MARKETING TECHNIQUES UTILIZED BY OKLAHOMA HOSPITAL FOODSERVICE DEPARTMENTS

By

EDITH M. GIERLATOWICZ

Bachelor of Science

Georgia College

Milledgeville, Georgia

1972

Submitted to the Faculty of the Graduate College
of the Oklahoma State University
in partial fulfillment of the requirements
for the Degree of
MASTER OF SCIENCE
May, 1991

Thesis
1991
G454m
cop.2

Oklahoma State Univ. Library

MARKETING TECHNIQUES UTILIZED BY OKLAHOMA HOSPITAL FOODSERVICE DEPARTMENTS

Thesis Approved:

Lea L. Ebro
Thesis Adviser

Norman N. Durham
Dean of the Graduate College

1393120

ACKNOWLEDGMENTS

I would like to express my gratitude to Dr. Lea Ebro, thesis adviser, for her encouragement and assistance in completing my graduate program. Her interest in my research study provided me with the momentum to continue when things appeared endless. My thanks also go to committee members, Dr. William Warde and Dr. Jerrold Leong, for their contributions to the study. Their suggestions and support were appreciated.

To my husband, Brian, and daughter, Julie, thank you for being my biggest advocates and for helping me to accomplish my goal. Without your love, patience, and understanding, this study could not have been completed, I, therefore dedicate this thesis to my family.

TABLE OF CONTENTS

Chapter Page

I. INTRODUCTION 1

Purpose and Objectives 2
Hypotheses 4
Limitations and Assumptions 6
Definitions 6

II. REVIEW OF LITERATURE 12

Introduction 12
Marketing Techniques to the Elderly 13
Marketing of Cafeteria Services 15
Marketing of Take-Out Services 17
The Marketing of Vending 19
Summary 21

III. METHODOLOGY 22

Research Design 22
Population and Sample 23
Data Collection 24
  Instrumentation 24
  Procedure 24
Data Analysis 25

IV. RESULTS AND DISCUSSION 26

Characteristics of the Respondents 27
  Age and Sex. 27
  Total Years Experience 27
  Education 27
  Professional Affiliation 29
  Current Position 29
  Employment Status 30
  Hours Marketing 30
Characteristics of the Institutions 30
  Management and Classification of the Foodservice Department 31
  Number of Beds, Average Number of Meals and Population of City 31
  Existence of a Hospital Marketing Department and Hours They Spend Marketing Foodservice 33
Marketing Techniques Currently Utilized 33

Chapter Page

Marketing Techniques Used for In-House Patients . 34
Marketing Techniques Used for Hospital Employees . 34
Marketing Techniques Used for the Community at Large 36
Marketing Techniques Used for Visitors 39
Importance of Marketing Techniques 39
Statistical Analysis. 41
Marketing to In-House Patients by Respondent Variables 41
Marketing to Employees by Respondent Characteristics 47
Marketing to the Community at Large by Respondent Characteristics 54
Marketing to Visitors by Respondent Characteristics 63
Marketing to In-House Patients by Institutional Characteristics 68
Marketing to Hospital Employees by Institutional Characteristics 75
Marketing to the Community at Large by Institutional Characteristics 86
Marketing Techniques to Visitors by Institutional Characteristics 95

V. SUMMARY, RECOMMENDATIONS AND IMPLICATIONS 108

Summary 108
Recommendations 112
Implications 113

SELECTED BIBLIOGRAPHY 115

APPENDICES 118

APPENDIX A - QUESTIONNAIRE 119

APPENDIX B - CHI-SQUARE FREQUENCY ANALYSES TABLES FOR THOSE ASSOCIATIONS WHICH WERE SIGNIFICANT 128

LIST OF TABLES

Table Page

I. Characteristics of the Respondents 28

II. Characteristics of the Institutions 32

III. Marketing Techniques Used for In-House Patients 35

IV. Marketing Techniques Used for Hospital Employees 37

V. Marketing Techniques Used for the Community at Large . . . 38

VI. Marketing Techniques Used for Visitors 40

VII. Importance of Marketing Techniques 42

VIII. Chi-Square Determinations Indicating Associations Between Marketing Techniques to In-House Patients and Respondent Characteristics 43

IX. Chi-Square Determinations Indicating Associations Between Marketing Techniques to Employees and Respondent Characteristics 48

X. Chi-Square Determinations Indicating Associations Between Marketing Techniques to the Community at Large and Respondent Characteristics 55

XI. Chi-Square Determinations Indicating Associations Between Marketing Techniques to Visitors and Respondent Characteristics 64

XII. Chi-Square Determinations Indicating Associations Between Marketing Techniques to Patients and Institutional Characteristics 69

XIII. Chi-Square Determinations Indicating Associations Between Marketing Techniques to Employees and Institutional Characteristics 76

XIV. Chi-Square Determinations Indicating Associations Between Marketing Techniques to Community and Institutional Characteristics 87

Table Page

XV. Chi-Square Determinations Indicating Associations Between Marketing Techniques to Visitors and Institutional Characteristics 96

XVI. Chi-Square Determinations Indicating Associations Between Marketing Techniques Used and Respondent Characteristics 101

XVII. Chi-Square Determinations Indicating Associations Between Marketing Techniques Used and Institutional Characteristics 105

CHAPTER I

INTRODUCTION

Anita L. Owen, past president of the American Dietetic Association, stated that the 1980s were years of uncertainty, competition, and marketing (Owen, 1986). Dramatic changes in the regulatory and competitive environment have correlated with a significant drop in hospital patient days. The adoption of diagnosis-related group (DRG) payment plan by the government and the shift toward outpatient treatment areas have also resulted in reduced revenue for hospitals. Once hospital administrators had asked "what is marketing" and "why do we need marketing;" now, many hospitals have a marketing department. These marketing departments are being pressured to develop strategic plans to produce a competitive advantage that will improve the hospital's financial situation (Kizilbash & Wagle, 1986).

Hospital dietary departments, which have traditionally provided patient meals, nutritional care, and counseling, are increasing their marketing efforts to include revenue producing operations. To be effective in the 1990s, marketing of foodservices must shift from a "provider" to a "consumer" orientation (Parks & Moody, 1986). The foodservice director provides for consumer wants; and the consumer must perceive the value of these products or services and be willing to purchase them. Changing to the product market segmentation practices will increase the revenue needed to offset the government's cost containment measures.

Foodservice marketing research has been conducted in Texas by Pickens and Shanklin (1985), and in Indiana by Somers (1987). The Texas study identified the state of the art relative to the use of marketing techniques within hospital foodservice departments throughout the United States. This study was to determine whether any relationships existed between the use of marketing techniques and selected demographic characteristics of foodservice administrators and/or operations. Somers expanded on this study to include the perceived importance of marketing by hospital foodservice administrators.

The present study was designed to determine the current foodservice marketing techniques used by Oklahoma hospitals and to determine the current factors that influence increased marketing. It is hoped that the more timely information revealed will encourage foodservice directors to develop a marketing plan that will maximize their business opportunities.

Purpose and Objectives

The purpose of this study is to determine the relationship between the perceived value of marketing by hospital foodservice directors and the application of marketing techniques within selected operations of their department.

Specific objectives included are:

1. Analyze marketing techniques used in hospital foodservice departments. The following areas will be evaluated in relation to marketing techniques used by the foodservice director:

    a. In-house patients

    b. Hospital employees

c. Hospital visitors
d. The community

2. Analyze the perceived importance of marketing by foodservice directors. The following marketing techniques will be examined:

a. Marketing plan
b. New product development
c. Mass marketing
d. Target market
e. Market niche
f. Product diversification
g. Discounting
h. Merchandising
i. Advertising
j. Sales promotions
k. Public relations
l. Feedback
m. Reputation
n. Internal marketing

3. Determine the importance of marketing based on predetermined variables of foodservice directors and hospitals.

Respondent Variables

a. Age
b. Sex
c. Years of experience
d. Highest level of education
e. Professional affiliations
f. Current position

g. Employment status

h. Number of hours spent in marketing

Institutional Variables

a. Management of the foodservice department

b. Hospital classification:

Not-for-profit vs. for-profit

Corporate owned

Government operated (federal)

Government operated (city, county)

Owned and managed by a hospital corporation

Religious affiliation

c. Number of beds in facility

d. Average number of meals served daily

e. Population of the city where hospital is located

f. Existence of a hospital marketing department

Hypotheses

H1: The characteristics of the respondents (age, sex, years of experience, level of education, professional affiliations, current position, employment status and number of hours spent in marketing) will have no effect on the marketing techniques utilized by hospitals located in Oklahoma. Marketing techniques were studied for:

a. In-house patients

b. Hospital employees

c. Community

d. Hospital visitors

H2: The characteristics of the institution (management of foodservice department, hospital classification, number of beds, average number of meals served daily, population of the city, and existence of a hospital marketing department) will have no effect on the marketing techniques used by hospitals in Oklahoma. The marketing techniques examined were the same as stated in Hypotheses One.

H3: The characteristics of the respondents (age, sex, years of experience, level of education, professional affiliations, current position, employment status, and number of hours spent in marketing will have no effect on the perceived importance of marketing techniques. Specific techniques examined were:

a. Marketing plan
b. New product development
c. Mass marketing
d. Target market
e. Market niche
f. Product diversification
g. Discounting
h. Merchandising
i. Advertising
j. Sales promotions
k. Public relations
l. Feedback
m. Reputation
n. Internal marketing

H4: Institutional characteristics (management of foodservice department, hospital classification, number of beds, average number of meals served daily, population of the city, and existence of a hospital marketing department) will have no effect on the foodservice director's perceived importance of marketing techniques. Specific techniques examined were the same as those stated in Hypothesis Three.

Limitations and Assumptions

This study was limited to Oklahoma hospitals listed in the 1990 edition of the American Hospital Association Guide to the Health Care Field. A questionnaire was mailed to foodservice directors of all 137 hospitals in Oklahoma. Only 47 hospitals were listed as having over 100 bed capacity. However, it was assumed that the characteristics of the sample selected were representative of other hospitals in the United States.

The questionnaire was designed to identify current marketing techniques used by hospital foodservice departments; and to provide characteristics of the foodservice directors and the institutions. It was assumed that the questionnaire was completed without bias.

Definitions

For the purpose of this study the following terms are defined so that the researcher's intent is understood specifically.

Advertising: Any paid, persuasive message used to call public attention to a service or product to arouse a desire to buy or patronize (Zikmund & D'Amico, 1989).

Bottom-line Profits: Net revenue or profit (Ross Laboratories, 1990).

Community at Large: Residents of the city or town in which the hospital facility is located.

Competitive Edge: An advantage over others in business, gained through use of business strategies, market research, expert management, new product development, or other sound business techniques (Helm & Rose, 1986).

Corporate Owned Hospital: A non-profit agency owned under the corporate laws of the state (Riggs, 1991).

Diagnosis Related Groups (DRGs): Medical diagnoses on which federal reimbursement is based. Health care facilities are reimbursed per diagnosis and per historical costs incurred in various geographical regions in the United States. The facility receives no more than a predetermined amount (Ross Laboratories, 1990).

Dietitian Support for Home Health Care: The provision of food or clinical services to patients needing respite care.

Discounting: The process of reducing the price of goods or services to a select group of users.

Downsizing: Reducing operation to a lower level of production. For instance, downsizing a foodservice operation would mean serving fewer meals. Usually implies a reduction in employment force, or layoffs (Helm & Rose, 1986).

Elegant In-room Dining: The formal presentation of meals to provide a non-institutional atmosphere to in-house patients and their guests at an additional charge.

Fast Foods: Non rotating menu selections, such as sandwiches and French fries, that offer quick service.

Feedback: The communication of an individual's reaction back to the source of the message. The receiver becomes the source of the feedback information and the original sender becomes the receiver of the feedback (Zikmund & D'Amico, 1989).

Foodservice Administrator: Individuals employed by a health care institution whose primary responsibility is to manage the administrative functions of the foodservice department.

For-Profit: A classification for a business by the United States Internal Revenue Service that does not allow a tax exempt status.

Government Operated (City, County) Hospital: A city or county, non-profit agency operated under the laws of that specific political entity (Riggs, 1991).

Government Operated (Federal) Hospital: A federal, non-profit agency operated under the laws of that specific political entity (Riggs, 1991).

Gourmet Meals: Specialty meals that are not offered on the rotating cycle menu that are offered for an additional fee.

Gross National Product (GNP): The measure of value of all the goods and services produced in a nation (Zikmund and D'Amico, 1989).

Hospital Employee: Individuals that are hired by the hospital to provide services to patients, other hospital employees, visitors, and the community at large.

Hospital Owned and Managed by a Corporation: A private, profit agency not exempt from federal income tax, owned by a multiple hospital system (Riggs, 1991).

In-House Patient: Individuals who have been hospitalized for medical care. Also referred to as in-patients.

Internal Marketing: A managerial philosophy and a set of activities which view employees as internal customers and jobs as internal products, and then endeavors to offer internal products to satisfy the needs and wants of these internal customers, while at the same time addressing the objectives of the organization (Berry, 1984).

Market: Potential customers for a product (Helm & Rose, 1986).

Marketing: The activities involved in developing product, price, distribution, and promotional mixes that meet and satisfy the needs of customers (Zikmund & D'Amico, 1989).

Marketing Mix: The specific combination of interrelated and interdependent marketing activities engaged in by an organization. The basic elements of the marketing mix are product, price, distribution, and promotion (Zikmund & D'Amico, 1989).

Market Niche: The particular area of service or the particular product suited to the specific clients to be reached. The underlying philosophy is that you cannot be all things to all people, so you must find the spot that fits your objectives and goals and meets a particular unmet need. Market niching is the opposite of a mass marketing or market aggregation strategy where one attempts to market the same product or service to everyone (American Dietetic Association, 1987).

Market Share: A general measure of the percentage of all potential customers for a particular product or service that one competitor holds or hopes to capture (Helm & Rose, 1986).

Marketing Technique: The product or service offered in the marketplace. Also referred to as marketing strategies.

Mass Marketing: Attempting to market the same product or service to everyone.

Merchandising: Promoting the sale of a product through presentation.

New Product Development: Generating and introducing new products to the market place.

Not-For-Profit: A classification for a business by the United States Internal Revenue Service that allows special tax considerations (Ross Laboratories, 1990).

Nutritional Counseling: A revenue producing clinical service that provides clients with nutritional information and advice.

Product Diversification: The strategy of marketing new products to new sets of customers (Zikmund & D'Amico, 1989).

Profit: Return on investment in a business, over and above all costs including salaries and expenses (Helm & Rise, 1986).

Public Relations: The unsigned and unpaid activities involved in actively seeking to promote favorable relationship with the in-house patients, hospital employees, the community at large, and hospital visitors (Zikmund & D'Amico, 1989).

Reputation: Terminology used to express how the customer views the products or services provided by the foodservice department.

Revenue: Monies received for services incurred for providing a service, including private patient payment and third party (insurance company) payment (Ross, 1990).

Sales Promotion: The promotional activities, other than advertising, personal selling, and publicity, that stimulate consumer purchases and dealer effectiveness. Typically, a temporary offer of a reward to customers or dealers is made (Zikmund & D'Amico, 1989).

Service: An intangible product -- one that cannot be seen or experienced before it is delivered to the customer (Helm & Rose, 1986).

Strategic Marketing Plan: Guidelines for the marketers to follow setting the broad directions for marketing efforts involving the marketing mix, which are consistent with long range corporate strategies, goals and objectives (American Dietetic Association, 1987).

Take-Home Meals: Meals that are prepared by hospital foodservice employees that are sold to patients to meet their nutritional needs after discharge from the hospital.

Take-Out Meals: Food is sold to be eaten away from the point-of-sale.

Target Market: A particular market or segment of a market toward which an organization directs its marketing plan (Zikmund and D'Amico, 1989).

Theme Menus: A meal offering menu selections that relate to a particular subject or topic, i.e., Italian Cuisine, Spring Fling, Halloween.

Twenty-Four Hour Room Service: Meals or individual food items served during non-service times by the foodservice department for a fee.

Vending: The process of selling food and beverages through automated dispensing machines.

Visitors: Individuals, who are not classified as hospital employees or patients, and who are in the hospital for a short amount of time.

Weight Reduction Programs: A revenue producing clinical service that provides a nutritional plan for individuals desiring to lose weight.

CHAPTER II

REVIEW OF LITERATURE

Introduction

Hospital foodservice directors have experienced a reduction in staffing, budgets, and services in the past decade as a result of the diagnostic-related group payment plan. Allen Caudle has predicted that these changes in healthcare foodservice are just the "training grounds" for this decade (Boss, 1990). Top economic and financial experts have made the following healthcare predictions for the 1990s (Solovy, 1989):

1. Health care will consume an increasing portion of the nations income as measured by the gross national product (GNP).
2. Inflation in the goods and services purchased by hospitals will continue to increase.
3. Labor costs inflation will be at 6.8% in 1990 and 6.0% in 1995.
4. Hospitals will face tighter financial constraints as operating margins fall.
5. Average length of stay will not change.
6. Percent of occupancy will increase only 3.4% by 1995.

The prediction that the 1991 real growth of hospital foodservice is to be at 0.0% with a market share of only 4.4% has hospital foodservice administrators facing a challenge that will lead them to new sources of sales and profits (Stephenson, 1991). Hospital dietary departments have traditionally provided patients with meals, nutritional care and counseling. Foodservice magazines are reporting creative marketing techniques to in-patients (Long, 1986). These include restaurant-style menus, gourmet meals, room service, guest trays to patient visitors, and special meals to celebrate the birth of a child. Some hospitals offer wine with their gourmet meals. Somers (1987) noted that the use of gourmet menu selections, suite service with waiters, and fruit baskets were perceived as important techniques used by foodservice directors in Indiana. Other techniques more widely utilized were special holiday meals, birthday cakes, and congratulation dinners for new parents.

There has been little change in the hospital's occupancy rate and the trend is now focusing on the downsizing of foodservice units. The healthcare industry has become more market oriented by directing their attention toward the public and outpatient populations to build sales and create new revenue. By identifying specific target groups, health care is beginning to copy the product market segmentation practices (Grant, 1987). This will allow foodservice profit centers to support themselves during the dramatically changing state of healthcare.

There has been very limited research reported on the marketing of foodservices in the healthcare industry. The researcher reviewed selected articles that focused on marketing from research journals as well as trade journals to provide information on current marketing techniques used by hospital foodservice departments.

Marketing Techniques to the Elderly

One of the fastest growing markets is senior care and hospitals nationwide are targeting this population. It is estimated that individuals over the age of 55 will account for nearly 20 percent of the population and 70 percent of the nation's wealth by the year 1995 (Winston, 1986). The trend has been to provide services that permit older citizens to live as independently as possible, however, people live longer and are not necessarily "a group of gray-headed, sweater-wearing, rocking chair citizens who start their day with Ovaltine and finish it off with a glass of warm milk" (Sampson, 1990, p. 50). This market can be divided into groups; the young-old who are 65 to 74 years of age and the old-old who are over 85 years old (Beasley, 1987). This segment of the population is still considered in its infancy and seniors are achieving life-styles that leave the marketplace open to foodservice directors that are venturesome. Ideal programs increase revenue while they combine wellness and prevention services with clinical services. Skagit Valley Hospital in Mount Vernon, Washington offers cholesterol testing and special clinics to their Golden Care Club ("For Healthier Choices," 1989). Members also receive 15 percent discounts on meals which are offered during the slow periods of the day. A Senior Sunday Brunch is also offered to keep these customers coming back.

Hospitals have offered programs such as Meals on Wheels that deliver meals to people unable to leave their homes and congregate meal programs that are group feeding sites. There are approximately 400 million such meals served each year and this number is increasing by 10 percent to 12 percent each year (Schechter, 1990). This increase has been accelerated by the growing number of healthcare treatments that require early discharge from the hospital or perhaps are offered only on an out-patient basis. These programs operate with a large number of volunteers and may be subsidized by the United States Department of Agriculture (USDA) commodity program. Clients who can not pay the full price of the meal are assisted by United Way Organizations, local aging programs, and private contributions. While it is difficult to develop nutritious yet cost effective menus for these programs, many hospitals have the skilled personnel that allows them to market their foodservices to these programs.

Marketing of Cafeteria Services

While hospital employees account for approximately 65 percent of the meals served in the health-care facility (Erickson, 1990), it isn't enough to simply make food available to employees. The food must be appealing and the cafeteria must be operated as a business. The first goal of any business is to provide for the wants and desires of the customer. The foodservice director must continually look for ways to entice employees and then make the food services interesting. Institutions have been promoting gourmet foods, guest chefs, specialty bars and delicatessens, carving stations, "theme" and ethnic menus, contests, nutrition education, nutritious cuisine, and modified diets to promote cafeteria services. Many hospitals offer discounted meals to employees and senior citizens.

Gourmet dining is one way to inspire both patient and employee meal innovations. While some hospitals employ chefs, one popular way to provide gourmet dining is to invite guest chefs from favorite area restaurants to prepare cafeteria meals. Humana Hospital-Medical City Dallas invited a guest chef for a week of cooking, learning and sharing culinary skills (Blake, 1988). This benefited not only the cafeteria patrons, but foodservice staff and in-house patients as well. Check averages also tended to increase when a guest chef program is implemented.

Hospitals that are interested in upgrading their cafeteria foodservices have offered carving service along with upscale menus. These menus may include theme menus such as those offered by Georgia Baptist Hospital in Atlanta, Georgia ("Georgia Baptist," 1989). Theme days were used to boost the morale of employees and visitors and, at the same time, generate revenue. Some of the theme days offered by Gerogia Baptist Hospital were "Mayberry Day," "Beach Day," "Hearts and Flowers Day," and a "Fifties Party." Ethnic and regional dishes, such as Chinese cuisine or Cajun food, are also popular in hospital cafeterias.

Specialty bars, such as potato, salad, soup, taco, sandwich, deli, and dessert, are extremely popular in hospital cafeterias. When sold by the ounce, specialty bars have become profit centers. One foodservice director reported a 15 percent increase in cafeteria sales because they had attracted customers that would have otherwise gone to a nearby fast food restaurant ("Make-Your-Own," 1989). Sandwich bars also can be labor-cost effective if the foodservice staff had previously been preparing sandwiches. By-the-ounce gives customers the satisfaction of designing their own meals and receiving quick service.

A "Make Your Own Soup" bar was reported in the Market-Link Newsletter ("Make Your Own Soup," 1991). The soup bar provided chicken or beef broth and allowed the customer to add a variety of food items. Some of the food items included vegetables such as peas, corn, carrots, celery, onions, green beans, broccoli; starches such as noodles, lentils, potatoes, or rice; and other food items such as bacon pieces; grated cheese; and croutons. The soup was served with a variety of crackers and loaf of slice-it-yourself bread. Foodservice directors could be very creative in the marketing of a soup bar.

Nutrition education may be marketed to cafeteria patrons by offering them healthful choices or by making them aware of the nutritional content of the menu items. Lutheran Hospital in LaCrosse, Wisconsin, has "Tattle Tale" cards to inform employees how much each item counts against their daily nutrient requirements (Mielke, 1989) and McLean Hospital in Belmont, Massachusetts, has implemented a "100 Points of Light" program to inform patients and staff how to make healthy choices in eating ("For Healthier Choices," 1990).

Somers (1987) reported that the cafeteria was the number one marketing technique utilized by hospital foodservice departments to employees (97%) and visitors (90%). A study by Pickens and Shanklin (1985) also indicated this marketing technique was utilized to employees (93%) and hospital visitors (83%). Neither of these studies indicated that the cafeteria was marketed to the community at large. As hospital foodservice directors are exploring new sources of revenue, it would appear timely to market cafeteria services to the community at large.

Marketing of Take-Out Services

As more women have entered the work force, convenience has become more of a factor and it is projected that by the year 2001, over 50 percent of all meals will come from a non-traditional source such as hospitals (Stanton & McNutt, 1991). Take-out foodservice has consistently been a revenue producer (Lydecker, 1988), and in hospital foodservice it can be as varied as the target markets. Identifying those markets and which products they will need or desire is essential and is considered the first step. Patients, hospital employees, patients being discharged, family and guest of patients, office staff, and working mothers with young children are only a few of the potential customers.

While take-out can be used as a solution to limited cafeteria seating or to provide the late-shift employees with meals, hospital foodservice must attract other individuals who consider them as potential consumers for take-out food. The take-out market requires a commitment of providing quality food, keeping service standards high, and continuous promoting of the business. Hospitals may offer a complete nutritious meal served from the cafeteria or it could limit the take-out menu to standard items such as sandwiches, salads, or grilled items. It is interesting to note that the public considers the full-service segment for take-out food more nutritional and of better quality than fast-food take-out (Lydecker, 1988).

Creative foodservice managers use promotional strategies that can take many different forms and approaches to advertise quality products. The "Family Meals to Go" program at Kadlec Medical Center has proven to be a great way to capitalize on this service. Using appropriate containers, customers order the number of servings needed to feed their family ("Take-out," 1991).

The elderly, and even singles or people with empty nests, have been taking advantage of Gourmet 500's helpful lunches and dinners. Gourmet 500 is a commercial company that offers meals that are low in sodium, fat, cholesterol and calories. Its customers purchase a 28-day supply of meals that they can receive over a four-month period and for which they receive a 20 percent discount. Meals are delivered three times a week (Gindin, 1988). Hospitals have looked closely at this type of take-out service and have decided to enter this market. "Just What the Doctor Ordered" (Powills, 1987) and "Nutritious Cuisine" (Long, 1989) are patient after-care feeding programs that are designed to provide the proper diet that is essential to the patient's recovery after hospitalization. Packages of frozen meals which include an entree, vegetable, starch, soup, and dessert, may be purchased upon discharge. Nutritional counseling services may be marketed with these programs as well.

The Marketing of Vending

Vending machines, one of the original forms of self-service, have been around a long time and were used for such products as candy, soft drinks, and cigarettes. While most hospitals do not consider operating their cafeterias 24-hours a day economically feasible, they have discovered the great revenue potential that vending offers after foodservice personnel have gone home. Vending operators have rated hospitals (56%) second only to factories (84%) as a "best" vending site ("Sales Shifting," 1990). Vending operations in hospitals have traditionally been operated by a commercial vending operator on a contract basis and foodservice would earn approximately seven to ten percent of the profits. Hospitals have now discovered what commercial vending operators knew all along, that self-operated vending will double or possibly triple these profits ("The Ins & Outs," 1988).

Modern vending machines can sell any product, particularly food with considerable less labor cost than that associated with manual sales. Cold beverages, baked snacks, hot beverages, salted snacks, chocolate candy, gum and hard candy are the most popular food items vended. More healthy items such as oat bran cookies, fruit and fruit juices, and low cholesterol products are now being vended.

One creative foodservice director in a Southern California hospital had a videocassette vending machine installed by a video machine contractor to generate additional revenue ("Video Machine," 1988). The hospital receives 10 percent of the sales from tapes that rented for $2.00 to $2.99 per day. Although expensive, the customers like the convenience.

Foodservice directors who elect to enter the vending arena can tailor the vending program to the needs of its employees and the institution. There are nine types of vending machines that are used by vending operators. They include: hot beverage; window-front merchandiser; candy, cookies, and crackers; cup cold beverage; canned or bottled cold beverage; all-purpose food; canned juice and milk; pastry; and ice cream (Kaud, Miller & Underwood, 1982). A new line of high tech vending machines that have a built in bean grinder offers a cup of fresh-brewed coffee, microwave dinners that do not require refrigeration, and hot French fry machines are entering the market. New downsized, compact machines have also been introduced that would better accommodate smaller hospitals ("Take-out on the Go," 1991). Appealing to some foodservice directors is a new payment option whereby charge cards with a bar code are scanned by the vending machine and charged to an individual or a department (Beasley, 1990). To enhance vending services as well as take-out, it has been predicted that 25 percent of the new cars sold will be equipped with microwaves (Stanton & McNutt, 1991).

Because vending is taking the product to the customer, marketing of vending services requires that they be placed in areas of high volume and high customer traffic areas. Primary locations are lobbies, emergency waiting rooms, employee break areas, and traffic patterns that lead to parking areas. Another consideration for vending is that tight controls must be enforced for inventory management, food handling, and accounting for a vending operation to be successful (Beasley, 1990).

Summary

It appears inevitable that health care costs will continue to increase, and while we must continue to control costs, the foodservice director will have opportunities to market the foodservice department. Foodservice directors that are revenue driven are constantly searching for new sources, new approaches, and new ways to market their departments. Literature has been very limited until late 1989, but journals now abound with information regarding the marketing of foodservices. As additional marketing information is provided, it is imperative that foodservice directors evaluate their marketing techniques and integrate them into a strategic marketing plan for their department.

CHAPTER III

METHODOLOGY

The purpose of this study was to assess the marketing techniques used by hospital foodservice departments in Oklahoma and to determine if an association exists between specific characteristics of the respondents and the institutions with the marketing techniques. It is anticipated that this study will identify the perceived importance of specific marketing techniques that may be utilized by the administrators of the foodservice department. This chapter includes the research design; description of the population to be studied; data collection, including instrumentation and procedure; and data analysis.

Research Design

The research design used in this study is a status quo survey in the form of a mailed questionnaire. The purpose of this status quo survey is to identify the specific marketing techniques used by hospital foodservice departments and to collect information regarding attitudes of the respondents concerning specific marketing techniques. The study will not attempt to manipulate the variables, but to examine marketing as it exists in the hospital foodservice departments in Oklahoma.

The dependent variables of this study were the marketing techniques used to market foodservice to in-house patients, hospital employees, the community at large, and hospital visitors. To determine the foodservice director's perceived importance of marketing techniques, 14 specific dependent variables were used: marketing plan, new product development, mass marketing, target market, market niche, product diversification, discounting, merchandising, advertising, sales promotions, public relations, feedback, reputation, and internal marketing.

The independent variables were the characteristics of the respondents and the characteristics of the institutions. Specific characteristics of the respondents were age, sex, years of experience, level of education, professional affiliation, current position, employment status, and number of hours spent in marketing the foodservice department. Management of the foodservice department, hospital classification, number of beds, average number of meals served daily, population of the city, existence of a hospital marketing department and the number of hours spent marketing the foodservice department were specific characteristics of the institutions.

Population and Sample

The sample, which was the same as the population, consisted of foodservice administrators employed in 137 hospitals in the state of Oklahoma listed in the American Hospital Association Guide to the Health Care Field (1990). This directory includes hospitals registered by the American Hospital Association (AHA) and the American Osteopathic Hospital Association (AOHA). While this directory indicates the hospitals that are accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), not all hospitals in Oklahoma were listed as having this designation.

Data Collection

Instrumentation

The research instrument (Appendix A) was adapted from the research instrument used by Somers (1987) and was divided into three sections. Section I was divided into four sections and designed to determine the marketing techniques used to market hospital foodservice to in-house patients, visitors, hospital employees, and the community at large. The survey participants were asked to indicate which techniques were currently being used in the foodservice department. Respondents were also able to add marketing techniques that were not included in the lists. Section II was designed to measure the respondents perceived importance of specific marketing techniques. On a scale of one to five, with one being least important and five being most important, the respondents were asked to rate each marketing technique according to importance in the marketing process. Section III was to provide general demographic information regarding the foodservice directors and the hospitals in which they were employed.

Procedure

The questionnaires with two cover letters (Appendix A) were mailed first class on September 15, 1990, to the 137 hospital administrators employed in Oklahoma hospitals listed in the American Hospital Association Guide to the Health Care Field (1990). The first cover letter was a letter from Mr. Paul Dougherty, Administrator at Stillwater Medical Center, to the hospital administrators asking them to refer the survey to the hospital foodservice director. The second cover letter, from the researcher and the major adviser, instructed the foodservice director to complete the questionnaire and return it not later than October 1, 1990. An addressed envelope with first class postage affixed was included for the respondents to return the completed surveys. A total of 74 usable surveys (51.7%) were returned, hence no follow-up letter or post cards were mailed.

Data Analysis

The responses to the questionnaire were tabulated and coded for analysis. The responses which indicated that a marketing technique was currently being used were coded with a "1" for yes and a "0" for not being utilized. In Section II, the actual rating (1-5) was recorded. A no response was recorded with a "0." Section III provided demographic data about the respondents and the institutions. The responses were coded as indicated by the survey participant. The data were evaluated using the Statistical Analysis System (SAS) (Helwig & Council, 1979). Chi-square analyses was the standard statistical procedure used. The level of significance was established at $p \leq .05$.

CHAPTER IV

RESULTS AND DISCUSSION

Marketing of the foodservices in hospitals is no longer considered optional or for in-house patients only by the hospital administrators. Foodservice directors are now revenue driven and are being asked to contribute profits to the bottom line of hospital financial statements. The purpose of this study was to assess the current status of marketing in hospital foodservice departments as related to the current marketing techniques used for in-house patients, hospital employees, the community at large, and hospital visitors and to determine the perceived importance of specified marketing techniques.

A six page questionnaire, as described in Chapter III, was mailed to 137 administrators of hospitals located in Oklahoma. The names of these hospitals were obtained from the 1990 edition of the American Hospital Association Guide to the Health Care Field. The administrators were asked to have the foodservice director or supervisor complete and return the research instrument. Seventy-nine (58%) completed questionnaires were returned and data from 52% of the responses were analyzed (N = 71). Three hospitals reported that foodservices were either not available or not marketed and three questionnaires were returned after the data were analyzed.

Characteristics of the Respondents

To determine the characteristics of the survey participants, respondents were asked to provide general demographic data. Information requested consisted of age, sex, years of experience, level of education, professional affiliation, current position, employment status, and number of hours spent in marketing.

Age and Sex

Respondents were asked to select an age category rather than to give precise ages, however, for analysis purposes the respondents were divided into two categories, those younger than 40 and those 40 and older. Thirty-seven percent (N = 26) listed their age as less than 40, while 63% were over 40 years old (N = 45). Of the 71 respondents, 77.5% were women (N = 5) and 22.5% were men (N = 16) (Table I).

Total Years Experience

The respondents were asked to indicate the total years of work experience. Twenty-eight percent (N = 20) reported having less than 10 years years experience in the field, while over 70% of the respondents indicated greater than 10 years experience. Four respondents had worked in foodservice for more than 30 years and only two had less than one year of experience (Table I).

Education

Forty-six of the respondents (64.8%) had a bachelor's degree and higher, while 22.5% reported a Vocational-Technical degree or an Associate Degree. There were nine respondents that indicated they had

TABLE I

CHARACTERISTICS OF THE RESPONDENTS

Characteristic	Frequency[a]	Percentage[b]
Age Group		
20-29	6	8.5
30-39	20	28.2
40-49	18	25.4
50-59	23	32.4
60-69	4	5.6
Sex		
Female	55	77.5
Male	16	22.5
Total Years Experience		
<1	2	2.8
1-5	6	8.5
6-10	12	16.9
11-15	14	19.7
16-20	14	19.7
21-25	14	19.7
26-30	5	7.0
Over 30	4	5.6
Education		
Junior High School	1	1.4
High School	8	11.2
Vocational-Technical	13	18.3
Associate Degree	3	4.2
B. S. Degree	31	43.7
Master's Degree	15	21.1
Affiliation[c]		
ADA	34	47.9
Registered	33	46.5
Non-Registered	1	1.4
ASHFSA	22	31.0
NRA	6	8.5
DMA	25	35.2
IFT	2	2.8
American Culinary Society	1	1.4
Current Position		
Supervisor/Dietary Manager	17	23.9
Foodservice Director/Department Head	44	61.8
Clinical Dietitian	5	7.0
Hospital Administrator	3	4.2
Not Specified	2	2.8
Employment Status		
Full-time	68	95.8
Part-time	3	4.2
Hours Marketing		
None	12	16.9
<1 hour	10	14.1
1-2 hours	23	32.4
2-3 hours	10	14.1
>3 hours	9	12.7
Not specified	7	9.8

[a] N = 71

[b] Total is not 100 due to rounding error.

[c] Multiple answers were allowed.

a high school diploma and only one participant did not have a degree at all (Table I).

Professional Affiliation

Foodservice directors were asked to indicate their professional affiliation(s). Respondents were to check all or any of the four affiliations listed. They were also allowed to list other affiliations in the "Other" category. Thirty-four respondents (47.9%) were members of the American Dietetic Association (ADA). Thirty-three of the ADA members were registered and one had applied for registration. The researcher, therefore, considered all ADA members as registered members of ADA. Dietary Managers Association members accounted for 35% of the respondents (N = 25). Twenty-two respondents were members of the American Society for Hospital Foodservice Administrators (ASHFSA), while only six were members of the National Restaurant Association. Two respondents listed the Institute of Food Technologists in the "Other" category (Table I).

Current Position

The respondents were asked to list their current position. Sixty-two percent of the respondents listed their current position as foodservice director or department head (N = 44). Five respondents were clinical dietitians and 17 of the respondents were supervisors or dietary managers. It is interesting to note that three of the 71 respondents were hospital administrators which possibly indicated that the hospital did not have a dietary manager. Only two of the respondends did not specify a current position (Table I).

Employment Status

Respondents were asked to indicate their employment status, with full-time being employed 35 or more hours per week and part-time as working less than 35 hours per week. Almost all of the participants (96%) indicated working full-time, while only three worked part-time (Table I).

Hours Marketing

Respondents were to indicate on the questionnaire the number of hours they spend in marketing the foodservice department each week. Twelve participants did not market the foodservice department and seven responded that they marketed the department but did not specify the amount of time. Ten respondents spent less than one hour, 32.4% (N = 23) spent from one to two hours, and 14.1% (N = 10) spent from two to three hours marketing the foodservice department. Nine respondents indicated that they engaged in marketing the foodservice department more than three hours per week (Table I).

Characteristics of the Institutions

To determine the characteristics of the hospitals, respondents were asked to provide demographic information about the institutions in which they were employed. This information included management of the foodservice department, hospital classification, number of beds, average number of meals served daily, population of the city, existence of a hospital marketing department and the number of hours the hospital marketing department spends marketing foodservice.

Management and Classification of the Foodservice Department

Of the 71 institutions participating in the study, 95.8% (N = 61) reported that the foodservice department was managed by the hospital. Ten hospitals were managed by a contract foodservice company (Table II).

Respondents were asked to specify if their hospital was for profit or not for profit and if they were corporate owned, federal government operated, city or county government operated, owned and managed by a hospital corporation, or if they were religious affiliated. Respondents were permitted to list other information regarding classification of the hospital. More than one answer was allowed. Forty-five of the hospitals were classified as not for profit, while 11 were for profit. Not all hospitals designated between these two classifications. Government hospitals, that are generally considered not for profit, were divided into federally operated and those that were city or county operated. Four hospitals were owned and/or managed by a hospital corporation and five were religious affiliated (Table II).

Number of Beds, Average Number of Meals and Population of City

Because Oklahoma has numerous small rural communities, it was not surprising to observe that 43 (61%) of the 71 respondent hospitals were less than 100 beds. Twelve respondents indicated that their hospitals were between 101 and 200 beds and seven hospitals were between 201 and 300 beds. Six hospitals were larger than 500 beds capacity (Table II).

Twenty-five percent (N = 18) of the hospitals served an average of less than 100 meals per day and 10 (14%) served between 100 and 199

TABLE II

CHARACTERISTICS OF THE INSTITUTIONS

Characteristic	Frequency[a]	Percentage[b]
Management of Foodservice		
Hospital	61	85.9
Contract	10	14.1
Hospital Classification[c]		
Not For Profit	45	63.4
For Profit	11	15.6
Corporate Owned	6	9.4
Federal	7	7.8
City, County	13	20.3
Hospital Corporation	4	6.2
Religious Affiliated	5	7.8
Other	4	6.2
Number of Beds		
Less than 25	6	8.5
26-50	21	29.6
51-100	16	22.5
101-200	12	16.9
201-300	7	9.9
301-400	1	1.4
401-500	2	2.8
More than 500	6	8.5
Average Number of Meals		
Less than 100	18	25.2
100-199	10	14.0
200-299	3	4.2
300-399	5	7.0
400-499	4	5.6
500-599	4	5.6
600-999	5	7.0
1000 or more	11	15.5
Not Specified	11	15.5
Population of City		
Less than 10,000	30	42.3
10,000-49,999	19	26.8
50,000-99,999	6	8.5
100,000-249,999	2	2.8
250,000-499,999	5	7.0
500,000-749,999	1	1.4
750,000-1,000,000	8	11.3
Hospital Marketing Department		
Yes	28	39.4
No	43	60.6
Hours Marketing		
None	14	19.8
Less than one hour	5	7.0
1-2 hours	5	7.0
More than 2 hours	4	5.6
No Marketing Department	43	60.6

[a] N = 71

[b] Total is not 100 due to rounding error.

[c] Multiple answers were allowed.

meals per day. Eleven hospitals indicated that they served more than 1000 meals per day (Table II).

Thirty hospitals were located in towns with less than 10,000 residents and 19 were located in cities with a population between 10,000 and 49,999. Eight hospitals were located in cities of greater than 750,000 residents (Table II).

Existence of a Hospital Marketing Department and Hours They Spend Marketing Foodservice

The respondents were asked to indicate if their hospital had a marketing department and how many hours this department marketed the foodservice department. Thirty-nine percent (N = 28) of the 71 hospitals reporting had a marketing department. Of those hospitals having a hospital marketing department, 14 reported no time and five indicated less than one hour was spent marketing the foodservice department. Seven percent had marketing departments that marketed the foodservice department for one to two hours, while in four hospitals greater than two hours was utilized (Table II).

Marketing Techniques Currently Utilized

To determine the marketing techniques used by the foodservice department, respondents were asked to denote on the questionnaire the techniques currently being used at the time of the survey. Four marketing groups were identified and analyzed by the researcher. These groups were marketing to techniques for in-house patients, hospital employees, the community at large and hospital visitors.

Marketing Techniques Used for In-House Patients

Ninety-two percent (N = 65) of the respondents used guest trays to market foodservice to in-house patients. Special holiday or "theme" menus were used by 89% (N = 63) and birthday or best wishes cakes were used by 65% (N = 46) of the responding hospitals. Research by Somers (1987) indicated special holiday meals (90%) and birthday cakes (88%) were used by hospitals in Indiana to market the foodservice department to in-house patients. Pickens and Shanklin (1985) also found special holiday meals (89.8%) and theme menus (35%) were used as a marketing technique for in-house patients.

Two hospitals used wine service, three hospitals used gourmet menus, and one hospital used menus featuring guest chef recipes as marketing techniques for in-house patients. Under "other" techniques listed by the respondents, one hospital marketed gift boxes and one hospital marketed a flyer (pamphlet) with employee signatures that were responsible for the meal to in-house patients. Table III illustrates the marketing techniques for in-house patients.

Marketing Techniques Used for Hospital Employees

The popularity of marketing the cafeteria to hospital employees was utilized by 90% (N = 64) of the hospitals providing cafeteria service to employees, 78% (N = 55) offering discounted cafeteria meals, 52% (N = 37) advertising the cafeteria menu, and 49% (N = 35) offering take-out service. Vending was marketed by the foodservice department to hospital employees by 47% (N = 33) of the hospitals. Restaurant service

TABLE III

MARKETING TECHNIQUES USED FOR IN-HOUSE PATIENTS

Marketing Techniques		Frequency	Percentage
(1)	Guest tray	65	91.5
(2)	Special holiday or theme menus	63	88.7
(3)	Birthday or best wishes cakes	46	64.8
(4)	Refreshment cart	26	36.6
(5)	New parent congratulation meals	24	33.8
(6)	Fruit baskets	16	22.5
(7)	Take-home meals	15	21.1
(8)	Cookbooks	12	16.9
(9)	Restaurant-style menus	10	14.1
(10)	Children's tray favor program	10	14.1
(11)	Symbols on menus to indicate health-wise dishes	10	14.1
(12)	Elegant in-room dining	6	8.5
(13)	Congregate dining with families	5	7.0
(14)	Family-style food services	5	7.0
(15)	24-hour room service	5	7.0
(16)	Gourmet menus	3	4.2
(17)	Wine service	2	2.8
(18)	Specialty stores	1	1.4
(19)	Menus featuring guest chef recipes	1	1.4
(20)	Flyer with employee signatures responsible for the meal	1	1.4
(21)	Gift boxes	1	1.4
(22)	Restaurant	1	1.4

and pizza franchise were reported by four hospitals as marketing techniques to employees. "Other" marketing techniques reported by the respondents included blue plate specials, the sale of monogram mugs, body composition testing, and free meal on the employees birthday. One hospital did not have a cafeteria but did offer employee meals (Table IV).

Again, this supports previous research completed by previous researchers. Somers (1987) reported that cafeteria service was marketed by 97% and vending was marketed by 71% of the hospitals in Indiana. Pickens and Shanklin (1985) found that 93% of the responding hospitals marketed cafeteria service and 65% marketed vending to employees.

Marketing Techniques Used for the Community at Large

As illustrated in Table V, nutritional counseling was marketed by the foodservice department to the community at large by 73% (N = 52) of the hospitals participating in the study. Somers (1987) found that 68% of the hospitals in Indiana used nutritional counseling to market hospital foodservice to the community while Pickens and Shanklin (1985) reported that 75% of their respondents used this technique.

Forty-three (61%) of the hospitals marketed cafeteria service and 39% offered weight reduction programs to the community at large. Thirty-seven percent (N = 26) of the participants marketed nutritional programs for civic organizations to the community at large. Foodservice to jails and restaurants were marketed by three of the responding hospitals. "Other" marketing techniques used for the community at large included body composition testing, a newsletter, contract meals to another agency, and wellness classes.

TABLE IV

MARKETING TECHNIQUES USED FOR HOSPITAL EMPLOYEES

Marketing Techniques		Frequency	Percentage
(1)	Cafeteria service	64	90.1
(2)	Discounted cafeteria meals	55	77.5
(3)	Cafeteria menu is advertised	37	52.1
(4)	Take-out service	35	49.3
(5)	Vending service	33	46.5
(6)	Nutrition consultation	32	45.1
(7)	Modified diet for employees	29	40.8
(8)	Specialty bars	27	38.0
(9)	Meals for late shift	24	33.8
(10)	Full catering program	23	32.4
(11)	"Theme" dining environments	23	32.4
(12)	Weight reduction programs	20	28.2
(13)	Fast food service	18	25.4
(14)	Separate physician dining	17	23.9
(15)	Party trays	17	23.9
(16)	Employee contests in cafeteria	16	22.5
(17)	New product samples	13	18.3
(18)	Nutritional analysis of cafe food	12	16.9
(19)	Nutritious cuisine in cafeteria	12	16.9
(20)	Birthday cakes to employees	12	16.9
(21)	Bake shop	11	15.5
(22)	Cookbooks	9	12.7
(23)	Deli	6	8.5
(24)	Restaurant service	4	5.6
(25)	Pizza franchise	4	5.6
(26)	Others	5	7.0

TABLE V

MARKETING TECHNIQUES USED FOR THE COMMUNITY AT LARGE

Marketing Techniques		Frequency	Percentage
(1)	Nutritional counseling	52	73.2
(2)	Cafeteria service	43	60.6
(3)	Weight reduction programs	28	39.4
(4)	Nutritional programs for civic organizations	26	36.6
(5)	Nutrition information via news media	20	28.2
(6)	Dietitian support for home health	24	33.8
(7)	Provide training for students	23	32.4
(8)	Cater to civic groups	23	32.4
(9)	Nutritional screening programs	22	31.0
(10)	Cookbooks and nutrition pamphlets	21	29.6
(11)	Cater events outside hospital	19	26.8
(12)	Fast food service	18	25.4
(13)	Meals on wheels program	17	23.9
(14)	Consultation to other facilities	17	23.9
(15)	Nutritional programs for schools	16	22.5
(16)	Banquet service	15	21.1
(17)	Convenience meals sold to seniors	14	19.7
(18)	Discounted meals to the elderly	13	18.3
(19)	Food to skilled nursing facility	10	14.1
(20)	Bakery	9	12.7
(21)	Sale of nutritional support products	7	9.9
(22)	Congregate meals for seniors	6	8.5
(23)	Meals/coffee breaks to office building	5	7.0
(24)	Foodservice to day care centers	4	5.6
(25)	Special diets	4	5.6
(26)	Foodservice to jails	3	4.2
(27)	Restaurant service	3	4.2
(28)	Other	4	5.6

Marketing Techniques Used for Visitors

Eighty-five percent (N = 60) of the respondents indicated that cafeteria service was used to market the foodservice department to hospital visitors. Once again, the data corresponded with the information reported in previous studies. Somers (1987) reported that 90% and Pickens and Shanklin (1985) reported that 82.7% of the hospitals marketed the foodservice department to visitors via the cafeteria.

Guest trays to patient rooms were marketed by the foodservice department to visitors by 82% (N = 58) of the hospitals participating in the study. National Nutrition Month promotions were used by 41 of the hospitals' foodservice departments. Employee arts and crafts show, contest and games, body composition testing, special diets, and promotional meals were listed as "other" marketing techniques used for visitors. Table VI illustrates the marketing techniques used for visitors.

Importance of Marketing Techniques

With one being the least important and five the most important, respondents were asked to rate specific marketing techniques according to how significant they perceived each technique is in the marketing process. Of the 14 specific marketing techniques listed, reputation was ranked as most important (rating of 5) by 80% (N = 57) of the respondents.

A marketing technique with a rating of four or higher was considered as a very significant technique utilized by the respondents in the marketing process. Feedback (85.9%), market niche (84.5%), and internal marketing (77.5%) were rated as very important by more than

TABLE VI

MARKETING TECHNIQUES USED FOR VISITORS

Marketing Techniques	Frequency	Percentage
(1) Cafeteria service	60	84.5
(2) Guest trays to patient room	58	81.7
(3) National nutrition month promotions	41	57.7
(4) Vending service	34	47.9
(5) Take-out service	30	42.3
(6) Specialty bars	28	39.4
(7) Cafeteria menu advertisement	26	36.6
(8) Fast food service	17	23.9
(9) Bake shop	10	14.1
(10) Deli	6	8.5
(11) Restaurant service	4	5.6
(12) Employee arts & crafts show	2	2.8
(13) Special diets served	2	2.8
(14) Pizza parlor	1	1.4
(15) Contests and games	1	1.4
(16) Body composition testing	1	1.4
(17) Special promotion meals	1	1.4

three-fourths of the respondents. Fifty-one of the respondents ranked public relations as very important, while merchandising and marketing plans were rated as very important by 49 of the respondents.

Mass marketing (33.8%) and advertising (28.2%) were given a lower ranking by respondents. This may be due to the fact that these marketing techniques were more expensive to implement than the other techniques (Table VII).

Statistical Analysis

H1: The characteristics of the respondents (age, sex, years of experience, level of education, professional affiliation, current position, employment status, and number of hours spent in marketing) will have no effect on the marketing techniques utilized by hospitals located in Oklahoma. Specific marketing techniques were examined for:

a. In-house patients
b. Hospital employees
c. Community
d. Hospital visitors

Chi-square values were used to determine the relationships between the eight respondent characteristics and the four categories of marketing techniques referred to in the null hypothesis.

Marketing to In-House Patients by Respondent Variables

The analyses indicated that 20 significant associations ($p \leq .05$) existed between respondent characteristics and the marketing techniques used for in-house patients. Table VIII contains the chi-square values

TABLE VII

IMPORTANCE OF MARKETING TECHNIQUES

	Least Important					Most Important
Marketing Technique	0 (%)*	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Marketing Plan	5 (7.0)	2 (2.8)	3 (4.2)	12 (16.9)	20 (28.2)	29 (40.8)
New Product Development	4 (5.6)	5 (7.0)	8 (11.3)	16 (22.5)	27 (38.0)	11 (15.5)
Mass Marketing	4 (5.6)	9 (12.7)	11 (15.5)	24 (33.8)	15 (21.1)	8 (11.3)
Target Marketing	5 (7.0)	5 (7.0)	7 (9.9)	10 (14.1)	30 (42.3)	14 (19.7)
Market Niche	5 (7.0)	1 (1.4)	1 (1.4)	4 (5.6)	19 (26.8)	41 (57.7)
Product Diversification	6 (8.5)	7 (9.9)	10 (14.1)	16 (22.5)	19 (26.8)	13 (18.3)
Discounting	4 (5.6)	12 (16.9)	7 (9.9)	16 (22.5)	16 (22.5)	16 (22.5)
Merchandising	5 (7.0)	6 (8.5)	5 (7.0)	6 (8.5)	21 (29.6)	28 (39.4)
Advertising	5 (7.0)	19 (26.8)	7 (9.9)	20 (28.2)	10 (14.1)	10 (14.1)
Sales Promotions	6 (8.5)	12 (16.9)	8 (11.3)	16 (22.5)	15 (21.1)	14 (19.7)
Public Relations	3 (4.2)	2 (2.8)	3 (4.2)	12 (16.9)	19 (26.8)	32 (45.1)
Feedback	3 (4.2)	1 (1.4)	1 (1.4)	5 (7.0)	24 (33.8)	37 (52.1)
Reputation	3 (4.2)	0 (0.0)	1 (1.4)	1 (1.4)	9 (12.7)	57 (80.3)
Internal Marketing	4 (5.6)	2 (2.8)	2 (2.8)	8 (11.3)	24 (33.8)	31 (43.7)

*Indicates no response.

TABLE VIII

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO IN-HOUSE PATIENTS AND RESPONDENT CHARACTERISTICS

Marketing Techniques	Respondent Characteristics										
	Age	Sex	Total Years Experience	Current Position	Level of Education	Employment Status	ADA (RD)	DMA	ASHFSA	NRA	Hours Spent Marketing
Fruit Baskets											
X^2					10.8		4.1		6.2		
df					2		1		1		
p					.004		.042		.013		
24-Hour Room Service											
X^2					12.8						
df					2						
p					.002						
Birthday/Best Wishes Cakes											
X^2				10.1			4.8	6.2	4.6		10.3
df				3			1	1	1		3
p				.017			.028	.012	.031		.016
Refreshment Cart											
X^2	5.3										
df	1										
p	.021										
Gourmet Menus											
X^2										13.7	
df										1	
p										.000	
Children's Tray Favors											
X^2						7.1					
df						1					
p						.007					

TABLE VIII (Continued)

Marketing Techniques	Respondent Characteristics										
	Age	Sex	Total Years Experience	Current Position	Level of Education	Employment Status	ADA (RD)	DMA	ASHFSA	NRA	Hours Spent Marketing
Guest Chef Recipes											
X^2			16.9							10.9	
df			3							1	
p			.001							.001	
Elegant In-Room Dining											
X^2										5.2	
df										1	
p										.022	
Congregate Dining with Families											
X^2	4.4	4.3									
df	1	1									
p	.037	.038									
Cookbooks											
X^2			12.6								
df			3								
p			.006								
Specialty Stores											
X^2										10.9	
df										1	
p										.001	
Restaurant											
X^2										10.9	
df										1	
p										.001	

(See Appendix B, pages 129-248)

examining the significant relationships between respondent characteristics and the marketing techniques used for in-house patients.

Those respondents who were registered members of the American Dietetic Association (ADA) (p=.004), members of American Society for Hospital Foodservice Administrators (ASHFSA) (p=.013), and those who had a Bachelor of Science degree or higher (p=.004) were more likely to market fruit baskets to in-house patients than those respondents not possessing these characteristics.

Birthday or best wishes cakes, which was used by 46% of the respondents as a marketing technique to in-house patients, was significantly related to current positions, hours spent in marketing and affiliation of the respondents. Those respondents whose current position was reported as department head or foodservice director were more likely to use this technique (p=.017) than those who reported their current position as administrator, clinical dietitian, or supervisor. Membership in ADA (p=.028), ASHSFA (p=.031) and the Dietary Managers Association (DMA) (p=.012) were also more likely to use this technique than other respondents not members of these associations. A significant association existed between respondents who reported that they spend more than one hour per week marketing foodservice and the use of birthday or best wishes cakes (p=.016).

Refreshment cart was more likely used as a marketing technique to in-house patients by those respondents who reported their age as 40 and older (p=.021). There was a significant association between congregate dining with families and male respondents (p=.038) and with those respondents who were younger than 40 years of age (p=.037).

While only 8.5% of the respondents were members of the National Restaurant Association (NRA), those respondents demonstrated highly significant relationships with the in-patient marketing techniques of gourmet menus that describe food origins ($p<.001$), elegant in-room dining ($p=.001$), menus featuring guest chef recipes ($p=.001$), restaurant ($p=.001$) and specialty stores ($p=.001$). This indicates that their training provides greater confidence in implementing "trendy" or more current marketing techniques to in-house patients.

A very significant association was reported between those respondents who had over 30 years experience in foodservice and the in-house patient marketing techniques of menus featuring guest chef recipes ($p=.001$). Those respondents with more than 10 years experience were more likely to market cookbooks ($p=.006$) than those with 10 or less years of experience. This also indicates that years of experience may increase the level of confidence toward marketing.

It is interesting to note that those respondents with a high school diploma as the highest level of education were more likely to use 24-hour room service as a marketing technique to in-house patients than those respondents with a higher level of education. These respondents using this technique presumably have acquired other marketing techniques from colleagues.

While only three respondents reported part-time employment (less than 35 hours per week), those respondents were more likely to have a tray favors program for children ($p=.007$) than those respondents who reported working full-time (35 or more hours per week). Those respondents who work full-time generally have a routine schedule and may either be too busy or to involved in the day-to-day operations to implement this type of marketing technique to patients.

Marketing to Employees by Respondent Characteristics

Cafeteria service was the number one marketing technique used for employees and the results of this study revealed a significant relationship between cafeteria service to employees and the current position of the respondent. Sixty-two percent of the total respondents were currently in the position of foodservice director or department head in a hospital in which the cafeteria was marketed to employees (p=.009) (Table IX).

Respondents who reported membership in the NRA were more likely to market fast foodservice to hospital employees than non NRA respondents. It is interesting to note that while only nine of the 22 ASHFSA members are currently marketing fast foodservice to hospital employees, they also were more likely to market this technique than non ASHFSA respondents (p=.043).

There was a high significance between vending service to employees and gender. Male respondents were much more likely to offer this service than did the female respondents (p=.002). Those respondents who were less than 40 years old were more likely to market vending than the older respondents (p=.015). Vending has been reported in trade journals as a sleeping giant in hospitals that has potential for real growth in bottom line profits. Historically, vending has been contracted out and profits of 7 to 10 percent have been earned by hospitals. It is not surprising that the younger population have begun to increase these profits to 40-50% ("The Ins and Outs," 1988).

Take-out service to hospital employees is another market that is projected to grow. There was a significant association between take-out

TABLE IX

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO EMPLOYEES AND RESPONDENT CHARACTERISTICS

Marketing Techniques	Respondent Characteristics										
	Age	Sex	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Cafe Service											
X^2									11.6		
df									3		
p									.009		
Fast Food Service											
X^2					4.0	5.9					
df					1	1					
p					.043	.015					
Vending											
X^2	5.9	10.0									
df	1	1									
p	.015	.002									
Take-Out											
X^2					10.0				9.5		
df					1				3		
p					.002				.023		
Bake Shop											
X^2						6.0				6.3	
df						1				1	
p						.015				.012	
Deli											
X^2					3.9	5.2		4.6			
df					1	1		1			
p					.048	.022		.032			
Specialty Bars											
X^2			7.5	6.2	6.0		7.9		10.4		
df			2	1	1		1		3		
p			.024	.013	.014		.005		.015		

TABLE IX (Continued)

Marketing Techniques	Respondent Characteristics										
	Age	Sex	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Pizza Franchise											
X^2				4.6							
df				1							
p				.032							
Party Trays											
X^2			8.2	4.6	5.0				12.8		
df			2	1	1				3		
p			.017	.032	.025				.005		
Full Catering Program											
X^2			7.7	6.4	14.2	7.8		4.3	15.2		
df			2	1	1	1		1	3		
p			.021	.011	.000	.005		.038	.002		
"Themed" Dining											
X^2				9.2	7.1		4.7		10.8		
df				1	1		1		3		
p				.002	.008		.030		.013		
New Product Samples											
X^2						4.4					
df						1					
p						.036					
Nutritional Analysis of Cafe Food											
X^2						5.11					
df						1					
p						.024					
Cafe Menu Advertising											
X^2						6.02			9.3		
df						1			3		
p						.014			.025		
Night Shift Meals											
X^2				5.1	6.1			4.0	12.7		
df				1	1			1	3		
p				.024	.013			.045	.005		

TABLE IX (Continued)

Marketing Techniques	Respondent Characteristics										
	Age	Sex	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Nutritious Cuisine in Cafe											
X^2				4.3		5.1					
df				1		1					
p				.039		.024					
Birthday Cakes											
X^2				4.3		5.1		10.1			8.23
df				1		1		1			3
p				.039		.024		.001			.043
Weight Reduction Program											
X^2	4.1				4.7				8.0		
df	1				1				3		
p	.044				.030				.046		
Modified Diets											
X^2						4.9					
df						1					
p						.027					

(See Appendix B, pages 129-248)

service and respondents who were currently in the position of foodservice director (p=.023) and respondents who were members of ASHFSA (p=.002).

Two significant associations existed between respondent characteristics and the marketing of a bake shop to employees. The independent variable NRA membership was significantly related to the marketing techniques of bake shop (p=.015). Fifty percent of the respondents with NRA membership reported marketing a bake shop to employees. It may interest the reader that of the three respondents reporting part-time employment status, two respondents reported marketing a bake shop to employees (p=.012).

There was a direct association between professional affiliation and the marketing of a deli to employees. Those respondents who were members of NRA (p=.022), ASHFSA (p=.048), and the Institute of Food Technologists (IFT) (p=.032) were more likely to market this technique to employees than respondents who did not report membership in these organizations.

Four significant associations existed between the characteristics of the respondents and marketing specialty bars (i.e., potato bar, salad bar, taco bar, etc.) to employees. Specialty bars were reported as a marketing technique to employees more often by respondents whose current position was listed as foodservice director or department head (p=.015) and by those respondents whose level of education was a B.S. degree or higher (p=.024). The respondents who reported membership in ADA (p=.013) and ASHFSA (p=.014) likewise reported greater use of specialty bars than those respondents not in these professional affiliations. In contrast, the analysis showed that those respondents with membership in the Dietary Managers Association (p=.005) were much less likely to use specialty bars as a marketing technique than non DMA members.

The marketing of party trays to employees was significantly associated with current positions (p=.005), level of education (p=.017), ADA membership (p=.032), and membership in ASHFSA (p=.025). Once again the researcher noted that respondents whose current position was foodservice director, whose level of education was reported at a B.S. degree or higher, and whose professional affiliations were ADA or ASHFSA, tended to use this technique more often than those respondents not reporting these characteristics.

This trend continued as the chi-square analysis revealed similar significant associations between the marketing of a full catering program and respondent characteristics. Fifty percent of the respondents who reported their current positions as foodservice director marketed a full catering program (p=.002). Since 81% of those whose current position is reported as foodservice director have a B.S. degree or higher, it is not surprising to see that a significant relationship exists between this technique and level of education of the respondents (p=.021). A full catering program was more often marketed to hospital employees by respondents whose professional membership was affiliated with ASHFSA (p<.001), NRA (p=.005), ADA (p=.011), and IFT (p=.038) than those respondents not reporting membership in these organizations.

A significant association was reported between marketing "theme" dining environments to employees and the respondent variables, current position and professional affiliation. Those respondents whose current position was reported as foodservice director were more likely to use this technique than those respondents whose current position was reported as administrator, clinical dietitian, or supervisor (p=.013). Respondents with membership in ADA (p=.002) and ASHFSA (p=.008) once more used this technique to a greater degree than those respondents not affiliated with these professional groups. Those respondents with membership in the DMA reported less use of "theme" dining environments than non DMA respondents.

A significant association existed between providing meals to night shift employees and current position (p=.005). Fifty percent of those respondents who are currently in the position of foodservice director are using this technique while only 2.6% of the respondents who are administrators, clinical dietitians, and supervisors are providing meals to the night shift employees. Those respondents with membership in ASHFSA (p=.013), ADA (p=.024), and IFT (p=.045) have a greater tendency to provide meals to the night shift employees than those respondents who are not members of these associations.

Three significant associations were noted between the respondents' characteristics and the marketing of a weight reduction program. Those respondents whose age was less than 40 marketed weight reduction programs more often than those respondents whose age was 40 and older (p=.044). Respondents whose current position was foodservice director (p=.046) and respondents with membership in ASHFSA (p=.030) marketed this technique more often than those respondents not reporting these characteristics.

The respondent characteristic, affiliations, had a significant association with six of the marketing techniques to employees. Those respondents who reported membership in ADA (p=.039) and NRA (p=.024) marketed nutritious cuisine in the cafeteria more often than non ADA and NRA respondents. Respondents with membership in IFT (p=.001), NRA (p=.024), and ADA (p=.039) marketed delivery of birthday cakes to employees more often than those respondents not members of these affiliations. It is interesting to note that foodservice directors that market birthday cakes to employees generally spend three to four hours marketing foodservice. Respondents who were ADA members (p=.032) were more likely to market a pizza franchise to employees than non ADA members. Members of NRA acknowledged greater use of new product samples (p=.036), nutritional analysis of cafeteria food (p=.024), and cafeteria menu advertisement (p=.014) than did non NRA respondents. Members in these associations not only are revenue driven, but are provided more exposure to business and industry which allows greater insights toward marketing and the availability of new products.

Marketing to the Community at Large by Respondent Characteristics

Chi-square analyses were computed to determine whether a relationship existed between respondent characteristics and the marketing techniques used for the community. Table X contains the chi-square values for the significant relationships between respondent characteristics and current marketing practices to the community. The analyses indicated that 23 of the marketing techniques for the community were significantly ($p \leq .05$) related to respondent characteristics.

Two significant associations existed between nutritional counseling to the community at large and the respondents' characteristics current position (p=.031) and ADA membership (p=.006). Those respondents who were in the position of foodservice director or department head and

TABLE X

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO THE COMMUNITY AT LARGE AND RESPONDENT CHARACTERISTICS

Marketing Techniques	Respondent Characteristics											
	Age	Sex	Years of Experience	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Nutritional Counseling												
X^2					7.5					8.9		
df					1					3		
p					.006					.031		
Weight Reduction Program												
X^2				12.3	13.6	5.2				8.2		
df				2	1	1				3		
p				.002	.000	.023				.043		
Congregate Meals for Seniors												
X^2							5.2		4.6			
df							1		1			
p							.022		.032			
Meals on Wheels												
X^2						5.0						
df						1						
p						.025						
Cafeteria Service												
X^2						6.0		9.7		8.2	4.8	
df						1		1		3	1	
p						.014		.002		.042	.028	
Fast Food Service												
X^2						4.0						
df						1						
p						.043						

TABLE X (Continued)

Marketing Techniques	Respondent Characteristics											
	Age	Sex	Years of Experience	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Food Services to Skilled Nursing Facilities												
X^2							7.0					
df							1					
p							.008					
Food Services to Day Care Centers												
X^2						3.8			7.6			
df						1			1			
p						.050			.006			
Food Services to Jails												
X^2			8.0									
df			3									
p			.046									
Dietitian Support for Home Health Care												
X^2	4.8								4.0			
df	1								1			
p	.028								.045			
Catering Outside Hospital												
X^2	11.3	5.7		6.6		5.7						
df	1	1		2		1						
p	.001	.017		.036		.017						
Nutritional Information Through News Media												
X^2	6.5			14.6	11.5	10.9		7.8	5.2	11.5		11.1
df	1			2	1	1		1	1	3		3
p	.010			.001	.001	.001		.005	.002	.009		.011
Nutritional Programs for Civic Groups												
X^2				6.6	10.4	6.9						
df				2	1	1						
p				.036	.001	.008						

TABLE X (Continued)

Marketing Techniques	Respondent Characteristics											
	Age	Sex	Years of Experience	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Nutritional Programs for Schools												
X^2					6.1	6.2			7.1			9.3
df					1	1			1			3
p					.014	.013			.008			.026
Provide Training to Students												
X^2	5.8			7.7	6.4	7.1				10.8		
df	1			2	1	1				3		
p	.016			.021	.011	.008				.013		
Provide Consultation Services to Other Facilities												
X^2						11.9						7.9
df						1						3
p						.001						.048
Nutritional Screening Program												
X^2	4.4											
df	1											
p	.036											
Cookbooks and Pamphlets												
X^2	15.6			8.3	9.6							
df	1			2	1							
p	.000			.016	.002							
Bakery												
X^2							8.2					
df							1					
p							.004					
Banquet Service												
X^2						4.4	8.1		7.7			
df						1	1		1			
p						.035	.004		.006			

TABLE X (Continued)

Marketing Techniques	Respondent Characteristics											
	Age	Sex	Years of Experience	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Cater to Civic Groups												
X^2				6.8	6.4	18.6				15.3		
df				2	1	1				3		
p				.032	.011	.000				.002		
Special Diets												
X^2					4.6	3.8						
df					1	1						
p					.032	.050						
Wellness Classes												
X^2			17.0									
df			3									
p			.001									

(See Appendix B, pages 129-248)

those with ADA membership were more likely to market nutritional counseling to the community than those respondents not reporting these characteristics. Generally, a prerequisite for ADA membership is training in nutritional counseling and administration and this would indicate the tendency for dietitians to market this technique to the community.

Four significant associations existed between weight reduction programs offered to the community at large and the respondent characteristics. Those respondents that marketed weight reduction programs were more likely to be clinical dietitians (p=.043), have a B.S. degree or higher (p=.002) and be members in ADA (p<.001) or ASHFSA (p=.023). Members of ADA (p=.032) and ASHFSA (p=.050) were also more likely to market special diets to community residents than nonmembers of these organizations.

It should be noted by the reader that nutritional screening programs were more likely to be offered by respondents who were younger than 40 years old (p=.036) than by the older respondents. A very significant relationship existed in wellness classes and respondents with over 30 years experience (p=.001). These respondents were more likely to offer wellness classes than the younger respondents. This may be due to the fact that the older respondents are more concerned with cardiac problems that occur with aging and become more health conscious because they recognize the value of a healty life-style.

The marketing of cookbooks and/or other nutrition related pamphlets was very significantly related to age. Those respondents less than 40 years old (p=.001) were more likely to market this technique than those respondents 40 years old and older. Those respondents who have obtained a B.S. degree or higher (p=.016) and who were ADA members (p=.002) reported marketing of cookbooks and other nutrition related pamphlets more than respondents who did not have these characteristics.

With the increase in the older population, it was observed that members of the NRA (p=.022) were not as likely to market congregate meals for senior citizens, whereas those with IFT membership (p=.032) were more apt to market this technique. Meals on wheels was also marketed to senior citizens. ASHFSA members (p=.025) were more likely to market this program to the community at large than non ASHFSA members.

Cafeteria service was marketed more often by those respondents who were food service directors or department heads (p=.042), who were employed full-time (p=.028), and who were members of ASHFSA (p=.014) than those respondents that did not demonstrate those characteristics. There was a highly significant association between cafeteria service and members of DMA (p=.002). Members of DMA were less likely to market cafeteria services to the community at large than non DMA members. Members of ASHFSA (p=.043) were also more likely to market fast foodservice to the community at large than non ASHFSA members. While ASHFSA members are generally located in large hospitals, DMA members are usually employed in hospitals located in small communities. Many times these hospitals are too small to offer this service.

Hospital dietary departments occasionally market their food and services to other institutions that do not have adequate facilities or personnel to provide these services. Seven significant relationships existed between characteristic respondents and marketing techniques that provide foodservice to other facilities within the community.

Members of NRA (p=.008) were more likely to provide foodservice to skilled nursing facilities and ASHFSA (p=.001) and IFT (p=.006) members marketed their foodservices more often to day care centers than nonmembers of these organizations. ASHFSA (p=.001) members also provided consultation services to other facilities more than non ASHFS members. It may interest the reader to know that respondents that provided consultation services to other facilities generally spent more than one hour marketing foodservice (p=.048). Dietitian support for home health care was more often marketed by members of IFT (p=.045) than non IFT members and by respondents that were younger than 40 years old (p=.028). Dietitian support for home health care is a new concept and the respondents may not know how to market this technique.

Catering takes on many forms in foodservice. Significant associations were noted for three forms of catering and the characteristics of the respondents. Catering programs for events outside the hospital was very significantly related to age (p=.001). Those respondents younger than 40 were more involved in catering events outside the hospital than the older respondents. Male respondents (p=.017), respondents with a college education (p=.036), and members of ASHFSA (p=.017) marketed this technique more than respondents without these characteristics.

Banquet service was more often used by respondents who were members of NRA (p=.004), ASHFSA (p=.035), and IFT (p=.006) than nonmembers of these organizations. It should be noted that marketing a bakery to the community at large was utilized considerably more by NRA members than non NRA members.

Catering to civic groups was significantly related to level of education, current position, and affiliation. Those respondents that reported greater involvement in marketing this technique were currently foodservice directors or department heads (p=.002), have a B.S. degree or higher (p=.032), and were members of ADA (p=.011) or ASHFSA (p<.001). While catering is not limited to large cities, it is a revenue driven marketing technique that is used to secure more of the market share which is associated with greater populated cities. Members of ASHFSA, NRA, ADA, and IFT also tended to be more profit oriented than those not in these affiliations.

Nutritional education to the community can be marketed in a variety of ways. Four nutritional programs to the community demonstrated significant relationships with the characteristics of the respondents. Nutritional programs were provided to schools by those respondents who were affiliated with ADA (p=.014), ASHFSA (p=.013), and IFT (p=.008) than nonmembers of these associations. It may interest the reader to know that respondents that market nutritional programs for schools tend to spend more than three hours per week marketing foodservice. Those respondents who were less than 40 years old (p=.016), who had obtained a B.S. degree or higher (p=.021), who were in current positions of foodservice director or department head (p=.013), and who were members of ADA (p=.011) or ASHFSA (p=.008) were more likely to provide training for university or vocational-technical (vo-tech) students than were those respondents not possessing these characteristics. Respondents with a B.S. degree or higher (p=.036) and members of ADA (p=001) or ASHFSA (p=.008) marketed nutritional programs for civic organizations and other clubs while those without these characteristics did not.

Providing nutritional information via the news media had three very significant (p=.001) associations with the respondent characteristics, level of education, and membership in ADA and ASHFSA. Those respondents who had a B.S. degree or higher and membership in ADA or ASHFSA were more responsive to providing nutrition information via the news media than members without a college degree or not members of ADA or ASHFSA. Significant associations were also reported with this technique by respondents who were younger than 40 (p=.010), who were in the position of foodservice director or department head (p=.009), and were members of IFT (p=.022). Respondents that marketed this technique more often to the community spent between one and two hours per week (p=.011) marketing the foodservice department than those respondents spending more or less time marketing foodservice. Members of the Dietary Managers Association (p=.005) were not as likely to market nutritional information through the news media as did non DMA members. DMA members are usually located in rural hospitals that do not have access to the news media or newspapers as do nonrural hospitals.

Marketing to Visitors by Respondent Characteristics

The chi-square analysis indicated that 25 significant associations existed between respondent characteristics and the marketing techniques used for visitors.(Table XI). Cafeteria service was very significantly related to current position. Those respondents who were in the position of foodservice director or department head (p=.001) were more likely to market cafeteria service. The cafeteria menu was more often advertised by NRA members (p=.013) than by non NRA members. It may interest the

TABLE XI

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO VISITORS AND RESPONDENT CHARACTERISTICS

Marketing Techniques	Respondent Characteristics											
	Age	Sex	Years of Experience	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Cafeteria Service												
X^2										15.4		
df										3		
p										.001		
Fast Food Service												
X^2							6.6					
df							1					
p							.010					
Vending												
X^2	5.0	9.2										
df	1	1										
p	.025	.002										
Take-Out Service												
X^2						6.0	4.5			11.3		
df						1	1			3		
p						.015	.033			.010		
Bake Shop												
X^2					4.8				6.2			
df					1				1			
p					.028				.013			
Deli												
X^2							5.2		4.6			
df							1		1			
p							.022		.032			
Specialty Bars												
X^2				11.5	7.4	7.8		12.2		12.1		8.1
df				2	1	1		1		3		3
p				.003	007	.005		.000		.007		.045

TABLE XI (Continued)

Marketing Techniques	Age	Sex	Years of Experience	Level of Education	ADA	ASHFSA	NRA	DMA	IFT	Current Position	Employment Status	Hours of Marketing
Cafe Menu Advertisement												
X^2							6.2					
df							1					
p							.013					
National Nutrition Monthly Promotions												
X^2				16.9	20.3	14.4		10.5		28.7		8.4
df				2	1	1		1		3		3
p				.000	.000	.000		.001		.000		.039
Employee Arts and Crafts Show												
X^2						4.6					10.7	
df						1					1	
p						.032					.001	
Special Diets Served												
X^2			8.4									
df			3									
p			.039									
Promotional Meals												
X^2											23.0	
df											1	
p											.000	

(See Appendix B, pages 129-248)

reader to note that one respondent employed part-time (less than 35 hours per week) (p<.001) reported marketing special promotion meals to visitors and that one respondent with over 30 years experience (p=.039) reported marketing special diets to visitors.

Take-out service was marketed more often by those respondents whose current position was foodservice director or department head (p=.010) and by those respondents who were either ASHFSA (p=.015) or NRA (p=.033) members. As has been the trend, specialty bars (potato, salad, sandwich, etc.) were marketed more often by respondents whose current position was foodservice director or department head (p=.007), who had a B.S. degree or higher education (p=.003), and who were ADA (p=.007) or ASHFSA (p=.005) members than those not reporting these characteristics. Those respondents who market specialty bars tend to spend between one and two hours per week marketing foodservice(p=.045).

National Nutrition Month promotions were also used more often by foodservice directors (p<.001), those with a college degree (p<.001), and those who were ADA (p<.001) and ASHFSA (p<.001) members than by those respondents without these characteristics. Respondents who market National Nutrition Month reported that they spend more than three hours marketing foodservice (p=.039). A very significant association existed between these techniques and members of DMA. DMA members (p<.001) did not market specialty bars (p<.001) or National Nutrition Month (p<.001) to visitors.

Members of NRA (p=.010) reported marketing fast foodservice to visitors more often than non NRA members; while vending was marketed more often by men (p=.002) than women and by those respondents younger than 40 (p=.025). The respondents with membership in NRA (p=.022) and

IFT (p=.032) reported marketing a deli more often than non NRA or non IFT members. IFT members (p=.013) as well as ADA members (p=.028) marketed the technique, bake shop, more often than nonmembers of these associations.

When asked to list other marketing techniques to visitors, two respondents listed an employee arts and crafts show. The respondent characteristics, ASHFSA (p=.032) and employment part-time (p=.001), were more likely to provide an employee arts and crafts show than respondents without these characteristics.

The analyses revealed that respondent characteristics were associated with marketing techniques for in-house patients, employees, the community at large, and for hospital visitors. Based on the results shown in Tables VIII, IX, X, and XI, the researcher rejects parts a, b, c, and d of Hypothesis One.

H2: The characteristics of the institution (management of the foodservice department, hospital classification, number of beds, average number of meals served daily, population of the city, existence of a hospital marketing department and the number of hours the hospital marketing department spends marketing foodservice) will have no effect on the marketing techniques utilized by hospitals located in Oklahoma. Marketing techniques examined were:

a. In-house patients
b. Hospital employees
c. Community
d. Hospital visitors

Chi-square values were used to determine the associations between the six institutional characteristics and the four categories of marketing techniques referred to in the null hypothesis.

Marketing to In-House Patients by Institutional Characteristics

There was a significant association between the marketing of guest trays to in-house patients and hospital affiliation and the number of beds. Hospitals that provided guest trays to patients were usually city or county operated (p=.036) and those with 300 or less beds (p=.015) (Table XII).

Wine service is generally offered to in-house patients to increase revenue. This is supported by results of the chi-square analysis in which wine service was more often marketed to in-house patients by those responding hospitals who were for profit (p=.001) and corporate owned (p=.032) than by hospitals not having these institutional characteristics.

A significant relationship existed between the marketing of fruit baskets to patients and foodservice being managed by a contract food company (p=.025), religious affiliation (p=.038), number of beds (p=.001), average number of meals served (p<.001), population of city (p=.043), the existence of a hospital marketing department (p=.032), and the hours the marketing department utilizes marketing the foodservice department (p=.022). Fruit baskets were marketed more often in hospitals which were managed by a contract food company and have religious affiliations. These hospitals have over 300 beds and produce over 1000 meals per day. Only hospitals that were located in cities with a population of over 500,000 have these characteristics. The hospitals marketing fruit baskets most often have a marketing department and this department spends less than one hour marketing foodservice.

TABLE XII

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO PATIENTS AND INSTITUTIONAL CHARACTERISTICS

Marketing Techniques	Institutional Characteristics												
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Government Owned/Corp. Managed	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Guest Trays													
X^2					4.4				8.4				
df					1				2				
p					.036				.015				
Wine Service													
X^2		11.2				4.6							
df		1				1							
p		.001				.032							
Fruit Baskets													
X^2	5.0						4.3		13.8	17.7	6.3	4.6	9.6
df	1						1		2	2	2	1	3
p	.025						.038		.001	.000	.043	.032	.022
Congratulation Meals for New Parents													
X^2					4.0		5.1		6.2				
df					1		1		2				
p					.046		.024		.045				
Holiday or "Theme" Menus													
X^2								8.0					
df								1					
p								.005					
Birthday Cakes													
X^2									11.3	11.2		17.3	
df									2	2		1	
p									.003	.004		.000	
Refreshment Cart													
X^2			5.3										
df			1										
p			.021										
Gourmet Menus													
X^2									6.5		8.4	4.8	9.1
df									2		2	1	3
p									.039		.015	.028	.028

TABLE XII (Continued)

Marketing Techniques	Institutional Characteristics												
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Government Owned/Corp. Managed	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Guest Chef Menus													
X^2	6 2	5.5		11.0									
df	1	1		1									
p	.013	.019		.001									
Health-Wise Symbols on Menus													
X^2	20.3								11.8	8.9	14.7	8.0	
df	1								2	2	2	1	
p	.000								.003	.012	.001	.005	
Elegant In-Room Dining													
X^2									8.4	6.4	8.4		
df									2	2	2		
p									.015	.041	.015		
Congregate Dining with Families													
X^2							8.9				11.1		
df							1				2		
p							.003				.004		
Cookbooks													
X^2	4.4												
df	1												
p	.035												
Specialty Stores													
X^2	6.2										7.0		
df	1										2		
p	.013										.030		
Birthday Cards													
X^2					9.3						7.0		
df					1						2		
p					.002						.030		
Gift Boxes													
X^2											7.0		
df											2		
p											.030		

TABLE XII (Continued)

Marketing Techniques	Institutional Characteristics												
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Government Owned/Corp. Managed	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Restaurant													
X^2	6.2								7.0		7.0		
df	1								2		2		
p	.013								.030		.030		
Flyer with Employee's Signatures Responsible for the Meal													
X^2					9.3						7.0		
df					1						2		
p					.002						.030		

(See Appendix B, pages 129-248)

While hospitals that were federal government operated (p=.046) did not offer congratulatory meal for new parents, those that have religious affiliation (p=.024) generally offered this service to new parents. Most of the hospitals operated by the federal government in Oklahoma are Veteran Administration hospitals that do not provide maternity care. The respondents reported that larger hospitals with greater than 300 beds (p=.045) market congratulatory meals more often than smaller hospitals.

Birthday or best wishes cakes were marketed by respondents whose hospitals were over 100 beds (p=.003) and produced over 300 meals per day (p=.004). A very significant association existed between those hospitals having a marketing department and the marketing of birthday or best wishes cakes. Respondents whose hospitals had a marketing department (p<.001) were more likely to market birthday or best wishes cakes to in-house patients. When asked to respond to other marketing techniques used for in-house patients, respondents in hospitals that were operated by the federal government (p=.002) and were located in cities greater than 500,000 (p=.030) responded that birthday cards were marketed to in-house patients.

It is interesting to note that respondents whose hospitals were designated not for profit (p=.021) were more likely to market a refreshment cart to in-house patients than respondents from hospitals that were for profit. Respondents whose hospitals were government owned but managed by a hospital corporation were less likely to market special holiday or "theme" menus to in-house patients than respondents in hospitals not possessing this characteristic.

Only respondents who were in the larger hospitals (over 300 beds) (p=.039) and in cities that had a population of greater than 500,000 (p=.015) marketed gourmet menus that described food origin to in-house patients. These gourmet menus were more often marketed in hospitals which had a marketing department (p=.028) and which marketed foodservice one to two hours per week (p=.028).

A very significant association existed between menus featuring guest chef recipes and those hospitals who were corporate owned (p=.001). Hospitals whose dietary department was managed by a contract food company (p=.013) and who were designated for profit (p=.019) demonstrated a significant association with this institutional characteristic. Administration in hospitals with these characteristics intuitively know that they must show bottom line profits and therefore, they must be versatile and have the expertise to generate revenue. Bringing in a guest chef or even using recipes that represent a guest chef also denotes quality and produces public relations that will bring in the profits.

Five significant relationships existed between marketing health-wise dishes to in-patients by indicating these dishes with a symbol on the menu and the hospital characteristics. The respondents indicated that hospitals using this technique were more likely located in a city with a population of 500,000 or greater (p=.001), generally have a bed capacity over 300 (p=.003), and on the average, produced over 999 meals per day (p=.012). These hospitals' foodservice departments were more often managed by a contract food company (p<.001) and had a hospital marketing department (p=.005) than hospitals without these characteristics.

Elegant in-room dining was a marketing technique that was used more often by hospitals that were located in cities with a population greater than 500,000 (p=.015), which have over 300 beds (p=.015), and which produce over 1,000 meals per day (p=.041) than in small hospitals located in towns with less population. Congregate dining with families was further significantly associated with hospitals located in cities with a population of 500,000 or greater (p=.004). Religious affiliated hospitals (p=.003) tended to offer congregate dining with families more often than hospitals without this designation. Once again, the research analysis presents the marketing arena in which larger hospitals must compete to gain a bigger share of the available profits.

A significant association existed between the two independent variables, management of the foodservice and population of the city and the marketing techniques, specialty stores and restaurant service. Institutions with a contract foodservice were more likely to market a specialty store (p=.013) and a restaurant (p=.013) than those hospitals managing their own foodservice department. Those hospitals which were located in larger cities that had a population of over 500,000 were more likely to market specialty stores (p=.030) and restaurant service (p=.030) than hospitals located in smaller towns.

Cookbooks were more likely marketed to in-house patients by hospitals with contract foodservice (p=.035) than in hospitals that manage their own foodservice.

It should be noted that under other marketing techniques to in-patients, one hospital located in a large city (population >500,000) reported the use of gift boxes (p=.030). One other hospital operated by the federal government (p=.002) and located in a larger city in

Oklahoma reported that a flyer is sent to patients with the employees' signature that was responsible for the meal. This is considered an excellent internal marketing tool.

Marketing to Hospital Employees by Institutional Characteristics

Cafeteria service to employees was marketed more often in not for profit hospitals (p=.044) and in hospitals having a marketing department (p=.025) than by hospitals which did not have these characteristics (Table XIII). A very significant association existed between federal government operated hospitals and the marketing techniques, cafeteria service to employees and discounted cafeteria meals. These hospitals were less likely to offer cafeteria service (p<.001) or discounted cafeteria meals (p=.001) to employees than other hospitals. It is interesting to note that hospitals that were city or county government operated (p=.024) were also less likely to offer discounted cafeteria meals to employees than those hospitals not city or county government operated. Hospitals with more than 100 beds (p=.018), that served over 300 meals per day (p=.013), and who had a marketing department (p=.009) were more likely to advertise their cafeteria menus than hospitals without these characteristics.

Nutritious cuisine or health conscious meals are more often marketed by those hospitals that have an occupancy of more than 300 beds (p=.034) and that are located in cities with a population of 500,000 or greater (p=.034) than smaller hospitals located in smaller towns. Nutritional analysis of the cafeteria food was provided more often in hospitals that were corporate owned (p=.024) and that had a

TABLE XIII

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO EMPLOYEES AND INSTITUTIONAL CHARACTERISTICS

Marketing Techniques	Institutional Characteristics											
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Cafeteria Service												
X^2			4.1		19.5						5.1	
df			1		1						1	
p			.044		.000						.025	
Fast Food Service												
X^2								13.9	21.0	7.6	10.9	
df								2	2	2	1	
p								.001	.000	.022	.001	
Restaurant												
X^2	4.5							11.1	9.4			
df	1							2	2			
p	.034							.004	.009			
Vending												
X^2					6.7		6.2				8.5	
df					1		1				1	
p					.009		.013				.004	
Take-Out												
X^2								17.6	13.2	10.7		
df								2	2	2		
p								.000	.001	.005		
Deli												
X^2								11.3	8.2	10.6		
df								2	2	2		
p								.004	.017	.005		
Specialty Bars												
X^2					4.8			15.5	14.2	9.3	17.5	9 5
df					1			2	2	2	1	3
p					.029			.000	.001	.010	.000	.024

TABLE XIII (Continued)

Marketing Techniques	Institutional Characteristics											
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Pizza Franchise												
X^2								11.1	9.4			
df								2	2			
p								.004	.009			
Party Trays												
X^2	8.3							17.0	21.8	8.9	22.3	8.0
df	1							2	2	2	1	3
p	.004							.000	.000	.011	.000	.047
Full Catering Program												
X^2	4.0					4.4		13.4	16.3	8.2	16.9	
df	1					1		2	2	2	1	
p	.044					.035		.001	.000	.017	.000	
Themed Dining Environments												
X^2								15.4	18.1	9.7	16.9	
df								2	2	2	1	
p								.000	.000	.008	.000	
Employee Contests in Cafeteria												
X^2		7.6						6.5	9.9		4.6	
df		1						2	2		1	
p		.006						.039	.007		.032	
Nutrition Consultation												
X^2		5.5										
df		1										
p		.019										
Nutritional Analysis of Cafeteria Food												
X^2				5.1							4.5	8.6
df				1							1	3
p				.024							.034	.036

TABLE XIII (Continued)

Marketing Techniques	Institutional Characteristics											
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Cafeteria Menu Advertised												
X^2								8.0	8.7		6.9	
df								2	2		1	
p								.018	.013		.009	
Late Shift Employee Meals												
X^2			3.9		4.0			9.6	7.2			
df			1		1			2	2			
p			.048		.046			.008	.027			
Nutritious Cuisine Served in Cafeteria												
X^2								6.8		6.8		
df								2		2		
p								.034		.034		
Discounted Cafeteria Meals												
X^2					10.6	5.1						
df					1	1						
p					.001	.024						
Birthday Cakes												
X^2								7.1	10.5		7.6	
df								2	2		1	
p								.029	.005		.006	
Weight Reduction Program												
X^2								7.9			4.9	9.8
df								2			1	3
p								.019			.026	.020

TABLE XIII (Continued)

Marketing Techniques	Institutional Characteristics											
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Separate Physician Dining												
X^2	8.3						3.8	11.1	11.3	8.9	9.1	18.7
df	1						1	2	2	2	1	3
p	.004						.050	.004	.004	.011	.003	.000
Blue Plate Specials												
X^2	6.2											
df	1											
p	.013											
Monogrammed Mugs for Sale												
X^2	6.2											
df	1											
p	.013											
Body Composition Testing												
X^2						4.5					9.5	
df						1					3	
p						.033					.024	
Birthday Meal												
X^2							22.9					
df							1					
p							.000					

(See Appendix B, pages 129-248)

marketing department (p=.034) than those without these characteristics. In those hospitals that had a marketing department, this technique was marketed more often when greater than one hour was spent marketing the foodservice department (p=.036) than when foodservice was marketed less than one hour.

The marketing of "theme" dining environments to attract employees to the cafeteria had a very significant association with number of beds, average number of meals, and the existence of a hospital marketing department. Those hospitals which had a bed capacity of over 300 (p<.001), served over 300 meals per day (p<.001), and had a hospital marketing department (p<.001) were more likely to market "theme" dining to employees. Considering that hospitals of this size are located in cities with a population of 500,000 residents, it is not surprising that the population of the city (p=.008) was significantly associated with "theme" dining environments. It may interest the reader to know that one hospital managed by a contract food management company reported marketing "blue plate specials" to employees (p=.013).

While many of the "trendy" marketing techniques are localized to the larger hospitals, specialty bars such as potato bars, salad bars, and sandwich bars are marketed by hospitals that are mid-sized and larger. Specialty bars were marketed more often to employees in hospitals that were located in cities with a population of 50,000 or more residents (p=.010), that were over 100 beds (p<.001), and that serve 300 or more meals per day (p=.001). This technique was marketed to employees more often when a hospital marketing department existed (p<.001) and when the marketing department spent one to two hours marketing foodservice (p=.024). Specialty bars were not marketed by hospitals which were operated by the federal government (p=.029).

The technique of marketing employee contests in the cafeteria was used more often by hospitals that were classified as for profit (p=.006), that had 101-300 beds (p=.039), that served an average of 300-999 meals per day (p=.007), and that had a marketing department (p=.032) than by those hospitals not having these characteristics. The reader is reminded that hospitals that are considered small (<100 beds) do not generally have the staff to market contests to employees in the cafeteria, while the larger hospitals (>300 beds) have patients that require a higher acuity of care and there is not as much time for these "fun and games" to take place.

An extension to the hospital cafeteria is the marketing of take-out service to employees. This technique was marketed more often by hospitals located in towns that had a population greater than 50,000 (p=.005), who had more than 100 beds (p<.001), and served more than 300 meals per day (p=.001) than by hospitals with less beds located in smaller towns.

The dependent variable, provision of meals for night shift employees who work from 11:00 p.m. until 7:00 a.m., was significantly associated with the independent variables, classification of the hospital, number of beds, and average number of meals served daily. Hospitals that were classified not for profit (p=.048), that had a bed occupancy of 101-300 (p=.008), and served an average of 300-999 meals per day (p=.027) were more likely to provide meals for the late shift employees than hospitals not possessing these characteristics. Hospitals that were operated by the federal government did not provide meals for these employees. As previously stated, small hospitals generally do not have the staff to provide meals to late shift employees;

and while many large hospitals provide foodservice 24 hours per day, this service may not necessarily be considered as a marketing technique to the night shift employees. Late shift employees were definitely considered when making the decision to offer "round-the-clock" foodservice.

The marketing of fast foods to employees was significantly related to the population of the city and very significantly associated with number of beds, average number of meals, and the existence of a hospital marketing department. Hospitals marketing fast food were more often located in cities with a population of 500,000 or larger ($p=.022$), had greater than 300 beds ($p=.001$), served more than 1,000 meals per day ($p<.001$), and had a hospital marketing department ($p=.001$). A deli was marketed more often by hospitals that were in the larger cities (population <500,000) ($p=.005$), that had over 300 beds ($p=.004$), and that served more than 1,000 meals per day ($p=.017$). Number of beds ($p=.004$) and average number of beds ($p=.009$) was also significantly associated with the marketing of a pizza franchise.

Restaurant foodservice, which is slowly making its way into hospitals, was more likely to be marketed by hospitals in Oklahoma whose foodservice department is managed by a contract management company ($p=.034$), and in larger hospitals which have over 300 beds ($p=.004$), and who serve more than 1,000 meals per day ($p=.009$) than by hospitals that manage their own foodservice and that are smaller. Larger hospitals tend to have more expertise in marketing foodservice and appear unafraid to experiment with many of the current marketing trends. The foodservice directors of larger hospitals also have insight to the value the foodservice department can bring to their department by producing revenue that contributes to the overall hospital profits.

Vending was significantly associated with hospital classification and the existence of a marketing department. Religious affiliated hospitals (p=.013) marketed vending more often than those hospitals with no religious affiliation. Hospitals which were operated by the federal government (p=.009) did not market vending as often as those hospitals that were nonfederal government operated. Hospitals that had a marketing department (p=.004) were more likely to market vending services than those without a marketing department.

As has been the trend, a very significant association existed between the marketing of a full catering program to employees and number of beds, average number of meals served daily, and the existence of a marketing department. Hospitals with more than 300 beds (p=.001), that served an average of more than 300 meals per day (p<.001), and which had a marketing department (p<.001) were more likely to market a full catering program to employees than hospitals without these characteristics. This technique was also marketed more often in hospitals located in cities with a population of 500,000 or greater (p=.017) than hospitals in smaller towns. Due to the fact that catering is an excellent revenue producer, it is no consequence that hospitals whose foodservice department is managed by a contract food management company (p=.044) participated in this technique more often than hospitals that managed their own foodservice departments. It should be noted that hospitals that are city or county operated generally did not market a full catering program to employees (p=.035). In communities where a hospital was managed by the city or county government the hospital tended to be concerned that the hospital may be in competition with other catering businesses in the community and therefore, tended to not enter this market.

As was with the marketing of a full catering program, the marketing of party trays had a very significant association with number of beds, average number of meals served daily, and the existence of a marketing department. Those hospitals that had over 300 beds ($p<.001$), that produced more than an average pf 300 meals per day ($p=.000$), and that had a hospital marketing department ($p<.001$) were more likely to market party trays to employees than hospitals without these characteristics. If the hospital had a marketing department, this department was more likely to market party trays when one to two hours ($p=.047$) were spent marketing foodservice. These hospitals, as one might expect, were generally located in cities with a population of 500,000 or greater ($p=.011$). Hospitals with contract foodservice ($p=.004$) were more likely to market party trays than those hospitals that manage their own foodservice departments.

Contrary to the researcher's expectations, hospitals that were classified as not for profit were more likely to market nutrition consultation ($p=.019$) to employees than hospitals that were for profit. Hospitals that had between 101 and 300 beds ($p=.019$) marketed weight reduction programs to hospitals' employees more often than smaller or larger hospitals. The independent variable, existence of a hospital marketing department also had a significant association with weight reduction programs ($p=.026$). Those hospitals with a marketing department tended to market weight reduction programs more often than those hospitals that did not have a marketing department. It may interest the reader to note that a significant association existed between the amount of time the marketing department spent marketing foodservice and weight reduction programs. Hospitals with marketing departments spending less than one hour marketing foodservice (p=.020) were more apt to market weight reduction programs than hospitals that spent either no time or more time marketing foodservice. The marketing of weight reduction programs to employees has been around for a long time and is considered by the researcher as a basic marketing technique for most hospital employees. The more time a marketing specialist spends marketing a department the more he/she gets to know that department and its potential for growth, thus increasing the marketability of the foodservice department.

Only one hospital reported the marketing of body composition testing to employees. This hospital was city or county operated (p=.033) and the marketing department spent greater than two hours per week (p=.024) marketing the foodservice department.

There was a significant relationship between birthday cakes to employees and hospital size, average number of meals served, and the existence of a marketing department. Hospitals that had 101-300 beds (p=.029), served an average of 300-999 meals per day (p=.005), and had a marketing department (p=.006) marketed birthday cakes to employees more often than those hospitals without these characteristics. One hospital that was religious affiliated reported providing employees with a birthday meal (p<.001).

Seven significant relationships existed between the characteristics of the institution and separate physician dining. Separate dining was marketed more often to physicians by large hospitals with over 300 beds (p=.004), located in cities with a population of 500,000 or more residents (p=.011), that serve more than 1,000 meals per day (p=.004) than smaller hospitals located in towns with less residents. Hospitals with contract foodservice (p=.004) and those with religious affiliation (p=.050) were more likely to market separate phsician dining than other hospitals. Hospitals with a marketing department (p=.003) were more apt to market separate physician dining than hospitals without a marketing department. This technique was used more often by hospitals whose marketing department spent less than one hour marketing foodservice (p<.001) than by those spending more or less than one hour marketing foodservice.

When asked to list other marketing techniques to employees, one hospital reported the sale of monogram mugs. It may interest the reader to note that this hospital's foodservice was managed by a contract food management company (p=.013). This type of creative marketing is used by a food management company to increase revenues and to advertise their company.

Marketing to the Community at Large by Institutional Characteristics

A very significant association (p=.001) existed between the management of the foodservice department by a contract food management company and the marketing of a catering program for events outside the hospitals (Table XIV). These hospitals were more likely to market catering to the community than hospitals that managed their own foodservice department. Restaurant service (p=.007) was also marketed more often to the community by hospitals with contract foodservice than by those who managed their own foodservice.

For profit hospitals were more likely to market newsletters (p=.019), foodservice to skilled nursing facilities (p=.021), and

TABLE XIV

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO COMMUNITY AND INSTITUTIONAL CHARACTERISTICS

Marketing Techniques	Institutional Characteristics											
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Nutritional Counseling												
X^2				5.3				13.1	8.6			
df				1				2	2			
p				.021				.001	.013			
Weight Reduction Program												
X^2								10.4			12.0	
df								2			3	
p								.006			.007	
Congregate Meals for Senior Citizens												
X^2						4.4					9.8	
df						1					3	
p						.036					.021	
Meals on Wheels												
X^2								6.5	6.4			
df								2	2			
p								.039	.040			
Cafeteria												
X^2					7.0			15.8	13.3		6.3	
df					1			2	2		1	
p					.008			.000	.001		.012	
Fast Foodservice												
X^2								17.7	21.9	7.6		
df								2	2	2		
p								.000	.000	.022		
Restaurant												
X^2	7.2							16.2	14.1	9.8		
df	1							2	2	2		
p	.007							.000	.001	.008		

TABLE XIV (Continued)

Marketing Techniques	Institutional Characteristics											
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Foodservice to Skilled Nursing Facilities												
χ^2		5.3						12.3	9.1		4.6	8.5
df		1						2	2		1	3
p		.021						.002	.010		.033	.037
Foodservice to Jails												
χ^2						4.9						
df						1						
p						.027						
Dietitian Support for Home Health Care												
χ^2			3.9					7.9				9.1
df			1					2				3
p			.048					.019				.027
Catering Program for Events Outside Hospital												
χ^2	11.1							10.6	10.1		21.8	12.6
df	1							2	2		1	3
p	.001							.005	.006		.000	.005
Nutritional Information Through News Media												
χ^2								13.3	13.8		10.9	8.0
df								2	2		1	3
p								.001	.001		.001	.047
Nutritional Programs to Civic Groups												
χ^2								7.3	6.7			
df								2	2			
p								.026	.034			
Provide Meals and Food for Breaks to Office Buildings												
χ^2		8.1										
df		1										
p		.004										

TABLE XIV (Continued)

Marketing Techniques	Institutional Characteristics Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Discounted Meals to the Elderly												
X^2								11.3				11.0
df								2				3
p								.003				.012
Provide Training for Students												
X^2								16.0	13.8	10.5	12.9	8.3
df								2	2	2	1	3
p								.000	.001	.005	.000	.040
Provide Consultation Services to Other Facilities												
X^2								8.1				15.5
df								2				3
p								.018				.001
Nutritional Screening Program												
X^2				3.8				12.6	8.0		5.2	9.7
df				1				2	2		1	3
p				.050				.002	.018		.023	.021
Cookbooks and/or Pamphlets												
X^2								9.2	6.7		9.3	8.7
df								2	2		1	3
p								.010	.036		.002	.033
Bakery												
X^2								8.6	9.9		6.3	17.6
df								2	2		1	3
p								.014	.007		.012	.001
Banquet Service												
X^2								15.8	18.0	7.8	9.1	13.6
df								2	2	2	1	3
p								.000	.000	.020	.002	.003

TABLE XIV (Continued)

Marketing Techniques	Institutional Characteristics											
	Management of FSD	For Profit	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Cater to Civic Groups												
X^2								22.0	20.9		12.9	12.1
df								2	2		1	3
p								.000	.000		.000	.007
Body Composition Testing												
X^2						4.5					9.5	
df						1					3	
p						.033					.024	
Newsletter												
X^2		5.5					23.0				9.5	
df		1					1				3	
p		.019					.000				.024	
Contract Meals for Another Agency												
X^2						4.5				7.0	9.5	
df						1				2	3	
p						.033				.030	.024	

(See Appendix B, pages 129-248)

provide meals and food for breaks to office buildings (p=.004) in the community than hospitals that are not for profit. Hospitals that were classified as not for profit were more likely to provide dietitian support for home health care (p=.048) than those hospitals that were for profit. Corporate owned hospitals were more likely to provide nutritional screening programs (p=.050) and nutritional counseling (p=.021) than those hospitals that were not corporate owned. It may interest the reader to note that one hospital that was religious affiliated but managed by a hospital corporation marketed a newsletter to the community (p<.001). It is clear that hospitals which are managed by a food management firm, that are classified for profit and that are corporate owned are interested in increasing profits by marketing services that may have a direct influence on the revenue produced.

Hospitals that were operated by the city or county government were more committed to the community. These hospitals provided foodservice to jails (p=.027) and provided congregate meals for senior citizens more often than hospitals not operated by these municipalities. One hospital operated by a city or county government reported marketing contract meals to another agency (p=.033). Results from the data showed that hospitals operated by the federal government were less likely to market cafeteria services to the community (p=.008) than those hospitals not operated by the federal government.

The size of the hospital had a definite relationship with marketing techniques used to market foodservice to the community (Table XIV). Small hospitals (100 or less beds) were less likely to market weight reduction programs (p=.006), dietitian support for home health care (p=.019), nutritional information through the news media (p=.001), provide nutritional programs for civic organizations (p=.026), and have catering programs for events outside the hospital (p=.005) than hospitals with more than 100 beds.

Medium sized hospitals (101-300 beds) were more likely to market nutritional counseling (p=.001), meals on wheels programs (p=.039), discounted meals to the elderly (p=.003), foodservice to skilled nursing facilities (p=.002) and training for students (p<.001) than smaller or larger hospitals. Large hospitals that have over 300 beds were more likely to market cafeteria service (p<.001), fast foodservice (p<.001), restaurant service (p<.001), banquet service (p<.001), cater to civic groups (p<.001), bakery (p=.014), consultation services to other facilities (p=.018), nutritional screening programs (p=.002), and cookbooks or other nutrition related pamphlets (p=.010) than smaller hospitals.

As institutions increase in size the greater is their ability to market foodservice programs to the community. Not only does their staff have experience and expertise, but the hospital's physical plant can generally accommodate the services that are marketed. For example, many small hospitals cannot market cafeteria service to the community because the cafeteria does not have the seating capacity to provide for the additional guests.

There was a direct relationship between the number of meals a hospital served each day and the marketing techniques used to market foodservice to the community. Hospitals that served 100 or less meals per day did not market a bakery (p=.007) to the community. Hospitals that served an average of 300-999 meals per day more likely marketed nutritional counseling (p=.013), meals on wheels programs (p=.040), foodservice to skilled nursing facilities (p=.010), catering program for events outside the hospital (p=.006), cater to civic groups (p<.001), and provide nutritional programs for civic organizations (p=.034) than did hospitals serving more or less meals per day.

Six very significant associations existed between hospitals that served an average of 1,000 meals or more per day and the marketing techniques to the community. These hospitals were more likely to market cafeteria service (p=.001), fast foods (p<.001), restaurant service (p=.001), banquet service (p<.001), nutritional information through the news media (p=.001), and training for food and nutrition students (p=.001) than hospitals that serve less than 1,000 meals per day. They also marketed nutritional screening programs (p=.018), and cookbooks or other nutrition related pamphlets (p=.036) more often than hospitals serving less meals.

A significant relationship existed between independent variable, population of city, and the marketing techniques to the community. Hospitals located in cities with a population of 50,000 to 499,999 residents were more likely to provide training for university or vocational-technical students (p=.005) than hospitals located in smaller or larger cities. Hospitals located in the largest communities, where there are 500,000 or more residents, marketed fast foods (p=.022), restaurant service (p=.008), banquet service (p=.020), and contract meals to another agency (p=.030) more often than hospitals located in smaller communities.

The existence of a marketing department was very significantly associated with five of the marketing techniques used by hospitals to the community. Hospitals with a marketing department were more likely to provide training for food and nutrition students ($p<.001$), cater to civic groups ($p<.001$), cater events outside the hospital ($p<.001$), provide fast foodservice ($p=.001$), and provide nutritional information through the news media ($p=.001$) than hospitals without a marketing department. Other significant associations are listed in Table XIV.

It is interesting to note that there were significant associations between the amount of time a hospital's marketing department spent marketing the foodservice department and the marketing techniques to the community. Those hospitals in which the marketing department spent less than one hour marketing foodservice provided congregate meals for senior citizens ($p=.021$), discounted meals to the elderly ($p=.012$), and nutritional information through the news media ($p=.047$) more often than hospitals whose marketing department spent more time marketing foodservice. A very significant association was found between the marketing of a bakery to the community and the time spent by the marketing department marketing foodservice. A bakery ($p=.001$) was more likely to be marketed to the community when the marketing department spent one to two hours marketing the foodservice department than when less or more marketing time was used. When more than two hours was spent marketing the foodservice department, the hospital was more likely to provide consultation services to other facilities ($p=.001$). Table XIV contains the chi-square values examining the significant associations between the independent variable, time spent by the marketing department marketing foodservice, and the marketing techniques to the community.

Marketing Techniques to Visitors by Institutional Characteristics

The analyses indicated that 13 of the marketing techniques for hospital visitors were significantly related ($p \leq .05$) to institutional characteristics (Table XV). The independent variable management of the foodservice department was significantly related to National Nutrition Month promotions ($p = .026$), pizza parlor ($p = .013$), and restaurant service ($p = .034$). Hospitals with contract foodservice utilized these marketing techniques to visitors more often than hospitals managing their own foodservice. Not for profit hospitals marketed cafeteria service ($p = .043$) more often than for profit hospitals. There was a significant association between religious affiliated hospitals and the marketing techniques vending ($p = .016$) and advertisement of the cafeteria menu ($p = .020$). Religious affiliated hospitals were more likely to market these techniques than were other hospitals. Hospitals managed by the federal government were less likely to market take-out foodservice ($p = .017$), cafeteria service ($p < .001$), and specialty bars ($p = .025$) than other hospitals. City or county government operated hospitals were less likely to market National Nutrition Month promotions ($p = .029$), vending service ($p = .048$), or advertisement of the cafeteria menu ($p = .017$) than hospitals not operated by a city or county government. Only one hospital operated by a city or county government reported the marketing of body composition testing to visitors ($p = .033$).

There was a significant association between the independent variable, number of beds, and the marketing techniques to visitors. Hospitals that had 100 or less beds were less likely to market National Nutrition Month promotions ($p < .001$), specialty bars ($p < .001$), a deli

TABLE XV

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES TO VISITORS AND INSTITUTIONAL CHARACTERISTICS

Marketing Techniques	Institutional Characteristics										
	Management of FSD	Not for Profit	Corporate Owned	Federal Government Operated	City/County Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Cafeteria											
X^2		4.1		18.6			7.4	6.0		8.5	
df		1		1			2	2		1	
p		.043		.000			.025	.049		.004	
Fast Foodservice											
X^2							11.1	16.5		9.1	
df							2	2		1	
p							.004	.000		.003	
Restaurant											
X^2	4.5						11.1				
df	1						2				
p	.034						.004				
Vending											
X^2					3.9	5.9				7.4	
df					1	1				1	
p					.048	.016				.007	
Take-Out Service											
X^2				5.7			16.4	11.6	6.0	6.5	
df				1			2	2	2	1	
p				.017			.000	.003	.049	.011	
Bake Shop											
X^2							12.2	11.7		4.6	8.5
df							2	2		1	3
p							.002	.003		.033	.037
Deli											
X^2							9.1	8.2			
df							2	2			
p							.010	.017			

TABLE XV (Continued)

Marketing Techniques	Institutional Characteristics										
	Management of FSD	Not for Profit	Corporate Owned	Federal Government Operated	City/County/ Government Operated	Religious Affiliation	Number of Beds	Number of Meals	Population	Marketing Department	Hours of Marketing
Pizza Parlor											
X^2	6.2		17.0						7.0		
df	1		1						2		
p	.013		.000						.030		
Specialty Bars											
X^2				5.1			20.1	22.4	11.6	19.8	
df				1			2	2	2	1	
p				.025			.000	.000	.003	.000	
Cafeteria Menu Advertised											
X^2					5.7	5.4					
df					1	1					
p					.017	.020					
National Nutrition Month											
X^2	5.0				4.7		25.1	32.5	7.7	14.8	
df	1				1		2	2	2	1	
p	.026				.029		.000	.000	.022	.000	
Body Composition Testing											
X^2					4.5						9.4
df					1						3
p					.033						.024
Special Promotion Meals											
X^2									7.0		
df									2		
p									.030		

(See Appendix B, pages 129-248)

(p=.010), a bakery (p=.002), and take-out foodservice (p<.001) than hospitals that were larger. Hospitals that had 101 to 300 beds (p=.025) were more likely to market cafeteria service to visitors than hospitals of other sizes. Hospitals with over 300 beds were more likely to market fast foods (p=.004) and restaurant service (p=.004) than smaller hospitals.

A significant association existed between average number of meals served and marketing techniques to visitors. Those hospitals that served less than 300 meals were less likely to market National Nutrition Month promotions (p<.001), a deli (p=.017), a bakery (p=.003), and take-out foodservice (p=.003) than hospitals serving more than 300 meals. Cafeteria service (p=.049) was marketed more often in hospitals that serve 300 to 999 meals per day than those that serve less or more meals per day. Fast foods (p<.001) and specialty bars (p<.001) were marketed more often in hospitals that served an average of 1,000 or more meals per day than those hospitals that served fewer meals.

The analyses of the data revealed that seven of the marketing techniques for hospital visitors were significantly related to the institutional characteristic, hospital marketing department. Hospitals with a marketing department were more likely to market fast foods (p=.003), cafeteria service (p=.004), vending (p=.007), take-out foods (p=.011), bakery (p=.033), specialty bars (p<.001), and National Nutrition Month promotions (p<.001) to visitors than hospitals that do not have a marketing department. A bake shop (p=.037) was marketed more often in hospitals in which the marketing department spends one to two hours marketing foodservice than in hospitals spending more or less time marketing foodservice. It is interesting to note that when body composition testing (p=.024) is marketed to visitors that the hospital marketing department spent greater than two hours marketing the foodservice department.

The analyses revealed a significant association between institutional characteristics and marketing techniques for in-house patients, employees, the community at large, and for hospital visitors. The researcher, therefore, rejects a, b, c, and d of Hypothesis Two.

H3: The characteristics of the respondents (age, sex, years of experience, level of education, professional affiliations, current position, employment status, and number of hours spent in marketing) will have no effect on the perceived importance of marketing techniques. Specific techniques examined were:

a. Marketing plan
b. New product development
c. Mass marketing
d. Target marketing
e. Market niche
f. Product diversification
g. Discounting
h. Merchandising
i. Advertising
j. Sales promotions
k. Public relations
l. Feedback
m. Reputation
n. Internal marketing

With one (1) being the least important and five (5) being the most important respondents were asked to rank 14 specific techniques according to their importance in the foodservice marketing process. Using Chi-Square Analysis nine significant associations were found at $p \leq .05$ (Table XVI).

New product development, which is generating and introducing new products into the market place, was viewed by members of the American Society for Hospital Foodservice Administrators (ASHFSA) as more important than those respondents not affiliated with this association. Of the 22 ASHFSA respondents, 18 felt that this technique was most important (p=.027). ASHFSA membership in Oklahoma is generally associated with hospitals in larger cities where greater competition among hospitals exists.

New product development was also rated higher by the respondents whose current position is defined as department head or foodservice director (p=.025). These respondents generally have greater foodservice responsibility and are more aware of the total foodservice operations than the hospital administrator, clinical dietitian, or foodservice supervisor.

Those respondents who spend greater than two hours per week marketing the foodservice department rated new product development as more important than those respondents that spend less than two hours per week (p=.013). Those foodservice administrators who have greater marketing participation intuitively know that marketing reflects the needs and wants of the perspective customer. The development of new products provides the products that customers desire.

TABLE XVI

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES USED AND RESPONDENT CHARACTERISTICS

Marketing Techniques	Respondent Characteristics					
	Current Position	Hours of Marketing	ASHFSA	NRA	DMA	IFT
New Product Development						
X^2	18.9	21.0	9.1			
df	9	9	1			
p	.025	.013	.027			
Product Diversification						
X^2				10.6	7.9	
df				3	3	
p				.014	.047	
Public Relations						
X^2						6.2
df						2
p						.045
Feedback						
X^2	12.7					
df	6					
p	.048					
Reputation						
X^2			6.3			
df			2			
p			.043			
Internal Marketing						
X^2	16.1					
df	6					
p	.013					

(See Appendix B, pages 129-248)

Product diversification is the strategy of marketing new products to new sets of customers. Respondents who were members of the National Restaurant Association (NRA) rated this technique as four or greater in importance (p=.014) while the Dietary Managers Association (DMA) respondents rated this technique as four or less (p=.047). Restaurant managers have long been aware that it takes this type of marketing to keep new customers patronizing their establishments and it is not surprising that Dietary Managers did not rate product diversification higher because they are mainly taught basic foodservice operations. Marketing of foodservice departments is an area of study that may need to be considered in the Vocational-Technical curriculum for Dietary Managers.

Of the 22 ASHFSA respondents answering the section of importance of marketing techniques, all members of this affiliation rated how the foodservice department was viewed by the customer as very important (p=.043). ASHFSA is a national organization with membership at the national and/or state level. They have been orienting their membership regarding marketing techniques since the onset of government regulations in hospitals. While the reputation of the foodservice may not be the reason a customer selects a hospital, it may very well be the reason a customer decides not to utilize the services of a particular hospital.

Internal marketing is satisfying the needs and wants of the foodservice employee while viewing them as internal customers and their jobs as internal products. Of the 43 foodservice directors responding to the importance of this specific technique, 54% rated this as most important (p=.013). Thirty-five of the respondents that listed their current position as foodservice director or department head generally had obtained a Bachelor of Science or higher degree. It is assumed that those respondents have been educated regarding the value of internal marketing in the foodservice industry.

Two respondents reported membership in the Institute of Food Technologists (IFT) and it is interesting to note that they rated public relations as three (p=.045). This may be due to the fact that this affiliation is more interested in the quality of a food product than the marketing of foodservices through activities that promote favorable relationships with the public.

Feedback is obtaining information regarding the product or service from customers through various channels. Patron surveys may be a source of feedback in hospitals. Those respondents who spend more than one hour per week marketing foodservice felt that feedback was of greater importance than those respondents who spend less than one hour per week marketing foodservice (p=.048). Those who are attentive to marketing are interested in the customer's perception of the food and the service. With this information the foodservice director can continue to bring quality products to future clients.

Nine significant associations ($p \leq .05$) were noted between respondent characteristics and the perceived importance of marketing. Based on the association between the respondents' variables and the perceived importance of new product development, product diversification, public relations, feedback, reputation, and internal marketing relationships the researcher rejects parts b, f, k, l, m, and n of Hypothesis Three. There was no association between the respondent variables and the perceived importance of marketing plan, mass marketing, target marketing, market niche, discounting, merchandising, advertising, and sales promotions and therefore, the researcher fails to reject parts a, c, d, e, g, h, i, and j of Hypothesis Three.

H4. Institutional characteristics (management of foodservice department, hospital classification, number of beds, average number of meals served daily, population of the city, and existence of a hospital marketing department) will have no effect on the foodservice director's perceived importance of marketing techniques. Specific techniques examined were the same as stated in Hypothesis Three.

Three significant associations were identified between contract foodservice management and the importance of foodservice marketing (Table XVII). Institutions with contract foodservice management rated advertising ($p=.011$), sales promotions ($p=.038$) and merchandising ($p=.024$) as significantly more important than those hospitals who manage their own foodservice departments. Somers (1987) reported that respondents employed by a contract foodservice company were more likely to rate advertising ($p=.009$) and merchandising ($p<.10$) more important than respondents employed by the hospital. A significant relationship ($p\leq.05$) was also noted between the foodservice departments managed by contract foodservice companies and the perceived importance of merchandising and advertising in research results conducted by Pickens and Shanklin (1985). Those with contract foodservice management are aware that the bottom line must reflect profits to the hospital and to their company. Therefore, they are well trained in stimulating the customer to patronize their establishment and to buy their products. These relationships document their commitment to increase revenue not only through advertising and sales promotions, but by promoting the sale of a product through quality presentation.

TABLE XVII

CHI-SQUARE DETERMINATIONS INDICATING ASSOCIATIONS BETWEEN MARKETING TECHNIQUES USED AND INSTITUTIONAL CHARACTERISTICS

Marketing Techniques	Respondent Characteristics			
	Management	Population	Number of Meals	Marketing Department
Advertising				
X^2	11.2	14.4		
df	3	6		
p	.011	.025		
Sales Promotions				
X^2	8.4			
df	3			
p	.038			
Merchandising				
X^2	7.5		9.7	
df	2		4	
p	.024		.045	
New Product Development				
X^2	13.8			
df	6			
p	.032			
Internal Marketing				
X^2				9.5
df				2
p				.009

(See Appendix B, pages 129-248)

Hospitals located in cities with a population of 50,000 or more rated advertising significantly higher than those located in smaller towns (p=.025). These hospitals also indicated that new product development was more important than those hospitals located in towns of less than 50,000 residents (p=.032). Large metropolitan cities are accustomed to competition but Oklahoma has a number of rural hospitals that are located in small towns of less than 50,000. Historically, these hospitals have treated only patients from their town and have not felt the need to compete by advertising and developing new products. The trend is for the government to designate regional referral hospitals and these smaller hospitals will have to become more market oriented to keep their share of customers.

Merchandising was indeed considered more important in hospitals that serve over 300 meals per day (p=.045). These hospitals generally have foodservice directors with a higher degree of education managing the dietary department. They have learned that proper merchandising provides appealing food that promotes the sale of a product through presentation.

The Chi-Square Analysis indicated a trend of high significance (p=.009) between hospitals that have a marketing department and the importance of internal marketing. Those designated as marketing directors intuitively understand that marketing begins internally and then extends outward to the public.

Seven significant associations ($p \leq .05$) were noted between institutional characteristics and the perceived importance of marketing. Institutional characteristics effected the perceived importance of new product development, merchandising, advertising, sales promotions, and internal marketing. Therefore, the researcher rejects parts b, h, i, j, and n of Hypothesis Four. Institutional characteristics had no effect on market plan, mass marketing, target marketing, market niche, product diversification, discounting, public relations, feedback, and reputation. The researcher fails to reject parts a, c, d, e, f, g, k, l, and m of Hypothesis Four.

CHAPTER V

SUMMARY, RECOMMENDATIONS AND IMPLICATIONS

Pickens and Shanklin (1985) and Somers (1987) have completed two previous studies that specifically looked at the marketing techniques of hospital foodservice departments. The aim of this study was to identify the marketing techniques utilized by hospital foodservice departments to in-house patients, hospital employees, the community at large, and hospital visitors, and to determine the perceived importance of specified marketing techniques by foodservice directors in Oklahoma.

Summary

The results of the data collected from the questionnaires completed by Oklahoma hospital foodservice directors are presented in Chapter IV. The sample, which is the same as the population consisted of all Oklahoma hospitals. Data obtained from 71 usable questionnaires were analyzed using chi-square analysis.

The respondents were predominately female, between the ages of 20 and 59. Forty-six respondents had completed a Bachelor of Science degree or higher, 13 respondents had vocational-technical training, and 8 had a high school education. Only one respondent had not completed high school. Forty-eight percent of the respondents were registered members of the American Dietetic Association (ADA) and 31 percent were affiliated with the American Society for Hospital Foodservice Directors

(ASHFSA), while 35 percent were members of the Dietary Managers Association (DMA). Six respondents were members of the National Restaurant Association (NRA) and two members were affiliated with the Institute of Food Technologists. The majority of the respondents were employed full-time, were in the current position of foodservice director or department head, had between six and fourteen years of total foodservice experience and spent less than three hours per week marketing the foodservice department (Table I).

Sixty-one percent of the respondents indicated that the foodservice department was managed by the hospital rather than by a contract foodservice management company and 63 percent were classified as not for profit operations. Six hospitals were corporate owned, seven hospitals were federally operated while 13 were city or county operated. In addition, four were classified as a hospital corporation and five were religious affiliated. Sixty-nine percent of the respondents were employed in hospitals located in cities of less than 50,000 residents and 78 percent of the hospitals had 200 beds or less. Thirty-nine percent of the hospitals served an average of less than 200 meals per day, while 11 percent served more than 1000 meals per day. Twenty-eight of the 71 hospitals had a marketing department. Fourteen respondents indicated that the hospital marketing department did not market the foodservice department, five reported the marketing department spent less than one hour, and nine reported that the marketing department spent 1-2 hours marketing the foodservice department (Table II).

Ninety-two percent of the foodservice directors indicated that they used the marketing technique of providing guest trays to patients.

Eighty-eight percent used special holiday or "theme" menus and 65 percent used birthday or best wishes cakes as marketing techniques to patients. One technique listed by a respondent under "Other" marketing techniques was a flyer sent to patients with employee signatures responsible for the meal (Table III).

Cafeteria service was the predominant technique used by respondents for employees. While 90 percent of the respondents indicated that the cafeteria was marketed to employees, 78 percent used discounted cafeteria meals, 52 percent advertised the cafeteria menu, and 49 percent offered take-out service as marketing techniques to hospital employees. Vending which has been encouraged through trade journals (Beasley, 1990), was marketed to employees by only 47 percent of the respondents. The traditional marketing technique, nutrition consultation, was used by 45 percent of the respondents (Table IV).

Seventy-three percent of the survey participants used nutritional counseling to market hospital foodservice to the community. Cafeteria service was marketed to the community by 71 percent of the respondents. Dietitian support for home health, which is a new concept in foodservice marketing, was marketed by 34 percent of the respondents. While foodservice to senior citizens has been targeted by trade journals as a market niche for hospital foodservice departments (Beasley, 1987; Sampson, 1990; "Washington Hospital," 1989), only 24 percent of the respondents marketed Meals on Wheels program, 20 percent reported the sale of convenience meals, 18 percent marketed discounted meals, and 9 percent indicated congregate meals were being marketed to the elderly (Table V). It may interest the reader that one hospital marketed a newsletter to the community.

Eighty-five of the respondents used the cafeteria and 82 percent used guest trays to patient rooms as a marketing technique to visitors. National Nutrition Month promotions were used by 58 percent and vending was marketed to visitors by 48 percent of the respondents. Five "Other" techniques were listed as marketing techniques to visitors. These included employee arts and crafts show (N = 2), contest and games (N = 1), body composition testing (N = 1), special diets served (N = 2), and promotion meals (N = 1) (Table VI).

On a scale of one to five, 93 percent of the respondents ranked reputation as very important (ranked 4 or 5). Feedback (86%), market niche (85%) and internal marketing (78%) were also rated as very important by the respondents. The survey participants rated mass marketing (34%) and advertising (28%) lower than other marketing techniques (Table VII).

The four hypotheses were tested and the characteristics of the respondents (age, sex, years of experience, level of education, professional affiliation, current position, employment status, and number of hours spent in marketing) were associated with marketing techniques for in-house patients, hospital employees, the community at large, and hospital visitors (Tables VIII, IX, X, and XI). The characteristics of the institutions (management of the foodservice department, hospital classification, number of beds, average number of meals served daily, population of the city, existence of a hospital marketing department and the hours spent marketing) were also associated with the marketing techniques used for in-house patients, hospital employees, the community at large, and hospital visitors (Tables XII, XIII, XIV, and XV). Tables XVI and XVII illustrate the associations that existed between the characteristics of the respondents and the characteristics of the institutions and the foodservice director's perceived importance of marketing techniques.

Recommendations

Recommendations regarding the research instrument are concerned with the fact that question number nine of section three was confusing. Respondents were asked to select all the classifications that applied to their hospital. Many respondents answered only one part of this question rather than all that applied. This question could have been divided into two parts, with the first question asking to identify if the institution is for profit or not for profit. Then the respondents could be asked to indicate the classification of their hospital regarding corporate owned, government operated, religious affiliation.

Approximately six percent of the respondents did not answer Section II of the questionnaire. The survey participants were asked to rate specific marketing techniques according to how significant they felt each technique was to the marketing process. Even though the respondents were given a definition of the specific marketing techniques that were to be rated, the terminology may have not been familiar to the survey participants. The use of the word "felt" may also have discouraged survey participants to respond.

In the past, hospitals foodservice departments have marketed their services primarily to the in-patient because hospitals depended on this market for its principal revenue. As hospitals become more competitive and revenue driven, it is imperative that foodservice directors become aware of the evolving marketing trends that may contribute to the bottom line profits. Research regarding the marketing techniques of hospital foodservice departments has been limited. Research regarding foodservice marketing techniques needs to be conducted periodically and to a much broader audience, to ascertain the current marketing techniques utilized by a random number of hospital foodservice directors by states, region, or nationwide.

Implications

The characteristics of the respondents and the characteristics of the institutions had an association with the marketing techniques utilized to in-patients, hospital employees, the community at large, and hospital visitors. In general, those respondents with more experience, whose current position was foodservice director, who had a B.S. degree or higher, who was affiliated with ADA, NRA, or ASHFSA, who spent time marketing the foodservice department implemented more marketing techniques than survey participants who did not have these characteristics. Those respondents whose hospitals were located in cities of over 500,000 residents, that have over 300 beds, that serve over 1,000 meals per day and which were classified for profit utilized more marketing techniques to in-house patients, hospital employees, the community at large and hospital visitors than those without these characteristics. Hospitals with these characteristics tend to employ foodservice directors with the aforementioned characteristics, thereby implying that a relationship exists between the characteristics of the respondents and the characteristics of the institutions and the type of marketing techniques used by the foodservice department.

The characteristics of the respondents and the characteristics of the institutions were also associated with the foodservice director's perceived importance of marketing techniques. Those respondents whose current position was foodservice director or department head and whose hospitals had a marketing department indicated that internal marketing was very important. New product development was reported as very important by respondents whose current position was foodservice director, who were affiliated with ASHFSA, who marketed the foodservice department more than two hours per day, and whose hospitals were located in cities greater than 50,000 residents.

While foodservice directors are aware that marketing is important to the success of the hospital foodservice department, many are not aware of current marketing trends. Trade journals indicate that vending, take-out meals, and marketing to seniors, to name a few, are the marketing techniques currently being explored by hospital foodservice departments. No matter how small the institution, the foodservice director must be informed and willing to take the risks that are required to market the foodservice department. Results of this study, as well as those reported by Somers (1987), and Pickens and Shanklin (1985), need to be disseminated widely to hospital foodservice directors. This could be accomplished through workshops, professional seminars, and articles in trade or professional journals. The foodservice director can then determine which marketing techniques are best suited for their facility and develop a strategic marketing plan for the foodservice department.

SELECTED BIBLIOGRAPHY

American Dietetic Association. (1987). Gain the competitive edge: A marketing seminar. Manual presented at the ADA seminar in Kansas City, October 1989.

American Hospital Association guide to the health care field. (1990). Chicago: American Hospital Association, A334-A342.

Beasley, M. A. (1987). The aging of America. Hospital Food & Nutrition Focus, 4(1), 1-6.

Beasley, M. A. (1990). Ways vending can work for you. Food Management, 25(8), 42, 46.

Berry, L. (Ed.). (1984). The employee as customer in Christopher Lovelock. Services Marketing, pp. 271-278.

Blake, K. (1988). Chefs at center stage. Restaurants & Institutions, 23(9), 152-158.

Boss, D. (1990). The next wave is about to hit. Food Management, 25(9), 16.

Erickson, P. (1990). Dietitians' input and regional menus add interest to mealtime. Restaurants & Institutions, 100(19), 178.

For healthier choices: McLean hospital promotes "100 points of light." (1990). FoodService Director, 3(12), 10.

Georgia Baptist hospital theme days are very popular. (1989). The Stokes Report, 9(3), 12.

Gindin, R. (1988). Healthful meals by the month. Food Management, 23(10), 70.

Grant, J. (1987, Fall/Winter). Salesmanship for the hospital. Journal of Hospital Marketing, 1, 45-49.

Helm, K., & Rose, J. C. (1986). The competitive edge: Marketing strategies for the registered dietitian (Planning manual, pp. 141-142). Chicago: American Dietetic Association.

Helwig, T. G., & Council, K. A. (1979). SAS user's guide. Raleigh, NC: SAS Institute.

Kaud, F., Miller, R. P., & Underwood, R. F. (1982). Cafeteria management for hospitals (pp. 87-88). Chicago: American Hospital Association.

Kizilbash, A. H., & Wagle, J. (1986, Fall/Winter). Direction in hospital advertising. Journal of Hospital Marketing, 1, 95-103.

Lydecker, T. (1988). Should you go for take-out? Restaurants and Institutions, 98(10), 44-51.

Long, D. (1986, September). The health care market. Restaurant Business, 85, 162-164.

Long, D. (1989). Should you go for take-out? Restaurants and Institutions, 98(10), 44-51.

Make-your-own makes cents. (1989). Food Management, 24(11), 77.

Make your own soup bar. (1991). Market-Link, 10(2), 14.

Mielke, D. (1989). In Lutheran hospital cafeteria: Calorie cards do the counting. FoodService Director, 2(3), 24.

Owen, A. L. (1986). The competitive edge: Marketing strategies for the registered dietitian (Planning manual, pp. 2-3). Chicago: American Dietetic Association.

Parks, S. C., & Moody, D. L. (1986). Marketing: A survival tool for dietetic professionals in the 1990's. Journal of the American Dietetic Association, 86(1), 33-36.

Pickens, C. W., & Shanklin, C. W. (1985). State of the art in marketing hospital foodservice departments. Journal of the American Dietetic Association, 85(11), 1474-1478.

Powills, S. (1987). Marketing shorts. Hospitals, 61(16), 39.

Riggs, J. (March 12, 1991). Personal interview, Stillwater, OK.

Ross Laboratories. (1990, December). Business success in dietetics-generating revenue and saving costs (Development Series D421, pp. 48-49). Columbus, OH: Author.

Sales shifting: Vend machine volume now 55% food items. (1990). FoodService Director, 3(1), 5.

Sampson, F. G. (1990). Marketing for the '90s: Aim for age 50-plus group. Nation's Restaurant News, 24(19), 50.

Schechter, M. (1990). Home care. Food Management, 25(3), 134-144.

Solovy, A. (1989). Health care in the 1990s: Forecasts by top analyst. Hospitals, 63(14), 34-46.

Somers, D. C. (1987). Analysis of marketing strategies of health care foodservice departments in Indiana. Unpublished master's thesis, Oklahoma State University, Stillwater.

Stanton, J. L., & McNutt, C. J. (1991). Future food for Americans, 2001: A food odyssey. Food Nutrition News, 62(5), 29-31.

Stephenson, S. (1991). Annual forecast. Restaurants & Institutions, 101(1), 63.

Take-out on the go. (1991). FoodService Director, 4(1), 85-92.

The ins & outs of vending. (1988). FoodService Director, 1(8), 28-29.

Video machine adds reel sales. (1988). Food Management, 23(10), 85-86.

Washington hospital chases seniors, biz sites. (1989). FoodService Director, 2(8), 1.

Winston, W. J. (1986, Fall/Winter). The evolution of hospital marketing. Journal of Hospital Marketing, 1, 19-28.

Zikmund, W., & D'Amico, M. (1989). Marketing (pp. 659-679). Toronto, Canada: John Wiley & Sons.

APPENDICES

APPENDIX A

QUESTIONNAIRE

OSU

Oklahoma State University

DEPARTMENT OF FOOD, NUTRITION AND INSTITUTION ADMINISTRATION
COLLEGE OF HOME ECONOMICS

STILLWATER, OKLAHOMA 74078-0337
HOME ECONOMICS WEST 425
405-744-5040

September 12, 1990

Dear Food Service Director:

We would like to ask your assistance in a research survey on "Marketing Strategies in Healthcare Foodservice Departments." Your participation in the endeavor will assist in identifying marketing strategies utilized by foodservice directors in Oklahoma and marketing techniques believed to be important to the success of the foodservice department.

The information you convey to us will be held in strict confidence. At no time will you or the facilities you serve be identified in the research report.

It will take approximately 15 minutes to complete this questionnaire. Please return the completed survey on or before October 1, 1990. If you have any questions, please call (405) 372-1480, ext. 450 and ask for Edith.

If you would like to have a summary of the results please provide your name and address on the questionnaire where indicated. Thank you for your cooperation and professional assistance.

Sincerely,

Edith M Gierlatowicz

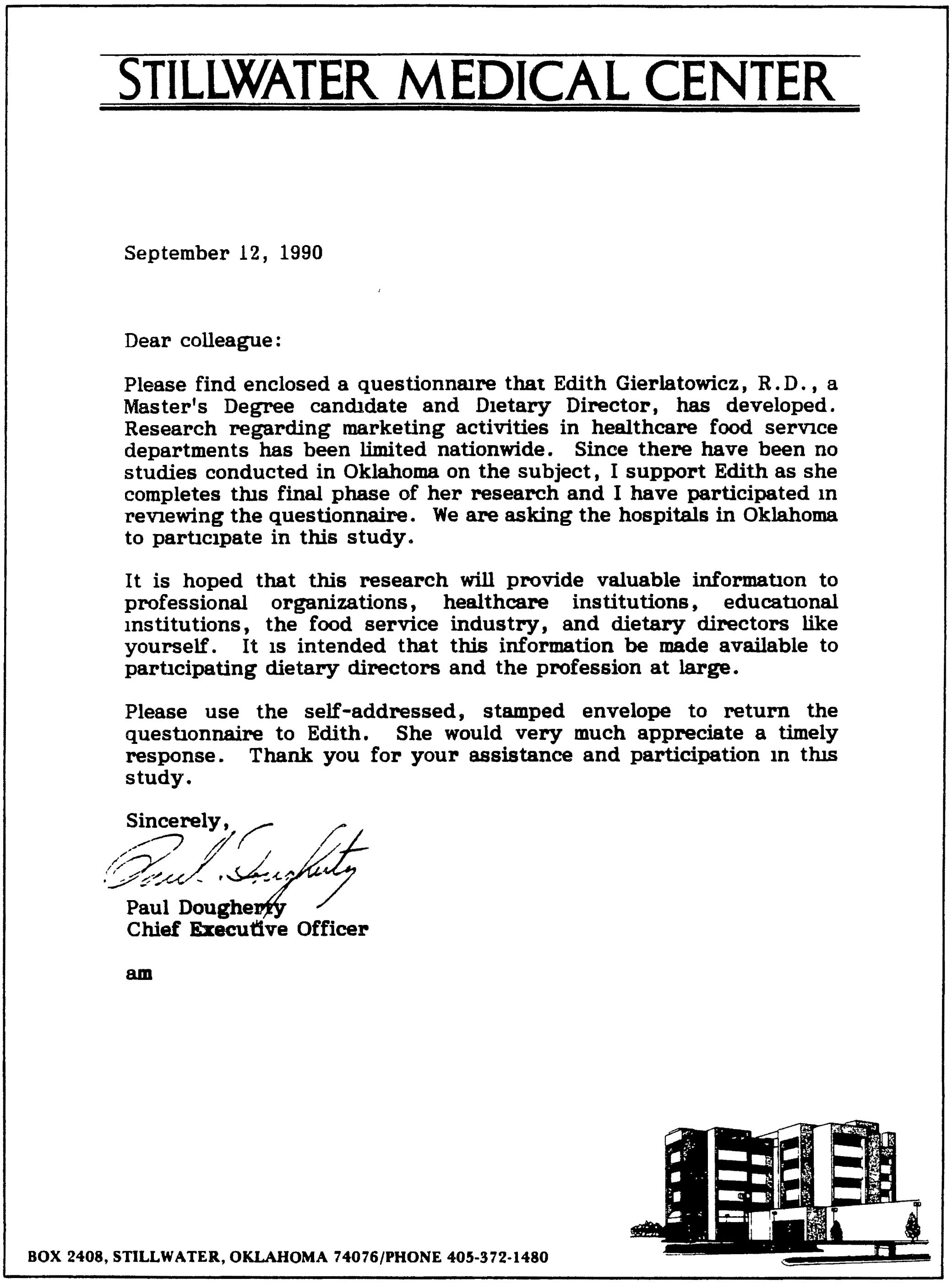
Edith M. Gierlatowicz, RD/LD
Food Service Director
Stillwater Medical Center
Graduate Student

Lea L Ebro

Lea L. Ebro, Ph.D., RD/LD
Major Advisor

CENTENNIAL
1890 • 1990

Celebrating the Past Preparing for the Future



STILLWATER MEDICAL CENTER

September 12, 1990

Dear colleague:

Please find enclosed a questionnaire that Edith Gierlatowicz, R.D., a Master's Degree candidate and Dietary Director, has developed. Research regarding marketing activities in healthcare food service departments has been limited nationwide. Since there have been no studies conducted in Oklahoma on the subject, I support Edith as she completes this final phase of her research and I have participated in reviewing the questionnaire. We are asking the hospitals in Oklahoma to participate in this study.

It is hoped that this research will provide valuable information to professional organizations, healthcare institutions, educational institutions, the food service industry, and dietary directors like yourself. It is intended that this information be made available to participating dietary directors and the profession at large.

Please use the self-addressed, stamped envelope to return the questionnaire to Edith. She would very much appreciate a timely response. Thank you for your assistance and participation in this study.

Sincerely,

Paul Dougherty
Chief Executive Officer

am

BOX 2408, STILLWATER, OKLAHOMA 74076/PHONE 405-372-1480

Oklahoma State University
Department of Food, Nutrition and Institution Administration
Edith M. Gierlatowicz - (405) 372-1480, ext. 450

SECTION I: MARKETING TECHNIQUES CURRENTLY UTILIZED

Instructions: Please answer all of the questions by placing a check mark in the blank before the answer that best reflects your hospital's involvement in the marketing of your dietary department's activities. List other techniques utilized by your department at the end of each question.

1. The following marketing techniques are used to market hospital food service to **in-house patients** (Check as many as apply):

_____ 1. "Guest" Trays
_____ 2. Wine Service
_____ 3. Fruit Baskets
_____ 4. Congratulation Meals for New Parents
_____ 5. Special Holiday or Theme Menus
_____ 6. Twenty-Four Hour Room Service
_____ 7. Restaurant-Style Menus
_____ 8. Birthday or Best Wishes Cakes
_____ 9. Refreshment Cart
_____ 10. Gourmet Menus that Describe Food Origins
_____ 11. Tray Favor Programs for Children
_____ 12. Menus featuring Guest Chef Recipes
_____ 13. Symbols on Menus to Indicate Health-Wise Dishes
_____ 14. Buffet-Style Pediatric Carts
_____ 15. Elegant In-Room Dining
_____ 16. Congregate Dining with Families
_____ 17. Suite Service with Waiters
_____ 18. Cookbooks
_____ 19. Take Home Meals
_____ 20. Family Style Food Service
_____ 21. Specialty Stores
_____ 22. Other (Please Specify): ______________________________
____
____

2. The following marketing techniques are utilized to market hospital food to **visitors** (Check as many as apply):

_____ 1. Cafeteria Service
_____ 2. Fast Food Service
_____ 3. Restaurant Service
_____ 4. Vending Service
_____ 5. Take-Out Service
_____ 6. Bake Shop
_____ 7. Deli
_____ 8. Pizza Parlor
_____ 9. Specialty Bars, i.e., Potato, Salad, Sandwich
_____ 10. Guest Trays to the Patient's Room
_____ 11. Cafeteria Menu Advertisement
_____ 12. National Nutrition Month Promotions
_____ 13. Other (Please Specify): ______________________________
____
____

(2)

3. The following marketing techniques are utilized to market hospital food service to **hospital employees** (Check as many as apply):

_____ 1. Cafeteria Service
_____ 2. Fast Food Service
_____ 3. Restaurant Service
_____ 4. Vending Service
_____ 5. Take-Out Service
_____ 6. Bake Shop
_____ 7. Deli
_____ 8. Specialty Bars, i.e., Potato, Salad, Sandwich
_____ 9. Pizza Franchise
_____ 10. Party Trays
_____ 11. Full Catering Program
_____ 12. Themed Dining Environments
_____ 13. Employee Contests in the Cafeteria
_____ 14. New Product Samples
_____ 15. Nutrition Consultation
_____ 16. Nutritional Analysis of Cafeteria Food is Provided
_____ 17. Cafeteria Menu is Advertised
_____ 18. Provision of Meals for Night Shift Employees
_____ 19. Nutritions Cuisine Served in the Cafeteria
_____ 20. Discounted Hospital Cafeteria Meals
_____ 21 Birthday Cakes available for delivery to employees
_____ 22. Weight Reduction Program
_____ 23. Modified Food Provided for Employees on Modified Diets
_____ 24. Cookbooks
_____ 25. Separate Physician Dining
_____ 26. Other (Please Specify): ______________________________

____

____

4. The following techniques are utilized to market hospital food service to the **community at large** (Check as many as apply)·

_____ 1. Nutritional Counseling
_____ 2. Weight Reduction Programs
_____ 3. Congregate Meals for Senior Citizens
_____ 4. Meals on Wheels Program
_____ 5. Convenience Meals for Sale to the Elderly
_____ 6. Cafeteria Service
_____ 7. Fast Food Service
_____ 8. Restaurant Service
_____ 9. Food Service to Skilled Nursing Facilities
_____ 10. Food Service to Daycare Centers
_____ 11. Food Service to School Lunchrooms
_____ 12. Food Service to Jails
_____ 13. Dietitian Support for Home Health Care
_____ 14. Sale of Nutritional Support Products
_____ 15. Catering Programs for Events Outside Hospital
_____ 16. Providing Nutritional Information through News Media
_____ 17. Nutritional Programs for Civic Organizations and Clubs
_____ 18. Nutritional Programs for Schools
_____ 19. Provide Meals and Food for Breaks to Office Buildings

(3)

Marketing Techniques utilized to the **community at large** (continued)
(Check all that apply):

_____ 20. Discounted Hospital Meals to the Elderly
_____ 21. Provide Training for University and/or Vo-Tech Food Service Students
_____ 22. Provide Consultation Services to Other Facilities
_____ 23. Nutritional Screening Programs
_____ 24. Cookbooks and/or Nutrition Related Pamphlets
_____ 25. Bakery
_____ 26. Banquet Service
_____ 27. Cater to Civic Groups
_____ 28. Other (Please Specify): ______________________________
____
____

SECTION II: IMPORTANCE OF MARKETING TECHNIQUES

Instructions: With **one (1)** being the **least** important and **five (5)** the **most** important, please rate each marketing technique according to how significant you feel each technique is in the marketing process.

1. MARKETING PLAN (Guidelines for your department which are consistent with hospital strategies, goals, and objectives for setting the broad directions for marketing efforts.)
   Least 1 2 3 4 5 Most

2. NEW PRODUCT DEVELOPMENT (Generating and introducing new products to the market place)
   Least 1 2 3 4 5 Most

3. MASS MARKETING (One attempts to market the same product or service to everyone.)
   Least 1 2 3 4 5 Most

4. TARGET MARKET (One particular market segment pinpointed as a primary customer group.)
   Least 1 2 3 4 5 Most

5. MARKET NICHE (Realizing that you cannot be all things to all people, you find the spot that fits your objectives and goals and meets a particular need.)
   Least 1 2 3 4 5 Most

6. PRODUCT DIVERSIFICATION (The strategy of marketing new products to new sets of customers.)
   Least 1 2 3 4 5 Most

7. DISCOUNTING (Reducing the price for services to a select group of users.)
   Least 1 2 3 4 5 Most

8. MERCHANDISING (Promoting the sale of a product through presentation.)
   Least 1 2 3 4 5 Most

9. ADVERTISING (Any paid, persuasive message used to call public attention to a service or product to arouse a desire to buy or patronize.)
Least 1 2 3 4 5 Most

10. SALES PROMOTIONS (Those promotional activities, other than advertising, personal selling, and publicity, that stimulate customers to buy.)
Least 1 2 3 4 5 Most

11. PUBLIC RELATIONS (Activities to promote favorable relationship with the public, i.e. seminars, conferences.)
Least 1 2 3 4 5 Most

12. FEEDBACK (Obtaining information regarding the product or service from the customer, i.e. patron surveys.)
Least 1 2 3 4 5 Most

13. REPUTATION (How your department/services are viewed by the consumer.)
Least 1 2 3 4 5 Most

14. INTERNAL MARKETING (Satisfying the needs and wants of the Foodservice employee while viewing them as internal customers and their jobs as internal products.)
Least 1 2 3 4 5 Most

SECTION III: GENERAL INFORMATION

Instructions: The information included in this questionnaire is confidential and will be used for research purposes only. Please answer all questions that describe you and your facility.

1. Your age is:
1. _____ 20-29 3. _____ 40-49 5. _____ 60-69
2. _____ 30-39 4. _____ 50-59 6. _____ 70 or Over

2. Your sex is
1. _____ Female 2. _____ Male

3. Your total number of years of work experience in foodservice are:
1. _____ Less than 1 year 5. _____ 16-20 years
2. _____ 1-5 years 6. _____ 21-25 years
3. _____ 6-10 years 7. _____ 26-30 years
4. _____ 11-15 years 8. _____ Over 30 years

4. Your highest level of education is:
1. _____ High School or GED
2. _____ Vocational Degree
3. _____ Associate Degree
4. _____ Bachelor's Degree
5. _____ Master's Degree
6. _____ Ph.D. Degree
7. _____ Other (Please Specify) ________________________________

5. Your professional affiliations include:
   1. _____ American Dietetic Association
      1. _____ Registered 2. _____ Non-Registered
   2. _____ American Society of Hospital Food Service Administrators
   3. _____ National Restaurant Association
   4. _____ Dietary Managers Association
   5. _____ Other (Please Specify): ______________________________

6. Your current position title is: ______________________________

7. Your Present Employment Status is.
   1. _____ Full-time (35 or more hours per week)
   2. _____ Part-time (34 hours per week or less)

8. Management of the Food Service Department is:
   1. _____ Employed by the Hospital
   2. _____ Employed by a Contract Food Service Company
   3. _____ Other (Please Specify) ______________________________

9. The hospital where you are currently employed is (Check all which apply)·
   1. _____ Not for Profit
   2. _____ For Profit
   3. _____ Corporate Owned
   4. _____ Government Operated (Federal)
   5. _____ Government Operated (City, County)
   6. _____ Owned and Managed by a Hospital Corporation
   7. _____ Religious Affiliation
   8. _____ Other (Please Specify) ______________________________

10. The number of beds your facility is licensed for is:
    1. _____ Less than 25 Beds
    2. _____ 26-50 Beds
    3. _____ 51-100 Beds
    4. _____ 101-200 Beds
    5. _____ 201-300 Beds
    6. _____ 301-400 Beds
    7. _____ 401-500 Beds
    8. _____ Over 500 Beds

11. Your average number of meals served daily is _______ .

12. The population of the city in which your hospital is located is:
    1. _____ Less than 10,000
    2. _____ 10,000-49,999
    3. _____ 50,000-99,999
    4. _____ 100,000-249,999
    5. _____ 250,000-499,999
    6. _____ 500,000-749,999
    7. _____ 750,000-1,000,000

13. Does your hospital have a Marketing Department?
    1. _____ Yes 2. _____ No

14. If Yes, how many hours do they spend marketing the foodservice department per week?
    1. _____ None
    2. _____ Less than one
    3. _____ 1-2 Hours
    4. _____ More than 2 Hours

15. How many hours per week do you spend on marketing the foodservice department of your facility?
    1. _____ None
    2. _____ Less than one
    3. _____ 1-2 hours
    4. _____ 2-3 hours
    5. _____ 3-4 hours
    6. _____ Other (Please Specify) ______________________________

Thank you for your assistance. If you would like a summary of the results, please indicate by giving your name and address below.

Name: ______________________________

Address: ______________________________

____

____

APPENDIX B

CHI-SQUARE FREQUENCY ANALYSES TABLES FOR THOSE ASSOCIATIONS WHICH WERE SIGNIFICANT

Key to Tables

In the following tables, the abbreviations used refer to questions on the questionnaire.

PAT refers to marketing techniques utilized to patients; (Section I, Question 1).
0=No; 1=Yes

VIS refers to marketing techniques utilized to visitors; (Section I, Question 2)
0=No; 1=Yes

EMP refers to marketing techniques utilized to employees; (Section I, Question 3)
0=No; 1=Yes

COM refers to marketing techniques utilized to the community at large; (Section I, Question 4)
0=No; 1=Yes

IMP refers to the importance of selected marketing techniques; (Section II)
0=No; 1=Yes

INF refers to general information that describes the respondents and the facility. When RINF is used, the values of the variable have been collapsed; (Section III)

INF1 refers to the age of the respondents.
2=<40; 3=40 and older

INF2 refers to the sex of the respondents.
1=female; 2=male

INF3 refers to the respondents' years of experience.
3=10 or less; 5=11-20; 7=21-30; 8=over 30

INF4 refers to the respondents' highest level of education.
0=no degree; 1=high school; 3=Vo-Tech or Assoc. Degree; 4=B.S. Degree or higher

INF5 refers to professional affiliations of the respondents.
5_1=ADA; 5_2=Registered ADA member; 5_3=Non-registered ADA member; 5_4=ASHFSA; 5_5=NRA; 6_6=DMA; 5_8=IFT

RINF6 refers to current position of the respondents.
ADA=administrator; DHD=department head or foodservice director; DIET=clinical dietitian; MGR=dietary manager or supervisor

INF7 refers to employment status of the respondents.
1=full-time; 2=part-time

INF8 refers to management of the foodservice department.
1=hospital; 2=contract foodservice company

INF9 refers to hospital classification (0=no; 1=yes)
INF9_1 = not for profit
INF9_2 = for profit
INF9_3 = corporate owned
INF9_4 = federal government operated
INF9_5 = city, county government operated
INF9_6 = owned and managed by a hospital corporation
INF9_7 = religious affiliation
INF9_8 = religious affiliated but managed by hospital corporation
INF9_9 = government owned but managed by a hospital corporation

RINF10 refers to number of beds
1=100 or less; 2=101-300; 3=>300

RINF11 refers to the average number of meals served daily.
1=<300; 2=300-999; 3=1000 or greater

RINF12 refers to the population of the city.
1=<50,000; 2=50,000-499,999; 3=500,000 or greater

INF13 refers to the existence of a hospital marketing department.
1=yes; 2=no

INF14 refers to the number of hours the marketing department spends marketing the foodservice department.
1=none; 2=<1; 3=1-2; 4=>2

INF15 refers to the number of hours the respondent spends marketing the foodservice department.
2=<1; 3=1-2; 4=2-3; 5=>3

```
                TABLE OF INF5_9 BY PAT1

      INF5_9          PAT1

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |      5 |     65 |     70
                     | 5 9155 | 64 085 |
                     | 0 1417 | 0 0131 |
                     |   7 04 |  91 55 |  98 59
      ---------------+--------+--------+
                   1 |      1 |      0 |      1
                     | 0 0845 | 0 9155 |
                     | 9 9178 | 0 9155 |
                     |   1 41 |   0 00 |   1 41
      ---------------+--------+--------+
      Total                 6       65       71
                         8 45    91 55   100 00

         STATISTICS FOR TABLE OF INF5_9 BY PAT1

Statistic                         DF       Value       Prob
------------------------------------------------------------
Chi-Square                         1      10 988      0 001
Likelihood Ratio Chi-Square        1       5 104      0 024
Continuity Adj  Chi-Square         1       2 263      0 132
Mantel-Haenszel Chi-Square         1      10 833      0 001
Fisher's Exact Test (Left)                            0 085
                    (Right)                           1 000
                    (2-Tail)                          0 085
Phi Coefficient                           -0 393
Contingency Coefficient                    0 366
Cramer's V                                -0 393

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_5 BY PAT1

      INF9_5          PAT1

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |      3 |     55 |     58
                     | 4 9014 | 53 099 |
                     | 0 7376 | 0 0681 |
                     |   4 23 |  77 46 |  81 69
      ---------------+--------+--------+
                   1 |      3 |     10 |     13
                     | 1 0986 | 11 901 |
                     | 3 2909 | 0 3038 |
                     |   4 23 |  14 08 |  18 31
      ---------------+--------+--------+
      Total                 6       65       71
                         8 45    91 55   100 00

         STATISTICS FOR TABLE OF INF9_5 BY PAT1

Statistic                         DF       Value       Prob
------------------------------------------------------------
Chi-Square                         1       4 400      0 036
Likelihood Ratio Chi-Square        1       3 471      0 062
Continuity Adj  Chi-Square         1       2 390      0 122
Mantel-Haenszel Chi-Square         1       4 338      0 037
Fisher's Exact Test (Left)                            0 070
                    (Right)                           0 991
                    (2-Tail)                          0 070
Phi Coefficient                           -0 249
Contingency Coefficient                    0 242
Cramer's V                                -0 249

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY PAT1

      RINF10          PAT1

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |      2 |     25 |     27
                     | 2 4545 | 24 545 |
                     | 0 0842 | 0 0084 |
                     |   3 64 |  45 45 |  49 09
      ---------------+--------+--------+
                   2 |      0 |     19 |     19
                     | 1 7273 | 17 273 |
                     | 1 7273 | 0 1727 |
                     |   0 00 |  34 55 |  34 55
      ---------------+--------+--------+
                   3 |      3 |      6 |      9
                     | 0 8182 | 8 1818 |
                     | 5 8182 | 0 5818 |
                     |   5 45 |  10 91 |  16 36
      ---------------+--------+--------+
      Total                 5       50       55
                         9 09    90 91   100 00

      Frequency Missing = 16

         STATISTICS FOR TABLE OF RINF10 BY PAT1

Statistic                         DF       Value       Prob
------------------------------------------------------------
Chi-Square                         2       8 393      0 015
Likelihood Ratio Chi-Square        2       7 794      0 020
Mantel-Haenszel Chi-Square         1       2 742      0 098
Phi Coefficient                            0 391
Contingency Coefficient                    0 364
Cramer's V                                 0 391

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY PAT2

      INF1            PAT2

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   2 |     24 |      2 |     26
                     | 25 268 | 0 7324 |
                     | 0 0636 | 2 1939 |
                     |  33 80 |   2 82 |  36 62
      ---------------+--------+--------+
                   3 |     45 |      0 |     45
                     | 43 732 | 1 2676 |
                     | 0 0367 | 1 2676 |
                     |  63 38 |   0 00 |  63 38
      ---------------+--------+--------+
      Total                69        2       71
                        97 18     2 82   100 00

         STATISTICS FOR TABLE OF INF1 BY PAT2

Statistic                         DF       Value       Prob
------------------------------------------------------------
Chi-Square                         1       3 562      0 059
Likelihood Ratio Chi-Square        1       4 119      0 042
Continuity Adj  Chi-Square         1       1 306      0 253
Mantel-Haenszel Chi-Square         1       3 512      0 061
Fisher's Exact Test (Left)                            0 131
                    (Right)                           1 000
                    (2-Tail)                          0 131
Phi Coefficient                           -0 224
Contingency Coefficient                    0 219
Cramer's V                                -0 224

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF9_2 BY PAT2

     INF9_2          PAT2

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     60 |      0 |     60
                    |  58 31 | 1 6901 |
                    |  0 049 | 1 6901 |
                    |  84 51 |   0 00 |  84 51
     ---------------+--------+--------+
                  1 |      9 |      2 |     11
                    |  10 69 | 0 3099 |
                    | 0 2672 |  9 219 |
                    |  12 68 |   2 82 |  15 49
     ---------------+--------+--------+
     Total               69        2       71
                      97 18     2 82   100 00


        STATISTICS FOR TABLE OF INF9_2 BY PAT2

 Statistic                     DF      Value       Prob
 ------------------------------------------------------
 Chi-Square                     1     11 225      0 001
 Likelihood Ratio Chi-Square    1      7 790      0 005
 Continuity Adj  Chi-Square     1      5 566      0 018
 Mantel-Haenszel Chi-Square     1     11 067      0 001
 Fisher's Exact Test (Left)                       1 000
                     (Right)                      0 022
                     (2-Tail)                     0 022
 Phi Coefficient                       0 398
 Contingency Coefficient               0 369
 Cramer's V                            0 398

 Sample Size = 71
 WARNING   50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF9_3 BY PAT2

     INF9_3          PAT2

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     64 |      1 |     65
                    | 63 169 |  1 831 |
                    | 0 0109 | 0 3771 |
                    |  90 14 |   1 41 |  91 55
     ---------------+--------+--------+
                  1 |      5 |      1 |      6
                    |  5 831 |  0 169 |
                    | 0 1184 | 4 0857 |
                    |   7 04 |   1 41 |   8 45
     ---------------+--------+--------+
     Total               69        2       71
                      97 18     2 82   100 00


        STATISTICS FOR TABLE OF INF9_3 BY PAT2

 Statistic                     DF      Value       Prob
 ------------------------------------------------------
 Chi-Square                     1      4 592      0 032
 Likelihood Ratio Chi-Square    1      2 481      0 115
 Continuity Adj  Chi-Square     1      0 729      0 393
 Mantel-Haenszel Chi-Square     1      4 527      0 033
 Fisher's Exact Test (Left)                       0 994
                     (Right)                      0 163
                     (2-Tail)                     0 163
 Phi Coefficient                       0 254
 Contingency Coefficient               0 246
 Cramer's V                            0 254

 Sample Size = 71
 WARNING   50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF4 BY PAT3

     INF4            PAT3

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |      8 |      0 |      8
                    | 6 1714 | 1 8286 |
                    | 0 5418 | 1 8286 |
                    |  11 43 |   0 00 |  11 43
     ---------------+--------+--------+
                  3 |     16 |      0 |     16
                    | 12 343 | 3 6571 |
                    | 1 0836 | 3 6571 |
                    |  22 86 |   0 00 |  22 86
     ---------------+--------+--------+
                  4 |     30 |     16 |     46
                    | 35 486 | 10 514 |
                    |  0 848 | 2 8621 |
                    |  42 86 |  22 86 |  65 71
     ---------------+--------+--------+
     Total               54       16       70
                      77 14    22 86   100 00

     Frequency Missing = 1


        STATISTICS FOR TABLE OF INF4 BY PAT3

 Statistic                     DF      Value       Prob
 ------------------------------------------------------
 Chi-Square                     2     10 821      0 004
 Likelihood Ratio Chi-Square    2     15 816      0 000
 Mantel-Haenszel Chi-Square     1      7 173      0 007
 Phi Coefficient                       0 393
 Contingency Coefficient               0 366
 Cramer's V                            0 393

 Effective Sample Size = 70
 Frequency Missing = 1
 WARNING   33% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_2 BY PAT3

     INF5_2          PAT3

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     33 |      5 |     38
                    | 29 437 | 8 5634 |
                    | 0 4314 | 1 4828 |
                    |  46 48 |   7 04 |  53 52
     ---------------+--------+--------+
                  1 |     22 |     11 |     33
                    | 25 563 | 7 4366 |
                    | 0 4967 | 1 7075 |
                    |  30 99 |  15 49 |  46 48
     ---------------+--------+--------+
     Total               55       16       71
                      77 46    22 54   100 00


        STATISTICS FOR TABLE OF INF5_2 BY PAT3

 Statistic                     DF      Value       Prob
 ------------------------------------------------------
 Chi-Square                     1      4 118      0 042
 Likelihood Ratio Chi-Square    1      4 168      0 041
 Continuity Adj  Chi-Square     1      3 044      0 081
 Mantel-Haenszel Chi-Square     1      4 060      0 044
 Fisher's Exact Test (Left)                       0 990
                     (Right)                      0 040
                     (2-Tail)                     0 051
 Phi Coefficient                       0 241
 Contingency Coefficient               0 234
 Cramer's V                            0 241

 Sample Size = 71
```

```
                     The SAS System

                 TABLE OF INF5_4 BY PAT3

        INF5_4          PAT3

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                      0|     42 |      7 |     49
                       | 37 958 | 11 042 |
                       | 0 4305 | 1 4798 |
                       |  59 15 |   9 86 |  69 01
        ---------------+--------+--------+
                      1|     13 |      9 |     22
                       | 17 042 | 4 9577 |
                       | 0 9588 | 3 2958 |
                       |  18 31 |  12 68 |  30 99
        ---------------+--------+--------+
        Total               55       16      71
                         77 46    22 54  100 00

          STATISTICS FOR TABLE OF INF5_4 BY PAT3

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        1       6 165       0 013
Likelihood Ratio Chi-Square       1       5 813       0 016
Continuity Adj  Chi-Square        1       4 734       0 030
Mantel-Haenszel Chi-Square        1       6 078       0 014
Fisher's Exact Test (Left)                            0 997
                    (Right)                           0 017
                    (2-Tail)                          0 029
Phi Coefficient                           0 295
Contingency Coefficient                   0 283
Cramer's V                                0 295

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF9_7 BY PAT3

        INF9_7          PAT3

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                      0|     53 |     13 |     66
                       | 51 127 | 14 873 |
                       | 0 0686 | 0 2359 |
                       |  74 65 |  18 31 |  92 96
        ---------------+--------+--------+
                      1|      2 |      3 |      5
                       | 3 8732 | 1 1268 |
                       |  0 906 | 3 1143 |
                       |   2 82 |   4 23 |   7 04
        ---------------+--------+--------+
        Total               55       16      71
                         77 46    22 54  100 00

          STATISTICS FOR TABLE OF INF9_7 BY PAT3

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        1       4 325       0 038
Likelihood Ratio Chi-Square       1       3 546       0 060
Continuity Adj  Chi-Square        1       2 324       0 127
Mantel-Haenszel Chi-Square        1       4 264       0 039
Fisher's Exact Test (Left)                            0 992
                    (Right)                           0 072
                    (2-Tail)                          0 072
Phi Coefficient                           0 247
Contingency Coefficient                   0 240
Cramer's V                                0 247

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF8 BY PAT3

        INF8            PAT3

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                      1|     50 |     11 |     61
                       | 47 254 | 13 746 |
                       | 0 1596 | 0 5487 |
                       |  70 42 |  15 49 |  85 92
        ---------------+--------+--------+
                      2|      5 |      5 |     10
                       | 7 7465 | 2 2535 |
                       | 0 9738 | 3 3473 |
                       |   7 04 |   7 04 |  14 08
        ---------------+--------+--------+
        Total               55       16      71
                         77 46    22 54  100 00

          STATISTICS FOR TABLE OF INF8 BY PAT3

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        1       5 029       0 025
Likelihood Ratio Chi-Square       1       4 337       0 037
Continuity Adj  Chi-Square        1       3 365       0 067
Mantel-Haenszel Chi-Square        1       4 959       0 026
Fisher's Exact Test (Left)                            0 993
                    (Right)                           0 040
                    (2-Tail)                          0 040
Phi Coefficient                           0 266
Contingency Coefficient                   0 257
Cramer's V                                0 266

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF10 BY PAT3

        RINF10          PAT3

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                      1|     26 |      1 |     27
                       | 20 127 | 6 8727 |
                       | 1 7135 | 5 0182 |
                       |  47 27 |   1 82 |  49 09
        ---------------+--------+--------+
                      2|     11 |      8 |     19
                       | 14 164 | 4 8364 |
                       | 0 7066 | 2 0694 |
                       |  20 00 |  14 55 |  34 55
        ---------------+--------+--------+
                      3|      4 |      5 |      9
                       | 6 7091 | 2 2909 |
                       | 1 0939 | 3 2036 |
                       |   7 27 |   9 09 |  16 36
        ---------------+--------+--------+
        Total               41       14      55
                         74 55    25 45  100 00

        Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY PAT3

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        2      13 805       0 001
Likelihood Ratio Chi-Square       2      15 617       0 000
Mantel-Haenszel Chi-Square        1      12 656       0 000
Phi Coefficient                           0 501
Contingency Coefficient                   0 448
Cramer's V                                0 501

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   33% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF11 BY PAT3

RINF11          PAT3

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     31 |      0 |     31
               | 24 283 | 6 7167 |
               | 1 8578 | 6 7167 |
               |  51 67 |   0 00 |  51 67
---------------+--------+--------+
             2 |     10 |      8 |     18
               |   14 1 |    3 9 |
               | 1 1922 | 4 3103 |
               |  16 67 |  13 33 |  30 00
---------------+--------+--------+
             3 |      6 |      5 |     11
               | 8 6167 | 2 3833 |
               | 0 7946 | 2 8728 |
               |  10 00 |   8 33 |  18 33
---------------+--------+--------+
Total               47       13       60
                 78 33    21 67   100 00

Frequency Missing = 11

         STATISTICS FOR TABLE OF RINF11 BY PAT3

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     2    17 744       0 000
Likelihood Ratio Chi-Square    2    22 830       0 000
Mantel-Haenszel Chi-Square     1    14 284       0 000
Phi Coefficient                      0 544
Contingency Coefficient              0 478
Cramer's V                           0 544

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF13 BY PAT3

INF13           PAT3

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     18 |     10 |     28
               |  21 69 | 6 3099 |
               | 0 6278 | 2 1581 |
               |  25 35 |  14 08 |  39 44
---------------+--------+--------+
             2 |     37 |      6 |     43
               |  33 31 | 9 6901 |
               | 0 4088 | 1 4053 |
               |  52 11 |   8 45 |  60 56
---------------+--------+--------+
Total               55       16       71
                 77 46    22 54   100 00


         STATISTICS FOR TABLE OF INF13 BY PAT3

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     1     4 600       0 032
Likelihood Ratio Chi-Square    1     4 519       0 034
Continuity Adj  Chi-Square     1     3 438       0 064
Mantel-Haenszel Chi-Square     1     4 535       0 033
Fisher's Exact Test (Left)                       0 033
                    (Right)                      0 992
                    (2-Tail)                     0 043
Phi Coefficient                     -0 255
Contingency Coefficient              0 247
Cramer's V                          -0 255

Sample Size = 71
```

```
               TABLE OF RINF12 BY PAT3

RINF12          PAT3

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     42 |      7 |     49
               | 37 958 | 11 042 |
               | 0 4305 | 1 4798 |
               |  59 15 |   9 86 |  69 01
---------------+--------+--------+
             2 |      8 |      5 |     13
               |  10 07 | 2 9296 |
               | 0 4257 | 1 4632 |
               |  11 27 |   7 04 |  18 31
---------------+--------+--------+
             3 |      5 |      4 |      9
               | 6 9718 | 2 0282 |
               | 0 5577 | 1 9171 |
               |   7 04 |   5 63 |  12 68
---------------+--------+--------+
Total               55       16       71
                 77 46    22 54   100 00


         STATISTICS FOR TABLE OF RINF12 BY PAT3

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     2     6 274       0 043
Likelihood Ratio Chi-Square    2     5 891       0 053
Mantel-Haenszel Chi-Square     1     5 760       0 016
Phi Coefficient                      0 297
Contingency Coefficient              0 285
Cramer's V                           0 297

Sample Size = 71
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF14 BY PAT3

INF14           PAT3

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     23 |      4 |     27
               | 19 756 | 7 2439 |
               | 0 5326 | 1 4527 |
               |  56 10 |   9 76 |  65 85
---------------+--------+--------+
             2 |      1 |      4 |      5
               | 3 6585 | 1 3415 |
               | 1 9319 | 5 2687 |
               |   2 44 |   9 76 |  12 20
---------------+--------+--------+
             3 |      3 |      2 |      5
               | 3 6585 | 1 3415 |
               | 0 1185 | 0 3233 |
               |   7 32 |   4 88 |  12 20
---------------+--------+--------+
             4 |      3 |      1 |      4
               | 2 9268 | 1 0732 |
               | 0 0018 |  0 005 |
               |   7 32 |   2 44 |   9 76
---------------+--------+--------+
Total               30       11       41
                 73 17    26 83   100 00

Frequency Missing = 30

                   The SAS System

         STATISTICS FOR TABLE OF INF14 BY PAT3

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     3     9 635       0 022
Likelihood Ratio Chi-Square    3     8 802       0 032
Mantel-Haenszel Chi-Square     1     1 622       0 203
Phi Coefficient                      0 485
Contingency Coefficient              0 436
Cramer's V                           0 485

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF9_4 BY PAT4

INF9_4          PAT4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     40 |     24 |     64
               | 42 366 | 21 634 |
               | 0 1322 | 0 2588 |
               |  56 34 |  33 80 |  90 14
---------------+--------+--------+
             1 |      7 |      0 |      7
               | 4 6338 | 2 3662 |
               | 1 2083 | 2 3662 |
               |   9 86 |   0 00 |   9 86
---------------+--------+--------+
Total               47       24       71
                 66 20    33 80   100 00

          STATISTICS FOR TABLE OF INF9_4 BY PAT4

Statistic                     DF       Value        Prob
------------------------------------------------------
Chi-Square                     1       3 965       0 046
Likelihood Ratio Chi-Square    1       6 160       0 013
Continuity Adj  Chi-Square     1       2 467       0 116
Mantel-Haenszel Chi-Square     1       3 910       0 048
Fisher's Exact Test (Left)                         0 047
                    (Right)                        1 000
                    (2-Tail)                       0 087
Phi Coefficient                       -0 236
Contingency Coefficient                0 230
Cramer's V                            -0 236

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF9_7 BY PAT4

INF9_7          PAT4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     46 |     20 |     66
               |  43 69 |  22 31 |
               | 0 1221 | 0 2392 |
               |  64 79 |  28 17 |  92 96
---------------+--------+--------+
             1 |      1 |      4 |      5
               | 3 3099 | 1 6901 |
               |  1 612 | 3 1568 |
               |   1 41 |   5 63 |   7 04
---------------+--------+--------+
Total               47       24       71
                 66 20    33 80   100 00

          STATISTICS FOR TABLE OF INF9_7 BY PAT4

Statistic                     DF       Value        Prob
------------------------------------------------------
Chi-Square                     1       5 130       0 024
Likelihood Ratio Chi-Square    1       4 866       0 027
Continuity Adj  Chi-Square     1       3 149       0 076
Mantel-Haenszel Chi-Square     1       5 058       0 025
Fisher's Exact Test (Left)                         0 997
                    (Right)                        0 042
                    (2-Tail)                       0 042
Phi Coefficient                        0 269
Contingency Coefficient                0 260
Cramer's V                             0 269

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF10 BY PAT4

RINF10          PAT4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     22 |      5 |     27
               | 17 673 | 9 3273 |
               | 1 0596 | 2 0076 |
               |  40 00 |   9 09 |  49 09
---------------+--------+--------+
             2 |     10 |      9 |     19
               | 12 436 | 6 5636 |
               | 0 4773 | 0 9044 |
               |  18 18 |  16 36 |  34 55
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 5 8909 | 3 1091 |
               |  0 607 |   1 15 |
               |   7 27 |   9 09 |  16 36
---------------+--------+--------+
Total               36       19       55
                 65 45    34 55   100 00

Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY PAT4

Statistic                     DF       Value        Prob
------------------------------------------------------
Chi-Square                     2       6 206       0 045
Likelihood Ratio Chi-Square    2       6 377       0 041
Mantel-Haenszel Chi-Square     1       5 576       0 018
Phi Coefficient                        0 336
Contingency Coefficient                0 318
Cramer's V                             0 336

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
               TABLE OF INF9_9 BY PAT5

INF9_9          PAT5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |      7 |     63 |     70
               | 7 8873 | 62 113 |
               | 0 0998 | 0 0127 |
               |   9 86 |  88 73 |  98 59
---------------+--------+--------+
             1 |      1 |      0 |      1
               | 0 1127 | 0 8873 |
               | 6 9877 | 0 8873 |
               |   1 41 |   0 00 |   1 41
---------------+--------+--------+
Total                8       63       71
                 11 27    88 73   100 00

          STATISTICS FOR TABLE OF INF9_9 BY PAT5

Statistic                     DF       Value        Prob
------------------------------------------------------
Chi-Square                     1       7 988       0 005
Likelihood Ratio Chi-Square    1       4 483       0 034
Continuity Adj  Chi-Square     1       1 522       0 217
Mantel-Haenszel Chi-Square     1       7 875       0 005
Fisher's Exact Test (Left)                         0 113
                    (Right)                        1 000
                    (2-Tail)                       0 113
Phi Coefficient                       -0 335
Contingency Coefficient                0 318
Cramer's V                            -0 335

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                   The SAS System

                TABLE OF INF4 BY PAT6

      INF4           PAT6

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |      5 |      3 |      8
                     | 7 4286 | 0 5714 |
                     |  0 794 | 10 321 |
                     |   7 14 |   4 29 |  11 43
      ---------------+--------+--------+
                   3 |     16 |      0 |     16
                     | 14 857 | 1 1429 |
                     | 0 0879 | 1 1429 |
                     |  22 86 |   0 00 |  22 86
      ---------------+--------+--------+
                   4 |     44 |      2 |     46
                     | 42 714 | 3 2857 |
                     | 0 0387 | 0 5031 |
                     |  62 86 |   2 86 |  65 71
      ---------------+--------+--------+
      Total               65        5       70
                       92 86     7 14   100 00

      Frequency Missing = 1


         STATISTICS FOR TABLE OF INF4 BY PAT6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      12 888     0 002
Likelihood Ratio Chi-Square    2       8 986     0 011
Mantel-Haenszel Chi-Square     1       8 609     0 003
Phi Coefficient                        0 429
Contingency Coefficient                0 394
Cramer's V                             0 429

Effective Sample Size = 70
Frequency Missing = 1
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                   The SAS System

               TABLE OF INF5_1 BY PAT8

      INF5_1         PAT8

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     18 |     19 |     37
                     | 13 549 | 23 451 |
                     |  1 462 | 0 8447 |
                     |  25 35 |  26 76 |  52 11
      ---------------+--------+--------+
                   1 |      8 |     26 |     34
                     | 12 451 | 21 549 |
                     |  1 591 | 0 9192 |
                     |  11 27 |  36 62 |  47 89
      ---------------+--------+--------+
      Total               26       45       71
                       36 62    63 38   100 00


        STATISTICS FOR TABLE OF INF5_1 BY PAT8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 817     0 028
Likelihood Ratio Chi-Square    1       4 914     0 027
Continuity Adj  Chi-Square     1       3 795     0 051
Mantel-Haenszel Chi-Square     1       4 749     0 029
Fisher's Exact Test (Left)                       0 993
                    (Right)                      0 025
                    (2-Tail)                     0 048
Phi Coefficient                        0 260
Contingency Coefficient                0 252
Cramer's V                             0 260

Sample Size = 71
```

```
                   The SAS System

               TABLE OF INF5_2 BY PAT8

      INF5_2         PAT8

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     19 |     19 |     38
                     | 13 915 | 24 085 |
                     | 1 8578 | 1 0734 |
                     |  26 76 |  26 76 |  53 52
      ---------------+--------+--------+
                   1 |      7 |     26 |     33
                     | 12 085 | 20 915 |
                     | 2 1393 |  1 236 |
                     |   9 86 |  36 62 |  46 48
      ---------------+--------+--------+
      Total               26       45       71
                       36 62    63 38   100 00


        STATISTICS FOR TABLE OF INF5_2 BY PAT8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 307     0 012
Likelihood Ratio Chi-Square    1       6 495     0 011
Continuity Adj  Chi-Square     1       5 127     0 024
Mantel-Haenszel Chi-Square     1       6 218     0 013
Fisher's Exact Test (Left)                       0 997
                    (Right)                      0 011
                    (2-Tail)                     0 015
Phi Coefficient                        0 298
Contingency Coefficient                0 286
Cramer's V                             0 298

Sample Size = 71
```

```
                   The SAS System

               TABLE OF INF5_4 BY PAT8

      INF5_4         PAT8

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     22 |     27 |     49
                     | 17 944 | 31 056 |
                     |  0 917 | 0 5298 |
                     |  30 99 |  38 03 |  69 01
      ---------------+--------+--------+
                   1 |      4 |     18 |     22
                     | 8 0563 | 13 944 |
                     | 2 0424 |   1 18 |
                     |   5 63 |  25 35 |  30 99
      ---------------+--------+--------+
      Total               26       45       71
                       36 62    63 38   100 00


        STATISTICS FOR TABLE OF INF5_4 BY PAT8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 669     0 031
Likelihood Ratio Chi-Square    1       5 000     0 025
Continuity Adj  Chi-Square     1       3 589     0 058
Mantel-Haenszel Chi-Square     1       4 603     0 032
Fisher's Exact Test (Left)                       0 994
                    (Right)                      0 027
                    (2-Tail)                     0 036
Phi Coefficient                        0 256
Contingency Coefficient                0 248
Cramer's V                             0 256

Sample Size = 71
```

```
                     The SAS System

                TABLE OF INF5_6 BY PAT8

      INF5_6             PAT8

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     12 |     34 |     46
                      | 16 845 | 29 155 |
                      | 1 3936 | 0 8052 |
                      |  16 90 |  47 89 |  64 79
      ----------------+--------+--------+
                    1 |     14 |     11 |     25
                      | 9 1549 | 15 845 |
                      | 2 5642 | 1 4815 |
                      |  19 72 |  15 49 |  35 21
      ----------------+--------+--------+
      Total                 26       45       71
                         36 62    63 38   100 00

          STATISTICS FOR TABLE OF INF5_6 BY PAT8

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        1       6 244       0 012
Likelihood Ratio Chi-Square       1       6 179       0 013
Continuity Adj  Chi-Square        1       5 022       0 025
Mantel-Haenszel Chi-Square        1       6 156       0 013
Fisher's Exact Test (Left)                            0 013
                    (Right)                           0 997
                    (2-Tail)                          0 020
Phi Coefficient                          -0 297
Contingency Coefficient                   0 284
Cramer's V                               -0 297

Sample Size = 71
```

```
                TABLE OF RINF6 BY PAT8

      RINF6              PAT8

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
      ADM             |      2 |      1 |      3
                      |  1 087 |  1 913 |
                      |  0 767 | 0 4358 |
                      |   2 90 |   1 45 |   4 35
      ----------------+--------+--------+
      DHD             |     11 |     33 |     44
                      | 15 942 | 28 058 |
                      |  1 532 | 0 8705 |
                      |  15 94 |  47 83 |  63 77
      ----------------+--------+--------+
      DIET            |      1 |      4 |      5
                      | 1 8116 | 3 1884 |
                      | 0 3636 | 0 2066 |
                      |   1 45 |   5 80 |   7 25
      ----------------+--------+--------+
      MGR             |     11 |      6 |     17
                      | 6 1594 | 10 841 |
                      | 3 8041 | 2 1614 |
                      |  15 94 |   8 70 |  24 64
      ----------------+--------+--------+
      Total                 25       44       69
                         36 23    63 77   100 00

      Frequency Missing = 2
        STATISTICS FOR TABLE OF RINF6 BY PAT8

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        3      10 141       0 017
Likelihood Ratio Chi-Square       3       9 971       0 019
Mantel-Haenszel Chi-Square        1       4 719       0 030
Phi Coefficient                           0 383
Contingency Coefficient                   0 358
Cramer's V                                0 383

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY PAT8

      RINF10             PAT8

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    1 |     16 |     11 |     27
                      | 10 309 | 16 691 |
                      | 3 1415 | 1 9404 |
                      |  29 09 |  20 00 |  49 09
      ----------------+--------+--------+
                    2 |      2 |     17 |     19
                      | 7 2545 | 11 745 |
                      | 3 8059 | 2 3507 |
                      |   3 64 |  30 91 |  34 55
      ----------------+--------+--------+
                    3 |      3 |      6 |      9
                      | 3 4364 | 5 5636 |
                      | 0 0554 | 0 0342 |
                      |   5 45 |  10 91 |  16 36
      ----------------+--------+--------+
      Total                 21       34       55
                         38 18    61 82   100 00

      Frequency Missing = 16

                     The SAS System

          STATISTICS FOR TABLE OF RINF10 BY PAT8

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        2      11 328       0 003
Likelihood Ratio Chi-Square       2      12 401       0 002
Mantel-Haenszel Chi-Square        1       5 187       0 023
Phi Coefficient                           0 454
Contingency Coefficient                   0 413
Cramer's V                                0 454

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF RINF11 BY PAT8

      RINF11             PAT8

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    1 |     17 |     14 |     31
                      |  10 85 |  20 15 |
                      | 3 4859 |  1 877 |
                      |  28 33 |  23 33 |  51 67
      ----------------+--------+--------+
                    2 |      2 |     16 |     18
                      |    6 3 |   11 7 |
                      | 2 9349 | 1 5803 |
                      |   3 33 |  26 67 |  30 00
      ----------------+--------+--------+
                    3 |      2 |      9 |     11
                      |   3 85 |   7 15 |
                      |  0 889 | 0 4787 |
                      |   3 33 |  15 00 |  18 33
      ----------------+--------+--------+
      Total                 21       39       60
                         35 00    65 00   100 00

      Frequency Missing = 11

                     The SAS System

          STATISTICS FOR TABLE OF RINF11 BY PAT8

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        2      11 246       0 004
Likelihood Ratio Chi-Square       2      12 020       0 002
Mantel-Haenszel Chi-Square        1       7 829       0 005
Phi Coefficient                           0 433
Contingency Coefficient                   0 397
Cramer's V                                0 433

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
                TABLE OF INF13 BY PAT8

INF13           PAT8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      2 |     26 |     28
               | 10 254 | 17 746 |
               | 6 6436 | 3 8385 |
               |   2 82 |  36 62 |  39 44
---------------+--------+--------+
             2 |     24 |     19 |     43
               | 15 746 | 27 254 |
               | 4 3261 | 2 4995 |
               |  33 80 |  26 76 |  60 56
---------------+--------+--------+
Total               26       45       71
                 36 62    63 38   100 00

                    The SAS System

         STATISTICS FOR TABLE OF INF13 BY PAT8

Statistic                     DF       Value       Prob
--------------------------------------------------------
Chi-Square                     1      17 308      0 000
Likelihood Ratio Chi-Square    1      19 842      0 000
Continuity Adj  Chi-Square     1      15 274      0 000
Mantel-Haenszel Chi-Square     1      17 064      0 000
Fisher's Exact Test (Left)                     1 82E-05
                    (Right)                       1 000
                    (2-Tail)                   3 19E-05
Phi Coefficient                       -0 494
Contingency Coefficient                0 443
Cramer's V                            -0 494

Sample Size = 71
```

```
                TABLE OF INF15 BY PAT8

INF15           PAT8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     12 |     10 |     22
               | 7 5522 | 14 448 |
               | 2 6194 | 1 3692 |
               |  17 91 |  14 93 |  32 84
---------------+--------+--------+
             3 |      5 |     18 |     23
               | 7 8955 | 15 104 |
               | 1 0619 | 0 5551 |
               |   7 46 |  26 87 |  34 33
---------------+--------+--------+
             4 |      5 |      5 |     10
               | 3 4328 | 6 5672 |
               | 0 7154 |  0 374 |
               |   7 46 |   7 46 |  14 93
---------------+--------+--------+
             5 |      1 |     11 |     12
               | 4 1194 | 7 8806 |
               | 2 3622 | 1 2348 |
               |   1 49 |  16 42 |  17 91
---------------+--------+--------+
Total               23       44       67
                 34 33    65 67   100 00

Frequency Missing = 4

          STATISTICS FOR TABLE OF INF15 BY PAT8

Statistic                     DF       Value       Prob
--------------------------------------------------------
Chi-Square                     3      10 292      0 016
Likelihood Ratio Chi-Square    3      11 039      0 012
Mantel-Haenszel Chi-Square     1       4 668      0 031
Phi Coefficient                        0 392
Contingency Coefficient                0 365
Cramer's V                             0 392

Effective Sample Size = 67
Frequency Missing = 4
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY PAT9

INF1            PAT9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     21 |      5 |     26
               | 16 479 | 9 5211 |
               | 1 2404 | 2 1469 |
               |  29 58 |   7 04 |  36 62
---------------+--------+--------+
             3 |     24 |     21 |     45
               | 28 521 | 16 479 |
               | 0 7167 | 1 2404 |
               |  33 80 |  29 58 |  63 38
---------------+--------+--------+
Total               45       26       71
                 63 38    36 62   100 00

                    The SAS System

         STATISTICS FOR TABLE OF INF1 BY PAT9

Statistic                     DF       Value       Prob
--------------------------------------------------------
Chi-Square                     1       5 344      0 021
Likelihood Ratio Chi-Square    1       5 640      0 018
Continuity Adj  Chi-Square     1       4 228      0 040
Mantel-Haenszel Chi-Square     1       5 269      0 022
Fisher's Exact Test (Left)                        0 996
                    (Right)                       0 018
                    (2-Tail)                      0 024
Phi Coefficient                        0 274
Contingency Coefficient                0 265
Cramer's V                             0 274

Sample Size = 71
```

```
                    The SAS System

               TABLE OF INF9_1 BY PAT9

INF9_1          PAT9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     21 |      5 |     26
               | 16 479 | 9 5211 |
               | 1 2404 | 2 1469 |
               |  29 58 |   7 04 |  36 62
---------------+--------+--------+
             1 |     24 |     21 |     45
               | 28 521 | 16 479 |
               | 0 7167 | 1 2404 |
               |  33 80 |  29 58 |  63 38
---------------+--------+--------+
Total               45       26       71
                 63 38    36 62   100 00

         STATISTICS FOR TABLE OF INF9_1 BY PAT9

Statistic                     DF       Value       Prob
--------------------------------------------------------
Chi-Square                     1       5 344      0 021
Likelihood Ratio Chi-Square    1       5 640      0 018
Continuity Adj  Chi-Square     1       4 228      0 040
Mantel-Haenszel Chi-Square     1       5 269      0 022
Fisher's Exact Test (Left)                        0 996
                    (Right)                       0 018
                    (2-Tail)                      0 024
Phi Coefficient                        0 274
Contingency Coefficient                0 265
Cramer's V                             0 274

Sample Size = 71
```

```
                       The SAS System

                TABLE OF INF5_5 BY PAT10

      INF5_5          PAT10

      Frequency     |
      Expected      |
      Cell Chi-Square|
      Percent       |       0|       1|  Total
      --------------+--------+--------+
                  0 |     64 |      1 |     65
                    | 62 254 | 2 7465 |
                    | 0 049  | 1 1106 |
                    |  90 14 |   1 41 |  91 55
      --------------+--------+--------+
                  1 |      4 |      2 |      6
                    | 5 7465 | 0 2535 |
                    | 0 5308 | 12 031 |
                    |   5 63 |   2 82 |   8 45
      --------------+--------+--------+
      Total              68        3       71
                      95 77     4 23   100 00

          STATISTICS FOR TABLE OF INF5_5 BY PAT10

  Statistic                      DF      Value       Prob
  --------------------------------------------------------
  Chi-Square                      1     13 722      0 000
  Likelihood Ratio Chi-Square     1      6 884      0 009
  Continuity Adj  Chi-Square      1      6 990      0 008
  Mantel-Haenszel Chi-Square      1     13 528      0 000
  Fisher's Exact Test (Left)                         1 000
                      (Right)                       0 017
                      (2-Tail)                      0 017
  Phi Coefficient                        0 440
  Contingency Coefficient                0 402
  Cramer's V                             0 440

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY PAT10

      RINF10          PAT10

      Frequency     |
      Expected      |
      Cell Chi-Square|
      Percent       |       0|       1|  Total
      --------------+--------+--------+
                  1 |     27 |      0 |     27
                    | 25 527 | 1 4727 |
                    | 0 085  | 1 4727 |
                    |  49 09 |   0 00 |  49 09
      --------------+--------+--------+
                  2 |     18 |      1 |     19
                    | 17 964 | 1 0364 |
                    | 0 0001 | 0 0013 |
                    |  32 73 |   1 82 |  34 55
      --------------+--------+--------+
                  3 |      7 |      2 |      9
                    | 8 5091 | 0 4909 |
                    | 0 2676 | 4 6391 |
                    |  12 73 |   3 64 |  16 36
      --------------+--------+--------+
      Total              52        3       55
                      94 55     5 45   100 00

      Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY PAT10

  Statistic                      DF      Value       Prob
  --------------------------------------------------------
  Chi-Square                      2      6 466      0 039
  Likelihood Ratio Chi-Square     2      5 916      0 052
  Mantel-Haenszel Chi-Square      1      5 622      0 018
  Phi Coefficient                        0 343
  Contingency Coefficient                0 324
  Cramer's V                             0 343

  Effective Sample Size = 55
  Frequency Missing = 16
  WARNING   23% of the data are missing
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF12 BY PAT10

      RINF12          PAT10

      Frequency     |
      Expected      |
      Cell Chi-Square|
      Percent       |       0|       1|  Total
      --------------+--------+--------+
                  1 |     48 |      1 |     49
                    |  46 93 | 2 0704 |
                    | 0 0244 | 0 5534 |
                    |  67 61 |   1 41 |  69 01
      --------------+--------+--------+
                  2 |     13 |      0 |     13
                    | 12 451 | 0 5493 |
                    | 0 0242 | 0 5493 |
                    |  18 31 |   0 00 |  18 31
      --------------+--------+--------+
                  3 |      7 |      2 |      9
                    | 8 6197 | 0 3803 |
                    | 0 3044 | 6 8988 |
                    |   9 86 |   2 82 |  12 68
      --------------+--------+--------+
      Total              68        3       71
                      95 77     4 23   100 00

          STATISTICS FOR TABLE OF RINF12 BY PAT10

  Statistic                      DF      Value       Prob
  --------------------------------------------------------
  Chi-Square                      2      8 355      0 015
  Likelihood Ratio Chi-Square     2      5 558      0 062
  Mantel-Haenszel Chi-Square      1      4 971      0 026
  Phi Coefficient                        0 343
  Contingency Coefficient                0 324
  Cramer's V                             0 343

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY PAT10

      INF13           PAT10

      Frequency     |
      Expected      |
      Cell Chi-Square|
      Percent       |       0|       1|  Total
      --------------+--------+--------+
                  1 |     25 |      3 |     28
                    | 26 817 | 1 1831 |
                    | 0 1231 | 2 7902 |
                    |  35 21 |   4 23 |  39 44
      --------------+--------+--------+
                  2 |     43 |      0 |     43
                    | 41 183 | 1 8169 |
                    | 0 0802 | 1 8169 |
                    |  60 56 |   0 00 |  60 56
      --------------+--------+--------+
      Total              68        3       71
                      95 77     4 23   100 00

          STATISTICS FOR TABLE OF INF13 BY PAT10

  Statistic                      DF      Value       Prob
  --------------------------------------------------------
  Chi-Square                      1      4 810      0 028
  Likelihood Ratio Chi-Square     1      5 788      0 016
  Continuity Adj  Chi-Square      1      2 527      0 112
  Mantel-Haenszel Chi-Square      1      4 743      0 029
  Fisher's Exact Test (Left)                         0 057
                      (Right)                       1 000
                      (2-Tail)                      0 057
  Phi Coefficient                       -0 260
  Contingency Coefficient                0 252
  Cramer's V                            -0 260

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                     The SAS System

               TABLE OF INF14 BY PAT10

     INF14          PAT10

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |     26 |      1 |     27
                    | 25 024 | 1 9756 |
                    |  0 038 | 0 4818 |
                    |  63 41 |   2 44 |  65 85
     ---------------+--------+--------+
                  2 |      5 |      0 |      5
                    | 4 6341 | 0 3659 |
                    | 0 0289 | 0 3659 |
                    |  12 20 |   0 00 |  12 20
     ---------------+--------+--------+
                  3 |      3 |      2 |      5
                    | 4 6341 | 0 3659 |
                    | 0 5763 | 7 2992 |
                    |   7 32 |   4 88 |  12 20
     ---------------+--------+--------+
                  4 |      4 |      0 |      4
                    | 3 7073 | 0 2927 |
                    | 0 0231 | 0 2927 |
                    |   9 76 |   0 00 |   9 76
     ---------------+--------+--------+
     Total                38        3       41
                       92 68     7 32   100 00

     Frequency Missing = 30

           STATISTICS FOR TABLE OF INF14 BY PAT10

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     3       9 106       0 028
Likelihood Ratio Chi-Square    3       6 180       0 103
Mantel-Haenszel Chi-Square     1       1 364       0 243
Phi Coefficient                        0 471
Contingency Coefficient                0 426
Cramer's V                             0 471

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF7 BY PAT11

     INF7           PAT11

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |     60 |      8 |     68
                    | 58 423 | 9 5775 |
                    | 0 0426 | 0 2598 |
                    |  84 51 |  11 27 |  95 77
     ---------------+--------+--------+
                  2 |      1 |      2 |      3
                    | 2 5775 | 0 4225 |
                    | 0 9654 | 5 8892 |
                    |   1 41 |   2 82 |   4 23
     ---------------+--------+--------+
     Total                61       10       71
                       85 92    14 08   100 00

           STATISTICS FOR TABLE OF INF7 BY PAT11

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       7 157       0 007
Likelihood Ratio Chi-Square    1       4 643       0 031
Continuity Adj  Chi-Square     1       3 339       0 068
Mantel-Haenszel Chi-Square     1       7 056       0 008
Fisher's Exact Test (Left)                         0 998
                    (Right)                        0 050
                    (2-Tail)                       0 050
Phi Coefficient                        0 317
Contingency Coefficient                0 303
Cramer's V                             0 317

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                     The SAS System

               TABLE OF INF5_9 BY PAT11

     INF5_9         PAT11

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     61 |      9 |     70
                    | 60 141 | 9 8592 |
                    | 0 0123 | 0 0749 |
                    |  85 92 |  12 68 |  98 59
     ---------------+--------+--------+
                  1 |      0 |      1 |      1
                    | 0 8592 | 0 1408 |
                    | 0 8592 | 5 2408 |
                    |   0 00 |   1 41 |   1 41
     ---------------+--------+--------+
     Total                61       10       71
                       85 92    14 08   100 00

           STATISTICS FOR TABLE OF INF5_9 BY PAT11

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       6 187       0 013
Likelihood Ratio Chi-Square    1       4 010       0 045
Continuity Adj  Chi-Square     1       1 081       0 298
Mantel-Haenszel Chi-Square     1       6 100       0 014
Fisher's Exact Test (Left)                         1 000
                    (Right)                        0 141
                    (2-Tail)                       0 141
Phi Coefficient                        0 295
Contingency Coefficient                0 283
Cramer's V                             0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF3 BY PAT12

     INF3           PAT12

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  3 |     20 |      0 |     20
                    | 19 718 | 0 2817 |
                    |  0 004 | 0 2817 |
                    |  28 17 |   0 00 |  28 17
     ---------------+--------+--------+
                  5 |     28 |      0 |     28
                    | 27 606 | 0 3944 |
                    | 0 0056 | 0 3944 |
                    |  39 44 |   0 00 |  39 44
     ---------------+--------+--------+
                  7 |     19 |      0 |     19
                    | 18 732 | 0 2676 |
                    | 0 0038 | 0 2676 |
                    |  26 76 |   0 00 |  26 76
     ---------------+--------+--------+
                  8 |      3 |      1 |      4
                    | 3 9437 | 0 0563 |
                    | 0 2258 | 15 806 |
                    |   4 23 |   1 41 |   5 63
     ---------------+--------+--------+
     Total                70        1       71
                       98 59     1 41   100 00

           STATISTICS FOR TABLE OF INF3 BY PAT12

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     3      16 989       0 001
Likelihood Ratio Chi-Square    3       6 013       0 111
Mantel-Haenszel Chi-Square     1       3 045       0 081
Phi Coefficient                        0 489
Contingency Coefficient                0 439
Cramer's V                             0 489

Sample Size = 71
WARNING   63% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 The SAS System

           TABLE OF INF5_5 BY PAT12

INF5_5          PAT12

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               0 |     65 |      0 |     65
                 | 64 085 | 0 9155 |
                 | 0 0131 | 0 9155 |
                 |  91 55 |   0 00 |  91 55
-----------------+--------+--------+
               1 |      5 |      1 |      6
                 | 5 9155 | 0 0845 |
                 | 0 1417 | 9 9178 |
                 |   7 04 |   1 41 |   8 45
-----------------+--------+--------+
Total                 70        1       71
                   98 59     1 41   100 00


      STATISTICS FOR TABLE OF INF5_5 BY PAT12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      10 988     0 001
Likelihood Ratio Chi-Square    1       5 104     0 024
Continuity Adj  Chi-Square     1       2 263     0 132
Mantel-Haenszel Chi-Square     1      10 833     0 001
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 085
                    (2-Tail)                     0 085
Phi Coefficient                        0 393
Contingency Coefficient                0 366
Cramer's V                             0 393

Sample Size = 71
WARNING   50% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF8 BY PAT12

INF8            PAT12

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     61 |      0 |     61
                 | 60 141 | 0 8592 |
                 | 0 0123 | 0 8592 |
                 |  85 92 |   0 00 |  85 92
-----------------+--------+--------+
               2 |      9 |      1 |     10
                 | 9 8592 | 0 1408 |
                 | 0 0749 | 5 2408 |
                 |  12 68 |   1 41 |  14 08
-----------------+--------+--------+
Total                 70        1       71
                   98 59     1 41   100 00


      STATISTICS FOR TABLE OF INF8 BY PAT12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 187     0 013
Likelihood Ratio Chi-Square    1       4 010     0 045
Continuity Adj  Chi-Square     1       1 081     0 298
Mantel-Haenszel Chi-Square     1       6 100     0 014
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 141
                    (2-Tail)                     0 141
Phi Coefficient                        0 295
Contingency Coefficient                0 283
Cramer's V                             0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF9_2 BY PAT12

INF9_2          PAT12

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               0 |     60 |      0 |     60
                 | 59 155 | 0 8451 |
                 | 0 0121 | 0 8451 |
                 |  84 51 |   0 00 |  84 51
-----------------+--------+--------+
               1 |     10 |      1 |     11
                 | 10 845 | 0 1549 |
                 | 0 0658 | 4 6095 |
                 |  14 08 |   1 41 |  15 49
-----------------+--------+--------+
Total                 70        1       71
                   98 59     1 41   100 00


      STATISTICS FOR TABLE OF INF9_2 BY PAT12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 532     0 019
Likelihood Ratio Chi-Square    1       3 809     0 051
Continuity Adj  Chi-Square     1       0 922     0 337
Mantel-Haenszel Chi-Square     1       5 455     0 020
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 155
                    (2-Tail)                     0 155
Phi Coefficient                        0 279
Contingency Coefficient                0 269
Cramer's V                             0 279

Sample Size = 71
WARNING   50% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF9_3 BY PAT12

INF9_3          PAT12

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               0 |     65 |      0 |     65
                 | 64 085 | 0 9155 |
                 | 0 0131 | 0 9155 |
                 |  91 55 |   0 00 |  91 55
-----------------+--------+--------+
               1 |      5 |      1 |      6
                 | 5 9155 | 0 0845 |
                 | 0 1417 | 9 9178 |
                 |   7 04 |   1 41 |   8 45
-----------------+--------+--------+
Total                 70        1       71
                   98 59     1 41   100 00


      STATISTICS FOR TABLE OF INF9_3 BY PAT12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      10 988     0 001
Likelihood Ratio Chi-Square    1       5 104     0 024
Continuity Adj  Chi-Square     1       2 263     0 132
Mantel-Haenszel Chi-Square     1      10 833     0 001
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 085
                    (2-Tail)                     0 085
Phi Coefficient                        0 393
Contingency Coefficient                0 366
Cramer's V                             0 393

Sample Size = 71
WARNING   50% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
                    The SAS System

              TABLE OF INF5_7 BY PAT13

     INF5_7           PAT13

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                   0|     61 |      9 |     70
                    | 60 141 | 9 8592 |
                    | 0 0123 | 0 0749 |
                    |  85 92 |  12 68 |  98 59
     ---------------+--------+--------+
                   1|      0 |      1 |      1
                    | 0 8592 | 0 1408 |
                    | 0 8592 | 5 2408 |
                    |   0 00 |   1 41 |   1 41
     ---------------+--------+--------+
     Total               61       10       71
                      85 92    14 08   100 00

          STATISTICS FOR TABLE OF INF5_7 BY PAT13

  Statistic                     DF       Value        Prob
  ---------------------------------------------------------
  Chi-Square                     1       6 187       0 013
  Likelihood Ratio Chi-Square    1       4 010       0 045
  Continuity Adj  Chi-Square     1       1 081       0 298
  Mantel-Haenszel Chi-Square     1       6 100       0 014
  Fisher's Exact Test (Left)                         1 000
                      (Right)                        0 141
                      (2-Tail)                       0 141
  Phi Coefficient                        0 295
  Contingency Coefficient                0 283
  Cramer's V                             0 295

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF8 BY PAT13

     INF8             PAT13

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                   1|     57 |      4 |     61
                    | 52 408 | 8 5915 |
                    | 0 4023 | 2 4538 |
                    |  80 28 |   5 63 |  85 92
     ---------------+--------+--------+
                   2|      4 |      6 |     10
                    | 8 5915 | 1 4085 |
                    | 2 4538 | 14 968 |
                    |   5 63 |   8 45 |  14 08
     ---------------+--------+--------+
     Total               61       10       71
                      85 92    14 08   100 00

          STATISTICS FOR TABLE OF INF8 BY PAT13

  Statistic                     DF       Value        Prob
  ---------------------------------------------------------
  Chi-Square                     1      20 278       0 000
  Likelihood Ratio Chi-Square    1      14 734       0 000
  Continuity Adj  Chi-Square     1      16 102       0 000
  Mantel-Haenszel Chi-Square     1      19 993       0 000
  Fisher's Exact Test (Left)                         1 000
                      (Right)                     2 47E-04
                      (2-Tail)                    2 47E-04
  Phi Coefficient                        0 534
  Contingency Coefficient                0 471
  Cramer's V                             0 534

  Sample Size = 71
  WARNING   25% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY PAT13

     RINF10           PAT13

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                   1|     27 |      0 |     27
                    | 22 582 | 4 4182 |
                    | 0 8644 | 4 4182 |
                    |  49 09 |   0 00 |  49 09
     ---------------+--------+--------+
                   2|     14 |      5 |     19
                    | 15 891 | 3 1091 |
                    |  0 225 |   1 15 |
                    |  25 45 |   9 09 |  34 55
     ---------------+--------+--------+
                   3|      5 |      4 |      9
                    | 7 5273 | 1 4727 |
                    | 0 8485 | 4 3369 |
                    |   9 09 |   7 27 |  16 36
     ---------------+--------+--------+
     Total               46        9       55
                      83 64    16 36   100 00

     Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY PAT13

  Statistic                     DF       Value        Prob
  ---------------------------------------------------------
  Chi-Square                     2      11 843       0 003
  Likelihood Ratio Chi-Square    2      14 756       0 001
  Mantel-Haenszel Chi-Square     1      11 494       0 001
  Phi Coefficient                        0 464
  Contingency Coefficient                0 421
  Cramer's V                             0 464

  Effective Sample Size = 55
  Frequency Missing = 16
  WARNING   23% of the data are missing
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF11 BY PAT13

     RINF11           PAT13

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                   1|     29 |      2 |     31
                    | 25 833 | 5 1667 |
                    | 0 3882 | 1 9409 |
                    |  48 33 |   3 33 |  51 67
     ---------------+--------+--------+
                   2|     15 |      3 |     18
                    |     15 |      3 |
                    |  3E-32 | 16E-33 |
                    |  25 00 |   5 00 |  30 00
     ---------------+--------+--------+
                   3|      6 |      5 |     11
                    | 9 1667 | 1 8333 |
                    | 1 0939 | 5 4697 |
                    |  10 00 |   8 33 |  18 33
     ---------------+--------+--------+
     Total               50       10       60
                      83 33    16 67   100 00

     Frequency Missing = 11

          STATISTICS FOR TABLE OF RINF11 BY PAT13

  Statistic                     DF       Value        Prob
  ---------------------------------------------------------
  Chi-Square                     2       8 893       0 012
  Likelihood Ratio Chi-Square    2       7 857       0 020
  Mantel-Haenszel Chi-Square     1       8 037       0 005
  Phi Coefficient                        0 385
  Contingency Coefficient                0 359
  Cramer's V                             0 385

  Effective Sample Size = 60
  Frequency Missing = 11
  WARNING   15% of the data are missing
  WARNING   33% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF12 BY PAT13

RINF12           PAT13

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     45 |      4 |     49
                 | 42 099 | 6 9014 |
                 |    0 2 | 1 2198 |
                 |  63 38 |   5 63 |  69 01
-----------------+--------+--------+
               2 |     12 |      1 |     13
                 | 11 169 |  1 831 |
                 | 0 0618 | 0 3771 |
                 |  16 90 |   1 41 |  18 31
-----------------+--------+--------+
               3 |      4 |      5 |      9
                 | 7 7324 | 1 2676 |
                 | 1 8016 |  10 99 |
                 |   5 63 |   7 04 |  12 68
-----------------+--------+--------+
Total                  61       10       71
                    85 92    14 08   100 00


      STATISTICS FOR TABLE OF RINF12 BY PAT13

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      14 650     0 001
Likelihood Ratio Chi-Square    2      10 598     0 005
Mantel-Haenszel Chi-Square     1      10 110     0 001
Phi Coefficient                        0 454
Contingency Coefficient                0 414
Cramer's V                             0 454

Sample Size = 71
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY PAT13

INF13            PAT13

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     20 |      8 |     28
                 | 24 056 | 3 9437 |
                 |  0 684 | 4 1722 |
                 |  28 17 |  11 27 |  39 44
-----------------+--------+--------+
               2 |     41 |      2 |     43
                 | 36 944 | 6 0563 |
                 | 0 4454 | 2 7168 |
                 |  57 75 |   2 82 |  60 56
-----------------+--------+--------+
Total                  61       10       71
                    85 92    14 08   100 00

       STATISTICS FOR TABLE OF INF13 BY PAT13

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       8 018     0 005
Likelihood Ratio Chi-Square    1       8 041     0 005
Continuity Adj  Chi-Square     1       6 163     0 013
Mantel-Haenszel Chi-Square     1       7 905     0 005
Fisher's Exact Test (Left)                    6 75E-03
                    (Right)                      0 999
                    (2-Tail)                     0 011
Phi Coefficient                       -0 336
Contingency Coefficient                0 319
Cramer's V                            -0 336

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY PAT15

INF5_5           PAT15

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               0 |     61 |      4 |     65
                 | 59 507 |  5 493 |
                 | 0 0375 | 0 4058 |
                 |  85 92 |   5 63 |  91 55
-----------------+--------+--------+
               1 |      4 |      2 |      6
                 |  5 493 |  0 507 |
                 | 0 4058 | 4 3959 |
                 |   5 63 |   2 82 |   8 45
-----------------+--------+--------+
Total                  65        6       71
                    91 55     8 45   100 00

      STATISTICS FOR TABLE OF INF5_5 BY PAT15

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 245     0 022
Likelihood Ratio Chi-Square    1       3 438     0 064
Continuity Adj  Chi-Square     1       2 320     0 128
Mantel-Haenszel Chi-Square     1       5 171     0 023
Fisher's Exact Test (Left)                       0 994
                    (Right)                      0 077
                    (2-Tail)                     0 077
Phi Coefficient                        0 272
Contingency Coefficient                0 262
Cramer's V                             0 272

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY PAT15

RINF10           PAT15

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     27 |      0 |     27
                 | 24 055 | 2 9455 |
                 | 0 3607 | 2 9455 |
                 |  49 09 |   0 00 |  49 09
-----------------+--------+--------+
               2 |     16 |      3 |     19
                 | 16 927 | 2 0727 |
                 | 0 0508 | 0 4148 |
                 |  29 09 |   5 45 |  34 55
-----------------+--------+--------+
               3 |      6 |      3 |      9
                 | 8 0182 | 0 9818 |
                 |  0 508 | 4 1485 |
                 |  10 91 |   5 45 |  16 36
-----------------+--------+--------+
Total                  49        6       55
                    89 09    10 91   100 00

Frequency Missing = 16

       STATISTICS FOR TABLE OF RINF10 BY PAT15

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       8 428     0 015
Likelihood Ratio Chi-Square    2       9 876     0 007
Mantel-Haenszel Chi-Square     1       8 266     0 004
Phi Coefficient                        0 391
Contingency Coefficient                0 365
Cramer's V                             0 391

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF11 BY PAT15

RINF11          PAT15

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     30 |      1 |     31
               | 28 417 | 2 5833 |
               | 0 0882 | 0 9704 |
               |  50 00 |   1 67 |  51 67
---------------+--------+--------+
             2 |     17 |      1 |     18
               |   16 5 |    1 5 |
               | 0 0152 | 0 1667 |
               |  28 33 |   1 67 |  30 00
---------------+--------+--------+
             3 |      8 |      3 |     11
               | 10 083 | 0 9167 |
               | 0 4304 | 4 7348 |
               |  13 33 |   5 00 |  18 33
---------------+--------+--------+
Total               55        5       60
                 91 67     8 33   100 00

Frequency Missing = 11

        STATISTICS FOR TABLE OF RINF11 BY PAT15

Statistic                       DF       Value        Prob
------------------------------------------------------------
Chi-Square                       2       6 406       0 041
Likelihood Ratio Chi-Square      2       4 970       0 083
Mantel-Haenszel Chi-Square       1       4 898       0 027
Phi Coefficient                          0 327
Contingency Coefficient                  0 311
Cramer's V                               0 327

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF12 BY PAT15

RINF12          PAT15

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     48 |      1 |     49
               | 44 859 | 4 1408 |
               | 0 2199 | 2 3823 |
               |  67 61 |   1 41 |  69 01
---------------+--------+--------+
             2 |     10 |      3 |     13
               | 11 901 | 1 0986 |
               | 0 3038 | 3 2909 |
               |  14 08 |   4 23 |  18 31
---------------+--------+--------+
             3 |      7 |      2 |      9
               | 8 2394 | 0 7606 |
               | 0 1864 | 2 0198 |
               |   9 86 |   2 82 |  12 68
---------------+--------+--------+
Total               65        6       71
                 91 55     8 45   100 00

        STATISTICS FOR TABLE OF RINF12 BY PAT15

Statistic                       DF       Value        Prob
------------------------------------------------------------
Chi-Square                       2       8 403       0 015
Likelihood Ratio Chi-Square      2       7 786       0 020
Mantel-Haenszel Chi-Square       1       6 894       0 009
Phi Coefficient                          0 344
Contingency Coefficient                  0 325
Cramer's V                               0 344

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF1 BY PAT16

INF1            PAT16

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     22 |      4 |     26
               | 24 169 |  1 831 |
               | 0 1947 | 2 5694 |
               |  30 99 |   5 63 |  36 62
---------------+--------+--------+
             3 |     44 |      1 |     45
               | 41 831 |  3 169 |
               | 0 1125 | 1 4846 |
               |  61 97 |   1 41 |  63 38
---------------+--------+--------+
Total               66        5       71
                 92 96     7 04   100 00

        STATISTICS FOR TABLE OF INF1 BY PAT16

Statistic                       DF       Value        Prob
------------------------------------------------------------
Chi-Square                       1       4 361       0 037
Likelihood Ratio Chi-Square      1       4 256       0 039
Continuity Adj  Chi-Square       1       2 582       0 108
Mantel-Haenszel Chi-Square       1       4 300       0 038
Fisher's Exact Test (Left)                           0 057
                    (Right)                          0 995
                    (2-Tail)                         0 057
Phi Coefficient                         -0 248
Contingency Coefficient                  0 241
Cramer's V                              -0 248

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF2 BY PAT16

INF2            PAT16

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     53 |      2 |     55
               | 51 127 | 3 8732 |
               | 0 0686 |  0 906 |
               |  74 65 |   2 82 |  77 46
---------------+--------+--------+
             2 |     13 |      3 |     16
               | 14 873 | 1 1268 |
               | 0 2359 | 3 1143 |
               |  18 31 |   4 23 |  22 54
---------------+--------+--------+
Total               66        5       71
                 92 96     7 04   100 00

        STATISTICS FOR TABLE OF INF2 BY PAT16

Statistic                       DF       Value        Prob
------------------------------------------------------------
Chi-Square                       1       4 325       0 038
Likelihood Ratio Chi-Square      1       3 546       0 060
Continuity Adj  Chi-Square       1       2 324       0 127
Mantel-Haenszel Chi-Square       1       4 264       0 039
Fisher's Exact Test (Left)                           0 992
                    (Right)                          0 072
                    (2-Tail)                         0 072
Phi Coefficient                          0 247
Contingency Coefficient                  0 240
Cramer's V                               0 247

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_9 BY PAT16

INF5_9         PAT16

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     66 |      4 |     70
               |  65 07 | 4 9296 |
               | 0 0133 | 0 1753 |
               |  92 96 |   5 63 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9296 | 0 0704 |
               | 0 9296 |  12 27 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total               66        5      71
                 92 96     7 04  100 00

          STATISTICS FOR TABLE OF INF5_9 BY PAT16

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     1     13 389      0 000
Likelihood Ratio Chi-Square    1      5 507      0 019
Continuity Adj  Chi-Square     1      2 859      0 091
Mantel-Haenszel Chi-Square     1     13 200      0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 070
                    (2-Tail)                     0 070
Phi Coefficient                       0 434
Contingency Coefficient               0 398
Cramer's V                            0 434

Sample Size = 71
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF9_7 BY PAT16

INF9_7         PAT16

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     63 |      3 |     66
               | 61 352 | 4 6479 |
               | 0 0443 | 0 5843 |
               |  88 73 |   4 23 |  92 96
---------------+--------+--------+
             1 |      3 |      2 |      5
               | 4 6479 | 0 3521 |
               | 0 5843 | 7 7121 |
               |   4 23 |   2 82 |   7 04
---------------+--------+--------+
Total               66        5      71
                 92 96     7 04  100 00

          STATISTICS FOR TABLE OF INF9_7 BY PAT16

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     1      8 925      0 003
Likelihood Ratio Chi-Square    1      5 034      0 025
Continuity Adj  Chi-Square     1      4 331      0 037
Mantel-Haenszel Chi-Square     1      8 799      0 003
Fisher's Exact Test (Left)                       0 998
                    (Right)                      0 037
                    (2-Tail)                     0 037
Phi Coefficient                       0 355
Contingency Coefficient               0 334
Cramer's V                            0 355

Sample Size = 71
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF12 BY PAT16

RINF12         PAT16

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     47 |      2 |     49
               | 45 549 | 3 4507 |
               | 0 0462 | 0 6099 |
               |  66 20 |   2 82 |  69 01
---------------+--------+--------+
             2 |     13 |      0 |     13
               | 12 085 | 0 9155 |
               | 0 0694 | 0 9155 |
               |  18 31 |   0 00 |  18 31
---------------+--------+--------+
             3 |      6 |      3 |      9
               | 8 3662 | 0 6338 |
               | 0 6692 | 8 8338 |
               |   8 45 |   4 23 |  12 68
---------------+--------+--------+
Total               66        5      71
                 92 96     7 04  100 00

          STATISTICS FOR TABLE OF RINF12 BY PAT16

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     2     11 144      0 004
Likelihood Ratio Chi-Square    2      8 003      0 018
Mantel-Haenszel Chi-Square     1      6 187      0 013
Phi Coefficient                       0 396
Contingency Coefficient               0 368
Cramer's V                            0 396

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF3 BY PAT18

INF3           PAT18

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             3 |     19 |      1 |     20
               |  16 62 | 3 3803 |
               | 0 3409 | 1 6761 |
               |  26 76 |   1 41 |  28 17
---------------+--------+--------+
             5 |     22 |      6 |     28
               | 23 268 | 4 7324 |
               | 0 0691 | 0 3395 |
               |  30 99 |   8 45 |  39 44
---------------+--------+--------+
             7 |     17 |      2 |     19
               | 15 789 | 3 2113 |
               | 0 0929 | 0 4569 |
               |  23 94 |   2 82 |  26 76
---------------+--------+--------+
             8 |      1 |      3 |      4
               | 3 3239 | 0 6761 |
               | 1 6248 | 7 9886 |
               |   1 41 |   4 23 |   5 63
---------------+--------+--------+
Total               59       12      71
                 83 10    16 90  100 00

          STATISTICS FOR TABLE OF INF3 BY PAT18

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     3     12 589      0 006
Likelihood Ratio Chi-Square    3     10 191      0 017
Mantel-Haenszel Chi-Square     1      3 192      0 074
Phi Coefficient                       0 421
Contingency Coefficient               0 388
Cramer's V                            0 421

Sample Size = 71
WARNING   63% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY PAT18

INF8            PAT18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     53 |      8 |    '61
                |  50 69 |  10 31 |
                | 0 1053 | 0 5175 |
                |  74 65 |  11 27 |  85 92
----------------+--------+--------+
              2 |      6 |      4 |     10
                | 8 3099 | 1 6901 |
                | 0 6421 | 3 1568 |
                |   8 45 |   5 63 |  14 08
----------------+--------+--------+
Total                 59       12       71
                   83 10    16 90   100 00


          STATISTICS FOR TABLE OF INF8 BY PAT18

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 422     0 035
Likelihood Ratio Chi-Square    1       3 649     0 056
Continuity Adj  Chi-Square     1       2 715     0 099
Mantel-Haenszel Chi-Square     1       4 359     0 037
Fisher's Exact Test (Left)                       0 990
                    (Right)                      0 058
                    (2-Tail)                     0 058
Phi Coefficient                        0 250
Contingency Coefficient                0 242
Cramer's V                             0 250

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY PAT19

INF5_5          PAT19

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     55 |     10 |     65
                | 51 268 | 13 732 |
                | 0 2717 | 1 0144 |
                |  77 46 |  14 08 |  91 55
----------------+--------+--------+
              1 |      1 |      5 |      6
                | 4 7324 | 1 2676 |
                | 2 9437 |  10 99 |
                |   1 41 |   7 04 |   8 45
----------------+--------+--------+
Total                 56       15       71
                   78 87    21 13   100 00


          STATISTICS FOR TABLE OF INF5_5 BY PAT19

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      15 220     0 000
Likelihood Ratio Chi-Square    1      12 001     0 001
Continuity Adj  Chi-Square     1      11 415     0 001
Mantel-Haenszel Chi-Square     1      15 005     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                   1 21E-03
                    (2-Tail)                  1 21E-03
Phi Coefficient                        0 463
Contingency Coefficient                0 420
Cramer's V                             0 463

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_9 BY PAT20

INF5_9          PAT20

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     66 |      4 |     70
                |  65 07 | 4 9296 |
                | 0 0133 | 0 1753 |
                |  92 96 |   5 63 |  98 59
----------------+--------+--------+
              1 |      0 |      1 |      1
                | 0 9296 | 0 0704 |
                | 0 9296 |  12 27 |
                |   0 00 |   1 41 |   1 41
----------------+--------+--------+
Total                 66        5       71
                   92 96     7 04   100 00


          STATISTICS FOR TABLE OF INF5_9 BY PAT20

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      13 389     0 000
Likelihood Ratio Chi-Square    1       5 507     0 019
Continuity Adj  Chi-Square     1       2 859     0 091
Mantel-Haenszel Chi-Square     1      13 200     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 070
                    (2-Tail)                     0 070
Phi Coefficient                        0 434
Contingency Coefficient                0 398
Cramer's V                             0 434

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY PAT21

INF5_5          PAT21

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     65 |      0 |     65
                | 64 085 | 0 9155 |
                | 0 0131 | 0 9155 |
                |  91 55 |   0 00 |  91 55
----------------+--------+--------+
              1 |      5 |      1 |      6
                | 5 9155 | 0 0845 |
                | 0 1417 | 9 9178 |
                |   7 04 |   1 41 |   8 45
----------------+--------+--------+
Total                 70        1       71
                   98 59     1 41   100 00


          STATISTICS FOR TABLE OF INF5_5 BY PAT21

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      10 988     0 001
Likelihood Ratio Chi-Square    1       5 104     0 024
Continuity Adj  Chi-Square     1       2 263     0 132
Mantel-Haenszel Chi-Square     1      10 833     0 001
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 085
                    (2-Tail)                     0 085
Phi Coefficient                        0 393
Contingency Coefficient                0 366
Cramer's V                             0 393

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY PAT21

     INF8           PAT21

     Frequency     |
     Expected      |
     Cell Chi-Square|
     Percent       |       0|       1|  Total
     --------------+--------+--------+
                  1|     61 |      0 |     61
                   | 60 141 | 0 8592 |
                   | 0 0123 | 0 8592 |
                   |  85 92 |   0 00 |  85 92
     --------------+--------+--------+
                  2|      9 |      1 |     10
                   | 9 8592 | 0 1408 |
                   | 0 0749 | 5 2408 |
                   |  12 68 |   1 41 |  14 08
     --------------+--------+--------+
     Total               70        1       71
                      98 59     1 41   100 00

          STATISTICS FOR TABLE OF INF8 BY PAT21

  Statistic                     DF      Value        Prob
  --------------------------------------------------------
  Chi-Square                     1      6 187       0 013
  Likelihood Ratio Chi-Square    1      4 010       0 045
  Continuity Adj  Chi-Square     1      1 081       0 298
  Mantel-Haenszel Chi-Square     1      6 100       0 014
  Fisher's Exact Test (Left)                        1 000
                      (Right)                       0 141
                      (2-Tail)                      0 141
  Phi Coefficient                       0 295
  Contingency Coefficient               0 283
  Cramer's V                            0 295

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF12 BY PAT21

     RINF12         PAT21

     Frequency     |
     Expected      |
     Cell Chi-Square|
     Percent       |       0|       1|  Total
     --------------+--------+--------+
                  1|     49 |      0 |     49
                   |  48 31 | 0 6901 |
                   | 0 0099 | 0 6901 |
                   |  69 01 |   0 00 |  69 01
     --------------+--------+--------+
                  2|     13 |      0 |     13
                   | 12 817 | 0 1831 |
                   | 0 0026 | 0 1831 |
                   |  18 31 |   0 00 |  18 31
     --------------+--------+--------+
                  3|      8 |      1 |      9
                   | 8 8732 | 0 1268 |
                   | 0 0859 | 6 0156 |
                   |  11 27 |   1 41 |  12 68
     --------------+--------+--------+
     Total               70        1       71
                      98 59     1 41   100 00


          STATISTICS FOR TABLE OF RINF12 BY PAT21

  Statistic                     DF      Value        Prob
  --------------------------------------------------------
  Chi-Square                     2      6 987       0 030
  Likelihood Ratio Chi-Square    2      4 232       0 120
  Mantel-Haenszel Chi-Square     1      4 893       0 027
  Phi Coefficient                       0 314
  Contingency Coefficient               0 299
  Cramer's V                            0 314

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_4 BY PAT22

     INF9_4         PAT22

     Frequency     |
     Expected      |
     Cell Chi-Square|
     Percent       |       0|       1|  Total
     --------------+--------+--------+
                  0|     64 |      0 |     64
                   | 63 099 | 0 9014 |
                   | 0 0129 | 0 9014 |
                   |  90 14 |   0 00 |  90 14
     --------------+--------+--------+
                  1|      6 |      1 |      7
                   | 6 9014 | 0 0986 |
                   | 0 1177 | 8 2414 |
                   |   8 45 |   1 41 |   9 86
     --------------+--------+--------+
     Total               70        1       71
                      98 59     1 41   100 00

          STATISTICS FOR TABLE OF INF9_4 BY PAT22

  Statistic                     DF      Value        Prob
  --------------------------------------------------------
  Chi-Square                     1      9 273       0 002
  Likelihood Ratio Chi-Square    1      4 770       0 029
  Continuity Adj  Chi-Square     1      1 839       0 175
  Mantel-Haenszel Chi-Square     1      9 143       0 002
  Fisher's Exact Test (Left)                        1 000
                      (Right)                       0 099
                      (2-Tail)                      0 099
  Phi Coefficient                       0 361
  Contingency Coefficient               0 340
  Cramer's V                            0 361

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF12 BY PAT22

     RINF12         PAT22

     Frequency     |
     Expected      |
     Cell Chi-Square|
     Percent       |       0|       1|  Total
     --------------+--------+--------+
                  1|     49 |      0 |     49
                   |  48 31 | 0 6901 |
                   | 0 0099 | 0 6901 |
                   |  69 01 |   0 00 |  69 01
     --------------+--------+--------+
                  2|     13 |      0 |     13
                   | 12 817 | 0 1831 |
                   | 0 0026 | 0 1831 |
                   |  18 31 |   0 00 |  18 31
     --------------+--------+--------+
                  3|      8 |      1 |      9
                   | 8 8732 | 0 1268 |
                   | 0 0859 | 6 0156 |
                   |  11 27 |   1 41 |  12 68
     --------------+--------+--------+
     Total               70        1       71
                      98 59     1 41   100 00


          STATISTICS FOR TABLE OF RINF12 BY PAT22

  Statistic                     DF      Value        Prob
  --------------------------------------------------------
  Chi-Square                     2      6 987       0 030
  Likelihood Ratio Chi-Square    2      4 232       0 120
  Mantel-Haenszel Chi-Square     1      4 893       0 027
  Phi Coefficient                       0 314
  Contingency Coefficient               0 299
  Cramer's V                            0 314

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
             TABLE OF INF9_4 BY PAT23

INF9_4          PAT23

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     64 |      0 |     64
               | 63 099 | 0 9014 |
               | 0 0129 | 0 9014 |
               |  90 14 |   0 00 |  90 14
---------------+--------+--------+
             1 |      6 |      1 |      7
               | 6 9014 | 0 0986 |
               | 0 1177 | 8 2414 |
               |   8 45 |   1 41 |   9 86
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00


        STATISTICS FOR TABLE OF INF9_4 BY PAT23

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     1     9 273       0 002
Likelihood Ratio Chi-Square    1     4 770       0 029
Continuity Adj  Chi-Square     1     1 839       0 175
Mantel-Haenszel Chi-Square     1     9 143       0 002
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 099
                    (2-Tail)                     0 099
Phi Coefficient                      0 361
Contingency Coefficient              0 340
Cramer's V                           0 361

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
             TABLE OF RINF12 BY PAT23

RINF12          PAT23

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     49 |      0 |     49
               |  48 31 | 0 6901 |
               | 0 0099 | 0 6901 |
               |  69 01 |   0 00 |  69 01
---------------+--------+--------+
             2 |     13 |      0 |     13
               | 12 817 | 0 1831 |
               | 0 0026 | 0 1831 |
               |  18 31 |   0 00 |  18 31
---------------+--------+--------+
             3 |      8 |      1 |      9
               | 8 8732 | 0 1268 |
               | 0 0859 | 6 0156 |
               |  11 27 |   1 41 |  12 68
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00


        STATISTICS FOR TABLE OF RINF12 BY PAT23

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     2     6 987       0 030
Likelihood Ratio Chi-Square    2     4 232       0 120
Mantel-Haenszel Chi-Square     1     4 893       0 027
Phi Coefficient                      0 314
Contingency Coefficient              0 299
Cramer's V                           0 314

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
             TABLE OF INF5_9 BY PAT24

INF5_9          PAT24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     70 |      0 |     70
               | 69 014 | 0 9859 |
               | 0 0141 | 0 9859 |
               |  98 59 |   0 00 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9859 | 0 0141 |
               | 0 9859 | 69 014 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00


        STATISTICS FOR TABLE OF INF5_9 BY PAT24

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     1    71 000       0 000
Likelihood Ratio Chi-Square    1    10 511       0 001
Continuity Adj  Chi-Square     1    17 246       0 000
Mantel-Haenszel Chi-Square     1    70 000       0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 014
                    (2-Tail)                     0 014
Phi Coefficient                      1 000
Contingency Coefficient              0 707
Cramer's V                           1 000

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
             TABLE OF INF7 BY PAT24

INF7            PAT24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     68 |      0 |     68
               | 67 042 | 0 9577 |
               | 0 0137 | 0 9577 |
               |  95 77 |   0 00 |  95 77
---------------+--------+--------+
             2 |      2 |      1 |      3
               | 2 9577 | 0 0423 |
               | 0 3101 | 21 709 |
               |   2 82 |   1 41 |   4 23
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00


        STATISTICS FOR TABLE OF INF7 BY PAT24

Statistic                     DF     Value        Prob
------------------------------------------------------
Chi-Square                     1    22 990       0 000
Likelihood Ratio Chi-Square    1     6 692       0 010
Continuity Adj  Chi-Square     1     5 252       0 022
Mantel-Haenszel Chi-Square     1    22 667       0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 042
                    (2-Tail)                     0 042
Phi Coefficient                      0 569
Contingency Coefficient              0 495
Cramer's V                           0 569

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF12 BY PAT24

RINF12          PAT24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     49 |      0 |     49
               |  48 31 | 0 6901 |
               | 0 0099 | 0 6901 |
               |  69 01 |   0 00 |  69 01
---------------+--------+--------+
             2 |     13 |      0 |     13
               | 12 817 | 0 1831 |
               | 0 0026 | 0 1831 |
               |  18 31 |   0 00 |  18 31
---------------+--------+--------+
             3 |      8 |      1 |      9
               | 8 8732 | 0 1268 |
               | 0 0859 | 6 0156 |
               |  11 27 |   1 41 |  12 68
---------------+--------+--------+
Total                70        1      71
                  98 59     1 41  100 00


        STATISTICS FOR TABLE OF RINF12 BY PAT24

Statistic                          DF     Value      Prob
---------------------------------------------------------
Chi-Square                          2     6 987     0 030
Likelihood Ratio Chi-Square         2     4 232     0 120
Mantel-Haenszel Chi-Square          1     4 893     0 027
Phi Coefficient                           0 314
Contingency Coefficient                   0 299
Cramer's V                                0 314

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY PAT25

INF5_5          PAT25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     65 |      0 |     65
               | 64 085 | 0 9155 |
               | 0 0131 | 0 9155 |
               |  91 55 |   0 00 |  91 55
---------------+--------+--------+
             1 |      5 |      1 |      6
               | 5 9155 | 0 0845 |
               | 0 1417 | 9 9178 |
               |   7 04 |   1 41 |   8 45
---------------+--------+--------+
Total                70        1      71
                  98 59     1 41  100 00


        STATISTICS FOR TABLE OF INF5_5 BY PAT25

Statistic                          DF     Value      Prob
---------------------------------------------------------
Chi-Square                          1    10 988     0 001
Likelihood Ratio Chi-Square         1     5 104     0 024
Continuity Adj  Chi-Square          1     2 263     0 132
Mantel-Haenszel Chi-Square          1    10 833     0 001
Fisher's Exact Test (Left)                          1 000
                    (Right)                         0 085
                    (2-Tail)                        0 085
Phi Coefficient                           0 393
Contingency Coefficient                   0 366
Cramer's V                                0 393

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY PAT25

INF8            PAT25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     61 |      0 |     61
               | 60 141 | 0 8592 |
               | 0 0123 | 0 8592 |
               |  85 92 |   0 00 |  85 92
---------------+--------+--------+
             2 |      9 |      1 |     10
               | 9 8592 | 0 1408 |
               | 0 0749 | 5 2408 |
               |  12 68 |   1 41 |  14 08
---------------+--------+--------+
Total                70        1      71
                  98 59     1 41  100 00


        STATISTICS FOR TABLE OF INF8 BY PAT25

Statistic                          DF     Value      Prob
---------------------------------------------------------
Chi-Square                          1     6 187     0 013
Likelihood Ratio Chi-Square         1     4 010     0 045
Continuity Adj  Chi-Square          1     1 081     0 298
Mantel-Haenszel Chi-Square          1     6 100     0 014
Fisher's Exact Test (Left)                          1 000
                    (Right)                         0 141
                    (2-Tail)                        0 141
Phi Coefficient                           0 295
Contingency Coefficient                   0 283
Cramer's V                                0 295

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF12 BY PAT25

RINF12          PAT25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     49 |      0 |     49
               |  48 31 | 0 6901 |
               | 0 0099 | 0 6901 |
               |  69 01 |   0 00 |  69 01
---------------+--------+--------+
             2 |     13 |      0 |     13
               | 12 817 | 0 1831 |
               | 0 0026 | 0 1831 |
               |  18 31 |   0 00 |  18 31
---------------+--------+--------+
             3 |      8 |      1 |      9
               | 8 8732 | 0 1268 |
               | 0 0859 | 6 0156 |
               |  11 27 |   1 41 |  12 68
---------------+--------+--------+
Total                70        1      71
                  98 59     1 41  100 00


        STATISTICS FOR TABLE OF RINF12 BY PAT25

Statistic                          DF     Value      Prob
---------------------------------------------------------
Chi-Square                          2     6 987     0 030
Likelihood Ratio Chi-Square         2     4 232     0 120
Mantel-Haenszel Chi-Square          1     4 893     0 027
Phi Coefficient                           0 314
Contingency Coefficient                   0 299
Cramer's V                                0 314

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF6 BY VIS1

RINF6            VIS1

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      0 |      3 |      3
               | 0 4348 | 2 5652 |
               | 0 4348 | 0 0737 |
               |   0 00 |   4 35 |   4 35
---------------+--------+--------+
DHD            |      2 |     42 |     44
               | 6 3768 | 37 623 |
               | 3 0041 | 0 5092 |
               |   2 90 |  60 87 |  63 77
---------------+--------+--------+
DIET           |      3 |      2 |      5
               | 0 7246 | 4 2754 |
               | 7 1446 |  1 211 |
               |   4 35 |   2 90 |   7 25
---------------+--------+--------+
MGR            |      5 |     12 |     17
               | 2 4638 | 14 536 |
               | 2 6108 | 0 4425 |
               |   7 25 |  17 39 |  24 64
---------------+--------+--------+
Total               10       59       69
                 14 49    85 51   100 00

Frequency Missing = 2


           STATISTICS FOR TABLE OF RINF6 BY VIS1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      15 431     0 001
Likelihood Ratio Chi-Square    3      13 506     0 004
Mantel-Haenszel Chi-Square     1       8 418     0 004
Phi Coefficient                        0 473
Contingency Coefficient                0 428
Cramer's V                             0 473

Effective Sample Size = 69
Frequency Missing = 2
WARNING   63% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF9_4 BY VIS1

INF9_4           VIS1

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |      6 |     58 |     64
               | 9 9155 | 54 085 |
               | 1 5462 | 0 2835 |
               |   8 45 |  81 69 |  90 14
---------------+--------+--------+
             1 |      5 |      2 |      7
               | 1 0845 | 5 9155 |
               | 14 136 | 2 5917 |
               |   7 04 |   2 82 |   9 86
---------------+--------+--------+
Total               11       60       71
                 15 49    84 51   100 00

          STATISTICS FOR TABLE OF INF9_4 BY VIS1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      18 558     0 000
Likelihood Ratio Chi-Square    1      13 025     0 000
Continuity Adj  Chi-Square     1      14 121     0 000
Mantel-Haenszel Chi-Square     1      18 296     0 000
Fisher's Exact Test (Left)                    6 36E-04
                    (Right)                      1 000
                    (2-Tail)                  6 36E-04
Phi Coefficient                       -0 511
Contingency Coefficient                0 455
Cramer's V                            -0 511

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF9_1 BY VIS1

INF9_1           VIS1

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |      7 |     19 |     26
               | 4 0282 | 21 972 |
               | 2 1925 |  0 402 |
               |   9 86 |  26 76 |  36 62
---------------+--------+--------+
             1 |      4 |     41 |     45
               | 6 9718 | 38 028 |
               | 1 2668 | 0 2322 |
               |   5 63 |  57 75 |  63 38
---------------+--------+--------+
Total               11       60       71
                 15 49    84 51   100 00

          STATISTICS FOR TABLE OF INF9_1 BY VIS1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 093     0 043
Likelihood Ratio Chi-Square    1       3 940     0 047
Continuity Adj  Chi-Square     1       2 832     0 092
Mantel-Haenszel Chi-Square     1       4 036     0 045
Fisher's Exact Test (Left)                       0 990
                    (Right)                      0 048
                    (2-Tail)                     0 085
Phi Coefficient                        0 240
Contingency Coefficient                0 233
Cramer's V                             0 240

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF10 BY VIS1

RINF10           VIS1

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      8 |     19 |     27
               | 4 4182 | 22 582 |
               | 2 9038 | 0 5681 |
               |  14 55 |  34 55 |  49 09
---------------+--------+--------+
             2 |      0 |     19 |     19
               | 3 1091 | 15 891 |
               | 3 1091 | 0 6083 |
               |   0 00 |  34 55 |  34 55
---------------+--------+--------+
             3 |      1 |      8 |      9
               | 1 4727 | 7 5273 |
               | 0 1517 | 0 0297 |
               |   1 82 |  14 55 |  16 36
---------------+--------+--------+
Total                9       46       55
                 16 36    83 64   100 00

Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY VIS1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       7 371     0 025
Likelihood Ratio Chi-Square    2       9 927     0 007
Mantel-Haenszel Chi-Square     1       3 917     0 048
Phi Coefficient                        0 366
Contingency Coefficient                0 344
Cramer's V                             0 366

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF11 BY VIS1

RINF11          VIS1

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      8 |     23 |     31
               |   4 65 |  26 35 |
               | 2 4134 | 0 4259 |
               |  13 33 |  38 33 |  51 67
---------------+--------+--------+
             2 |      1 |     17 |     18
               |    2 7 |   15 3 |
               | 1 0704 | 0 1889 |
               |   1 67 |  28 33 |  30 00
---------------+--------+--------+
             3 |      0 |     11 |     11
               |   1 65 |   9 35 |
               |   1 65 | 0 2912 |
               |   0 00 |  18 33 |  18 33
---------------+--------+--------+
Total                 9       51       60
                  15 00    85 00   100 00

Frequency Missing = 11


          STATISTICS FOR TABLE OF RINF11 BY VIS1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       6 040     0 049
Likelihood Ratio Chi-Square    2       7 598     0 022
Mantel-Haenszel Chi-Square     1       5 457     0 019
Phi Coefficient                        0 317
Contingency Coefficient                0 302
Cramer's V                             0 317

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY VIS1

INF13           VIS1

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      0 |     28 |     28
               |  4 338 | 23 662 |
               |  4 338 | 0 7953 |
               |   0 00 |  39 44 |  39 44
---------------+--------+--------+
             2 |     11 |     32 |     43
               |  6 662 | 36 338 |
               | 2 8248 | 0 5179 |
               |  15 49 |  45 07 |  60 56
---------------+--------+--------+
Total                11       60       71
                  15 49    84 51   100 00


          STATISTICS FOR TABLE OF INF13 BY VIS1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       8 476     0 004
Likelihood Ratio Chi-Square    1      12 323     0 000
Continuity Adj  Chi-Square     1       6 635     0 010
Mantel-Haenszel Chi-Square     1       8 357     0 004
Fisher's Exact Test (Left)                    2 25E-03
                    (Right)                      1 000
                    (2-Tail)                  2 48E-03
Phi Coefficient                       -0 346
Contingency Coefficient                0 327
Cramer's V                            -0 346

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY VIS2

INF5_5          VIS2

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     52 |     13 |     65
               | 49 437 | 15 563 |
               | 0 1329 | 0 4222 |
               |  73 24 |  18 31 |  91 55
---------------+--------+--------+
             1 |      2 |      4 |      6
               | 4 5634 | 1 4366 |
               | 1 4399 | 4 5739 |
               |   2 82 |   5 63 |   8 45
---------------+--------+--------+
Total                54       17       71
                  76 06    23 94   100 00

          STATISTICS FOR TABLE OF INF5_5 BY VIS2

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 569     0 010
Likelihood Ratio Chi-Square    1       5 471     0 019
Continuity Adj  Chi-Square     1       4 256     0 039
Mantel-Haenszel Chi-Square     1       6 476     0 011
Fisher's Exact Test (Left)                       0 998
                    (Right)                      0 026
                    (2-Tail)                     0 026
Phi Coefficient                        0 304
Contingency Coefficient                0 291
Cramer's V                             0 304

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY VIS2

RINF10          VIS2

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               | 19 636 | 7 3636 |
               | 1 4651 | 3 9068 |
               |  45 45 |   3 64 |  49 09
---------------+--------+--------+
             2 |     11 |      8 |     19
               | 13 818 | 5 1818 |
               | 0 5748 | 1 5327 |
               |  20 00 |  14 55 |  34 55
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 5455 | 2 4545 |
               | 0 9899 | 2 6397 |
               |   7 27 |   9 09 |  16 36
---------------+--------+--------+
Total                40       15       55
                  72 73    27 27   100 00

Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY VIS2

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      11 109     0 004
Likelihood Ratio Chi-Square    2      11 967     0 003
Mantel-Haenszel Chi-Square     1      10 284     0 001
Phi Coefficient                        0 449
Contingency Coefficient                0 410
Cramer's V                             0 449

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
              TABLE OF RINF11 BY VIS2

RINF11        VIS2

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     27 |      4 |     31
                 |  23 25 |   7 75 |
                 | 0 6048 | 1 8145 |
                 |  45 00 |   6 67 |  51 67
-----------------+--------+--------+
               2 |     15 |      3 |     18
                 |   13 5 |    4 5 |
                 | 0 1667 |    0 5 |
                 |  25 00 |   5 00 |  30 00
-----------------+--------+--------+
               3 |      3 |      8 |     11
                 |   8 25 |   2 75 |
                 | 3 3409 | 10 023 |
                 |   5 00 |  13 33 |  18 33
-----------------+--------+--------+
Total                 45       15       60
                   75 00    25 00   100 00

Frequency Missing = 11

        STATISTICS FOR TABLE OF RINF11 BY VIS2

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      16 450     0 000
Likelihood Ratio Chi-Square    2      14 527     0 001
Mantel-Haenszel Chi-Square     1      12 023     0 001
Phi Coefficient                        0 524
Contingency Coefficient                0 464
Cramer's V                             0 524

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF13 BY VIS2

INF13         VIS2

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     16 |     12 |     28
                 | 21 296 | 6 7042 |
                 | 1 3169 | 4 1832 |
                 |  22 54 |  16 90 |  39 44
-----------------+--------+--------+
               2 |     38 |      5 |     43
                 | 32 704 | 10 296 |
                 | 0 8575 |  2 724 |
                 |  53 52 |   7 04 |  60 56
-----------------+--------+--------+
Total                 54       17       71
                   76 06    23 94   100 00

        STATISTICS FOR TABLE OF INF13 BY VIS2

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       9 082     0 003
Likelihood Ratio Chi-Square    1       9 006     0 003
Continuity Adj  Chi-Square     1       7 448     0 006
Mantel-Haenszel Chi-Square     1       8 954     0 003
Fisher's Exact Test (Left)                    3 32E-03
                    (Right)                      1 000
                    (2-Tail)                  4 08E-03
Phi Coefficient                       -0 358
Contingency Coefficient                0 337
Cramer's V                            -0 358

Sample Size = 71
```

```
              TABLE OF INF8 BY VIS3

INF8          VIS3

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     59 |      2 |     61
                 | 57 563 | 3 4366 |
                 | 0 0359 | 0 6006 |
                 |  83 10 |   2 82 |  85 92
-----------------+--------+--------+
               2 |      8 |      2 |     10
                 | 9 4366 | 0 5634 |
                 | 0 2187 | 3 6634 |
                 |  11 27 |   2 82 |  14 08
-----------------+--------+--------+
Total                 67        4       71
                   94 37     5 63   100 00

        STATISTICS FOR TABLE OF INF8 BY VIS3

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 518     0 034
Likelihood Ratio Chi-Square    1       3 169     0 075
Continuity Adj  Chi-Square     1       1 921     0 166
Mantel-Haenszel Chi-Square     1       4 455     0 035
Fisher's Exact Test (Left)                       0 992
                    (Right)                      0 093
                    (2-Tail)                     0 093
Phi Coefficient                        0 252
Contingency Coefficient                0 245
Cramer's V                             0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY VIS3

RINF10        VIS3

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     26 |      1 |     27
                 | 25 036 | 1 9636 |
                 | 0 0371 | 0 4729 |
                 |  47 27 |   1 82 |  49 09
-----------------+--------+--------+
               2 |     19 |      0 |     19
                 | 17 618 | 1 3818 |
                 | 0 1084 | 1 3818 |
                 |  34 55 |   0 00 |  34 55
-----------------+--------+--------+
               3 |      6 |      3 |      9
                 | 8 3455 | 0 6545 |
                 | 0 6592 | 8 4045 |
                 |  10 91 |   5 45 |  16 36
-----------------+--------+--------+
Total                 51        4       55
                   92 73     7 27   100 00

Frequency Missing = 16

        STATISTICS FOR TABLE OF RINF10 BY VIS3

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      11 064     0 004
Likelihood Ratio Chi-Square    2       8 659     0 013
Mantel-Haenszel Chi-Square     1       5 295     0 021
Phi Coefficient                        0 449
Contingency Coefficient                0 409
Cramer's V                             0 449

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF11 BY VIS3

RINF11          VIS3

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     30 |      1 |     31
               | 28 933 | 2 0667 |
               | 0 0393 | 0 5505 |
               |  50 00 |   1 67 |  51 67
---------------+--------+--------+
             2 |     18 |      0 |     18
               |   16 8 |    1 2 |
               | 0 0857 |    1 2 |
               |  30 00 |   0 00 |  30 00
---------------+--------+--------+
             3 |      8 |      3 |     11
               | 10 267 | 0 7333 |
               | 0 5004 | 7 0061 |
               |  13 33 |   5 00 |  18 33
---------------+--------+--------+
Total                56        4      60
                  93 33     6 67  100 00

Frequency Missing = 11

         STATISTICS FOR TABLE OF RINF11 BY VIS3

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       9 382     0 009
Likelihood Ratio Chi-Square    2       7 665     0 022
Mantel-Haenszel Chi-Square     1       4 970     0 026
Phi Coefficient                        0 395
Contingency Coefficient                0 368
Cramer's V                             0 395

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF1 BY VIS4

INF1            VIS4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |      9 |     17 |     26
               | 13 549 | 12 451 |
               | 1 5275 | 1 6622 |
               |  12 68 |  23 94 |  36 62
---------------+--------+--------+
             3 |     28 |     17 |     45
               | 23 451 | 21 549 |
               | 0 8825 | 0 9604 |
               |  39 44 |  23 94 |  63 38
---------------+--------+--------+
Total                37       34      71
                  52 11    47 89  100 00

         STATISTICS FOR TABLE OF INF1 BY VIS4

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 033     0 025
Likelihood Ratio Chi-Square    1       5 091     0 024
Continuity Adj  Chi-Square     1       3 987     0 046
Mantel-Haenszel Chi-Square     1       4 962     0 026
Fisher's Exact Test (Left)                       0 023
                    (Right)                      0 994
                    (2-Tail)                     0 029
Phi Coefficient                       -0 266
Contingency Coefficient                0 257
Cramer's V                            -0 266

Sample Size = 71
```

```
                 TABLE OF INF2 BY VIS4

INF2            VIS4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     34 |     21 |     55
               | 28 662 | 26 338 |
               | 0 9942 | 1 0819 |
               |  47 89 |  29 58 |  77 46
---------------+--------+--------+
             2 |      3 |     13 |     16
               |  8 338 |  7 662 |
               | 3 4174 |  3 719 |
               |   4 23 |  18 31 |  22 54
---------------+--------+--------+
Total                37       34      71
                  52 11    47 89  100 00

         STATISTICS FOR TABLE OF INF2 BY VIS4

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       9 212     0 002
Likelihood Ratio Chi-Square    1       9 713     0 002
Continuity Adj  Chi-Square     1       7 567     0 006
Mantel-Haenszel Chi-Square     1       9 083     0 003
Fisher's Exact Test (Left)                       1 000
                    (Right)                   2 56E-03
                    (2-Tail)                  3 74E-03
Phi Coefficient                        0 360
Contingency Coefficient                0 339
Cramer's V                             0 360

Sample Size = 71
```

```
                 TABLE OF INF9_4 BY VIS4

INF9_4          VIS4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     30 |     34 |     64
               | 33 352 | 30 648 |
               | 0 3369 | 0 3666 |
               |  42 25 |  47 89 |  90 14
---------------+--------+--------+
             1 |      7 |      0 |      7
               | 3 6479 | 3 3521 |
               | 3 0803 | 3 3521 |
               |   9 86 |   0 00 |   9 86
---------------+--------+--------+
Total                37       34      71
                  52 11    47 89  100 00

         STATISTICS FOR TABLE OF INF9_4 BY VIS4

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       7 136     0 008
Likelihood Ratio Chi-Square    1       9 827     0 002
Continuity Adj  Chi-Square     1       5 166     0 023
Mantel-Haenszel Chi-Square     1       7 035     0 008
Fisher's Exact Test (Left)                    7 74E-03
                    (Right)                      1 000
                    (2-Tail)                     0 012
Phi Coefficient                       -0 317
Contingency Coefficient                0 302
Cramer's V                            -0 317

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF9_5 BY VIS4

INF9_5          VIS4

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     27 |     31 |     58
                | 30 225 | 27 775 |
                | 0 3442 | 0 3745 |
                |  38 03 |  43 66 |  81 69
----------------+--------+--------+
              1 |     10 |      3 |     13
                | 6 7746 | 6 2254 |
                | 1 5356 | 1 6711 |
                |  14 08 |   4 23 |  18 31
----------------+--------+--------+
Total                37       34       71
                  52 11    47 89   100 00

          STATISTICS FOR TABLE OF INF9_5 BY VIS4

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     1      3 925      0 048
Likelihood Ratio Chi-Square    1      4 126      0 042
Continuity Adj  Chi-Square     1      2 803      0 094
Mantel-Haenszel Chi-Square     1      3 870      0 049
Fisher's Exact Test (Left)                       0 045
                    (Right)                      0 991
                    (2-Tail)                     0 066
Phi Coefficient                      -0 235
Contingency Coefficient               0 229
Cramer's V                           -0 235

Sample Size = 71
```

```
                  TABLE OF INF9_7 BY VIS4

INF9_7          VIS4

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     37 |     29 |     66
                | 34 394 | 31 606 |
                | 0 1974 | 0 2148 |
                |  52 11 |  40 85 |  92 96
----------------+--------+--------+
              1 |      0 |      5 |      5
                | 2 6056 | 2 3944 |
                | 2 6056 | 2 8355 |
                |   0 00 |   7 04 |   7 04
----------------+--------+--------+
Total                37       34       71
                  52 11    47 89   100 00

          STATISTICS FOR TABLE OF INF9_7 BY VIS4

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     1      5 853      0 016
Likelihood Ratio Chi-Square    1      7 777      0 005
Continuity Adj  Chi-Square     1      3 822      0 051
Mantel-Haenszel Chi-Square     1      5 771      0 016
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 021
                    (2-Tail)                     0 021
Phi Coefficient                       0 287
Contingency Coefficient               0 276
Cramer's V                            0 287

Sample Size = 71
WARNING   50% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF13 BY VIS4

INF13           VIS4

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |      9 |     19 |     28
                | 14 592 | 13 408 |
                | 2 1427 | 2 3318 |
                |  12 68 |  26 76 |  39 44
----------------+--------+--------+
              2 |     28 |     15 |     43
                | 22 408 | 20 592 |
                | 1 3953 | 1 5184 |
                |  39 44 |  21 13 |  60 56
----------------+--------+--------+
Total                37       34       71
                  52 11    47 89   100 00

          STATISTICS FOR TABLE OF INF13 BY VIS4

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     1      7 388      0 007
Likelihood Ratio Chi-Square    1      7 517      0 006
Continuity Adj  Chi-Square     1      6 126      0 013
Mantel-Haenszel Chi-Square     1      7 284      0 007
Fisher's Exact Test (Left)                    6 40E-03
                    (Right)                      0 999
                    (2-Tail)                  8 22E-03
Phi Coefficient                      -0 323
Contingency Coefficient               0 307
Cramer's V                           -0 323

Sample Size = 71
```

```
                  TABLE OF INF5_4 BY VIS5

INF5_4          VIS5

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     33 |     16 |     49
                | 28 296 | 20 704 |
                | 0 7821 | 1 0689 |
                |  46 48 |  22 54 |  69 01
----------------+--------+--------+
              1 |      8 |     14 |     22
                | 12 704 | 9 2958 |
                | 1 7419 | 2 3806 |
                |  11 27 |  19 72 |  30 99
----------------+--------+--------+
Total                41       30       71
                  57 75    42 25   100 00

          STATISTICS FOR TABLE OF INF5_4 BY VIS5

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     1      5 973      0 015
Likelihood Ratio Chi-Square    1      5 969      0 015
Continuity Adj  Chi-Square     1      4 771      0 029
Mantel-Haenszel Chi-Square     1      5 889      0 015
Fisher's Exact Test (Left)                       0 997
                    (Right)                      0 015
                    (2-Tail)                     0 020
Phi Coefficient                       0 290
Contingency Coefficient               0 279
Cramer's V                            0 290

Sample Size = 71
```

```
              TABLE OF INF5_5 BY VIS5

INF5_5          VIS5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     40 |     25 |     65
               | 37 535 | 27 465 |
               | 0 1619 | 0 2212 |
               |  56 34 |  35 21 |  91 55
---------------+--------+--------+
             1 |      1 |      5 |      6
               | 3 4648 | 2 5352 |
               | 1 7534 | 2 3963 |
               |   1 41 |   7 04 |   8 45
---------------+--------+--------+
Total               41       30       71
                 57 75    42 25   100 00


        STATISTICS FOR TABLE OF INF5_5 BY VIS5

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     1      4 533     0 033
Likelihood Ratio Chi-Square    1      4 693     0 030
Continuity Adj  Chi-Square     1      2 880     0 090
Mantel-Haenszel Chi-Square     1      4 469     0 035
Fisher's Exact Test (Left)                      0 996
                    (Right)                     0 045
                    (2-Tail)                    0 076
Phi Coefficient                       0 253
Contingency Coefficient               0 245
Cramer's V                            0 253

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF9_4 BY VIS5

INF9_4          VIS5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     34 |     30 |     64
               | 36 958 | 27 042 |
               | 0 2367 | 0 3235 |
               |  47 89 |  42 25 |  90 14
---------------+--------+--------+
             1 |      7 |      0 |      7
               | 4 0423 | 2 9577 |
               | 2 1642 | 2 9577 |
               |   9 86 |   0 00 |   9 86
---------------+--------+--------+
Total               41       30       71
                 57 75    42 25   100 00


        STATISTICS FOR TABLE OF INF9_4 BY VIS5

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     1      5 682     0 017
Likelihood Ratio Chi-Square    1      8 243     0 004
Continuity Adj  Chi-Square     1      3 923     0 048
Mantel-Haenszel Chi-Square     1      5 602     0 018
Fisher's Exact Test (Left)                      0 017
                    (Right)                     1 000
                    (2-Tail)                    0 018
Phi Coefficient                      -0 283
Contingency Coefficient               0 272
Cramer's V                           -0 283

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF6 BY VIS5

RINF6           VIS5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      3 |      0 |      3
               | 1 7391 | 1 2609 |
               | 0 9141 | 1 2609 |
               |   4 35 |   0 00 |   4 35
---------------+--------+--------+
DHD            |     19 |     25 |     44
               | 25 507 | 18 493 |
               | 1 6601 | 2 2898 |
               |  27 54 |  36 23 |  63 77
---------------+--------+--------+
DIET           |      4 |      1 |      5
               | 2 8986 | 2 1014 |
               | 0 4186 | 0 5773 |
               |   5 80 |   1 45 |   7 25
---------------+--------+--------+
MGR            |     14 |      3 |     17
               | 9 8551 | 7 1449 |
               | 1 7433 | 2 4046 |
               |  20 29 |   4 35 |  24 64
---------------+--------+--------+
Total               40       29       69
                 57 97    42 03   100 00

Frequency Missing = 2


        STATISTICS FOR TABLE OF RINF6 BY VIS5

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     3     11 269     0 010
Likelihood Ratio Chi-Square    3     12 869     0 005
Mantel-Haenszel Chi-Square     1      4 673     0 031
Phi Coefficient                       0 404
Contingency Coefficient               0 375
Cramer's V                            0 404

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY VIS5

RINF10          VIS5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     23 |      4 |     27
               | 15 709 | 11 291 |
               | 3 3839 |  4 708 |
               |  41 82 |   7 27 |  49 09
---------------+--------+--------+
             2 |      7 |     12 |     19
               | 11 055 | 7 9455 |
               | 1 4871 |  2 069 |
               |  12 73 |  21 82 |  34 55
---------------+--------+--------+
             3 |      2 |      7 |      9
               | 5 2364 | 3 7636 |
               | 2 0003 |  2 783 |
               |   3 64 |  12 73 |  16 36
---------------+--------+--------+
Total               32       23       55
                 58 18    41 82   100 00

Frequency Missing = 16


        STATISTICS FOR TABLE OF RINF10 BY VIS5

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     2     16 431     0 000
Likelihood Ratio Chi-Square    2     17 572     0 000
Mantel-Haenszel Chi-Square     1     14 853     0 000
Phi Coefficient                       0 547
Contingency Coefficient               0 480
Cramer's V                            0 547

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF RINF11 BY VIS5

      RINF11          VIS5

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     24 |      7 |     31
                     | 17 567 | 13 433 |
                     |  2 356 |  3 081 |
                     |  40 00 |  11 67 |  51 67
      ---------------+--------+--------+
                   2 |      7 |     11 |     18
                     |   10 2 |    7 8 |
                     | 1 0039 | 1 3128 |
                     |  11 67 |  18 33 |  30 00
      ---------------+--------+--------+
                   3 |      3 |      8 |     11
                     | 6 2333 | 4 7667 |
                     | 1 6772 | 2 1932 |
                     |   5 00 |  13 33 |  18 33
      ---------------+--------+--------+
      Total               34       26       60
                       56 67    43 33   100 00

      Frequency Missing = 11

            STATISTICS FOR TABLE OF RINF11 BY VIS5

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      11 624     0 003
Likelihood Ratio Chi-Square    2      12 042     0 002
Mantel-Haenszel Chi-Square     1      10 591     0 001
Phi Coefficient                        0 440
Contingency Coefficient                0 403
Cramer's V                             0 440

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
                TABLE OF RINF12 BY VIS5

      RINF12          VIS5

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     33 |     16 |     49
                     | 28 296 | 20 704 |
                     | 0 7821 | 1 0689 |
                     |  46 48 |  22 54 |  69 01
      ---------------+--------+--------+
                   2 |      5 |      8 |     13
                     |  7 507 |  5 493 |
                     | 0 8372 | 1 1442 |
                     |   7 04 |  11 27 |  18 31
      ---------------+--------+--------+
                   3 |      3 |      6 |      9
                     | 5 1972 | 3 8028 |
                     | 0 9289 | 1 2695 |
                     |   4 23 |   8 45 |  12 68
      ---------------+--------+--------+
      Total               41       30       71
                       57 75    42 25   100 00

         STATISTICS FOR TABLE OF RINF12 BY VIS5

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       6 031     0 049
Likelihood Ratio Chi-Square    2       6 029     0 049
Mantel-Haenszel Chi-Square     1       5 427     0 020
Phi Coefficient                        0 291
Contingency Coefficient                0 280
Cramer's V                             0 291

Sample Size = 71
```

```
                TABLE OF INF13 BY VIS5

      INF13           VIS5

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     11 |     17 |     28
                     | 16 169 | 11 831 |
                     | 1 6525 | 2 2584 |
                     |  15 49 |  23 94 |  39 44
      ---------------+--------+--------+
                   2 |     30 |     13 |     43
                     | 24 831 | 18 169 |
                     |  1 076 | 1 4706 |
                     |  42 25 |  18 31 |  60 56
      ---------------+--------+--------+
      Total               41       30       71
                       57 75    42 25   100 00

         STATISTICS FOR TABLE OF INF13 BY VIS5

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 457     0 011
Likelihood Ratio Chi-Square    1       6 493     0 011
Continuity Adj  Chi-Square     1       5 269     0 022
Mantel-Haenszel Chi-Square     1       6 366     0 012
Fisher's Exact Test (Left)                       0 011
                    (Right)                      0 997
                    (2-Tail)                     0 015
Phi Coefficient                       -0 302
Contingency Coefficient                0 289
Cramer's V                            -0 302

Sample Size = 71
```

```
                TABLE OF INF5_1 BY VIS6

      INF5_1          VIS6

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     35 |      2 |     37
                     | 31 789 | 5 2113 |
                     | 0 3244 | 1 9788 |
                     |  49 30 |   2 82 |  52 11
      ---------------+--------+--------+
                   1 |     26 |      8 |     34
                     | 29 211 | 4 7887 |
                     |  0 353 | 2 1534 |
                     |  36 62 |  11 27 |  47 89
      ---------------+--------+--------+
      Total               61       10       71
                       85 92    14 08   100 00

         STATISTICS FOR TABLE OF INF5_1 BY VIS6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 810     0 028
Likelihood Ratio Chi-Square    1       5 061     0 024
Continuity Adj  Chi-Square     1       3 429     0 064
Mantel-Haenszel Chi-Square     1       4 742     0 029
Fisher's Exact Test (Left)                       0 996
                    (Right)                      0 031
                    (2-Tail)                     0 041
Phi Coefficient                        0 260
Contingency Coefficient                0 252
Cramer's V                             0 260

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_2 BY VIS6

        INF5_2        VIS6

        Frequency    |
        Expected     |
        Cell Chi-Square|
        Percent      |       0|       1|  Total
        -------------+--------+--------+
                   0 |     36 |      2 |     38
                     | 32 648 | 5 3521 |
                     | 0 3442 | 2 0995 |
                     |  50 70 |   2 82 |  53 52
        -------------+--------+--------+
                   1 |     25 |      8 |     33
                     | 28 352 | 4 6479 |
                     | 0 3963 | 2 4176 |
                     |  35 21 |  11 27 |  46 48
        -------------+--------+--------+
        Total             61       10      71
                       85 92    14 08  100 00


          STATISTICS FOR TABLE OF INF5_2 BY VIS6

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       5 258       0 022
Likelihood Ratio Chi-Square    1       5 497       0 019
Continuity Adj  Chi-Square     1       3 806       0 051
Mantel-Haenszel Chi-Square     1       5 184       0 023
Fisher's Exact Test (Left)                         0 997
                    (Right)                        0 025
                    (2-Tail)                       0 037
Phi Coefficient                        0 272
Contingency Coefficient                0 263
Cramer's V                             0 272

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_9 BY VIS6

        INF5_9        VIS6

        Frequency    |
        Expected     |
        Cell Chi-Square|
        Percent      |       0|       1|  Total
        -------------+--------+--------+
                   0 |     61 |      9 |     70
                     | 60 141 | 9 8592 |
                     | 0 0123 | 0 0749 |
                     |  85 92 |  12 68 |  98 59
        -------------+--------+--------+
                   1 |      0 |      1 |      1
                     | 0 8592 | 0 1408 |
                     | 0 8592 | 5 2408 |
                     |   0 00 |   1 41 |   1 41
        -------------+--------+--------+
        Total             61       10      71
                       85 92    14 08  100 00


          STATISTICS FOR TABLE OF INF5_9 BY VIS6

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       6 187       0 013
Likelihood Ratio Chi-Square    1       4 010       0 045
Continuity Adj  Chi-Square     1       1 081       0 298
Mantel-Haenszel Chi-Square     1       6 100       0 014
Fisher's Exact Test (Left)                         1 000
                    (Right)                        0 141
                    (2-Tail)                       0 141
Phi Coefficient                        0 295
Contingency Coefficient                0 283
Cramer's V                             0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY VIS6

        RINF10        VIS6

        Frequency    |
        Expected     |
        Cell Chi-Square|
        Percent      |       0|       1|  Total
        -------------+--------+--------+
                   1 |     27 |      0 |     27
                     | 23 564 | 3 4364 |
                     | 0 5011 | 3 4364 |
                     |  49 09 |   0 00 |  49 09
        -------------+--------+--------+
                   2 |     16 |      3 |     19
                     | 16 582 | 2 4182 |
                     | 0 0204 |   0 14 |
                     |  29 09 |   5 45 |  34 55
        -------------+--------+--------+
                   3 |      5 |      4 |      9
                     | 7 8545 | 1 1455 |
                     | 1 0374 | 7 1137 |
                     |   9 09 |   7 27 |  16 36
        -------------+--------+--------+
        Total             48        7      55
                       87 27    12 73  100 00

        Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY VIS6

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     2      12 249       0 002
Likelihood Ratio Chi-Square    2      12 989       0 002
Mantel-Haenszel Chi-Square     1      11 618       0 001
Phi Coefficient                        0 472
Contingency Coefficient                0 427
Cramer's V                             0 472

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF11 BY VIS6

        RINF11        VIS6

        Frequency    |
        Expected     |
        Cell Chi-Square|
        Percent      |       0|       1|  Total
        -------------+--------+--------+
                   1 |     31 |      0 |     31
                     |  26 35 |   4 65 |
                     | 0 8206 |   4 65 |
                     |  51 67 |   0 00 |  51 67
        -------------+--------+--------+
                   2 |     13 |      5 |     18
                     |   15 3 |    2 7 |
                     | 0 3458 | 1 9593 |
                     |  21 67 |   8 33 |  30 00
        -------------+--------+--------+
                   3 |      7 |      4 |     11
                     |   9 35 |   1 65 |
                     | 0 5906 |  3 347 |
                     |  11 67 |   6 67 |  18 33
        -------------+--------+--------+
        Total             51        9      60
                       85 00    15 00  100 00

        Frequency Missing = 11

          STATISTICS FOR TABLE OF RINF11 BY VIS6

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     2      11 713       0 003
Likelihood Ratio Chi-Square    2      15 034       0 001
Mantel-Haenszel Chi-Square     1      10 696       0 001
Phi Coefficient                        0 442
Contingency Coefficient                0 404
Cramer's V                             0 442

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY VIS6

INF13           VIS6

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     21 |      7 |     28
               | 24 056 | 3 9437 |
               | 0 3883 | 2 3687 |
               |  29 58 |   9 86 |  39 44
---------------+--------+--------+
             2 |     40 |      3 |     43
               | 36 944 | 6 0563 |
               | 0 2528 | 1 5424 |
               |  56 34 |   4 23 |  60 56
---------------+--------+--------+
Total                61       10      71
                  85 92    14 08  100 00

         STATISTICS FOR TABLE OF INF13 BY VIS6

Statistic                       DF     Value        Prob
--------------------------------------------------------
Chi-Square                       1     4 552       0 033
Likelihood Ratio Chi-Square      1     4 470       0 034
Continuity Adj  Chi-Square       1     3 185       0 074
Mantel-Haenszel Chi-Square       1     4 488       0 034
Fisher's Exact Test (Left)                         0 038
                    (Right)                        0 993
                    (2-Tail)                       0 043
Phi Coefficient                       -0 253
Contingency Coefficient                0 245
Cramer's V                            -0 253

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF14 BY VIS6

INF14           VIS6

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               |  22 39 | 4 6098 |
               | 0 3042 | 1 4775 |
               |  60 98 |   4 88 |  65 85
---------------+--------+--------+
             2 |      4 |      1 |      5
               | 4 1463 | 0 8537 |
               | 0 0052 | 0 0251 |
               |   9 76 |   2 44 |  12 20
---------------+--------+--------+
             3 |      2 |      3 |      5
               | 4 1463 | 0 8537 |
               |  1 111 | 5 3965 |
               |   4 88 |   7 32 |  12 20
---------------+--------+--------+
             4 |      3 |      1 |      4
               | 3 3171 | 0 6829 |
               | 0 0303 | 0 1472 |
               |   7 32 |   2 44 |   9 76
---------------+--------+--------+
Total                34        7      41
                  82 93    17 07  100 00

Frequency Missing = 30

         STATISTICS FOR TABLE OF INF14 BY VIS6

Statistic                       DF     Value        Prob
--------------------------------------------------------
Chi-Square                       3     8 497       0 037
Likelihood Ratio Chi-Square      3     6 986       0 072
Mantel-Haenszel Chi-Square       1     4 632       0 031
Phi Coefficient                        0 455
Contingency Coefficient                0 414
Cramer's V                             0 455

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY VIS7

INF5_5          VIS7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     61 |      4 |     65
               | 59 507 |  5 493 |
               | 0 0375 | 0 4058 |
               |  85 92 |   5 63 |  91 55
---------------+--------+--------+
             1 |      4 |      2 |      6
               |  5 493 |  0 507 |
               | 0 4058 | 4 3959 |
               |   5 63 |   2 82 |   8 45
---------------+--------+--------+
Total                65        6      71
                  91 55     8 45  100 00

         STATISTICS FOR TABLE OF INF5_5 BY VIS7

Statistic                       DF     Value        Prob
--------------------------------------------------------
Chi-Square                       1     5 245       0 022
Likelihood Ratio Chi-Square      1     3 438       0 064
Continuity Adj  Chi-Square       1     2 320       0 128
Mantel-Haenszel Chi-Square       1     5 171       0 023
Fisher's Exact Test (Left)                         0 994
                    (Right)                        0 077
                    (2-Tail)                       0 077
Phi Coefficient                        0 272
Contingency Coefficient                0 262
Cramer's V                             0 272

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_8 BY VIS7

INF5_8          VIS7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     64 |      5 |     69
               | 63 169 |  5 831 |
               | 0 0109 | 0 1184 |
               |  90 14 |   7 04 |  97 18
---------------+--------+--------+
             1 |      1 |      1 |      2
               |  1 831 |  0 169 |
               | 0 3771 | 4 0857 |
               |   1 41 |   1 41 |   2 82
---------------+--------+--------+
Total                65        6      71
                  91 55     8 45  100 00

         STATISTICS FOR TABLE OF INF5_8 BY VIS7

Statistic                       DF     Value        Prob
--------------------------------------------------------
Chi-Square                       1     4 592       0 032
Likelihood Ratio Chi-Square      1     2 481       0 115
Continuity Adj  Chi-Square       1     0 729       0 393
Mantel-Haenszel Chi-Square       1     4 527       0 033
Fisher's Exact Test (Left)                         0 994
                    (Right)                        0 163
                    (2-Tail)                       0 163
Phi Coefficient                        0 254
Contingency Coefficient                0 246
Cramer's V                             0 254

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF RINF10 BY VIS7

RINF10          VIS7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     27 |      0 |     27
               | 24 545 | 2 4545 |
               | 0 2455 | 2 4545 |
               |  49 09 |   0 00 |  49 09
---------------+--------+--------+
             2 |     17 |      2 |     19
               | 17 273 | 1 7273 |
               | 0 0043 | 0 0431 |
               |  30 91 |   3 64 |  34 55
---------------+--------+--------+
             3 |      6 |      3 |      9
               | 8 1818 | 0 8182 |
               | 0 5818 | 5 8182 |
               |  10 91 |   5 45 |  16 36
---------------+--------+--------+
Total               50        5      55
                 90 91     9 09  100 00

Frequency Missing = 16

       STATISTICS FOR TABLE OF RINF10 BY VIS7

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     2     9 147     0 010
Likelihood Ratio Chi-Square    2     9 266     0 010
Mantel-Haenszel Chi-Square     1     8 482     0 004
Phi Coefficient                      0 408
Contingency Coefficient              0 378
Cramer's V                           0 408

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF RINF6 BY VIS8

RINF6           VIS8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      3 |      0 |      3
               | 2 9565 | 0 0435 |
               | 0 0006 | 0 0435 |
               |   4 35 |   0 00 |   4 35
---------------+--------+--------+
DHD            |     44 |      0 |     44
               | 43 362 | 0 6377 |
               | 0 0094 | 0 6377 |
               |  63 77 |   0 00 |  63 77
---------------+--------+--------+
DIET           |      4 |      1 |      5
               | 4 9275 | 0 0725 |
               | 0 1746 | 11 872 |
               |   5 80 |   1 45 |   7 25
---------------+--------+--------+
MGR            |     17 |      0 |     17
               | 16 754 | 0 2464 |
               | 0 0036 | 0 2464 |
               |  24 64 |   0 00 |  24 64
---------------+--------+--------+
Total               68        1      69
                 98 55     1 45  100 00

Frequency Missing = 2

       STATISTICS FOR TABLE OF RINF6 BY VIS8

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     3    12 988     0 005
Likelihood Ratio Chi-Square    3     5 450     0 142
Mantel-Haenszel Chi-Square     1     0 276     0 599
Phi Coefficient                      0 434
Contingency Coefficient              0 398
Cramer's V                           0 434

Effective Sample Size = 69
Frequency Missing = 2
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF RINF11 BY VIS7

RINF11          VIS7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     31 |      0 |     31
               | 28 417 | 2 5833 |
               | 0 2348 | 2 5833 |
               |  51 67 |   0 00 |  51 67
---------------+--------+--------+
             2 |     16 |      2 |     18
               |   16 5 |    1 5 |
               | 0 0152 | 0 1667 |
               |  26 67 |   3 33 |  30 00
---------------+--------+--------+
             3 |      8 |      3 |     11
               | 10 083 | 0 9167 |
               | 0 4304 | 4 7348 |
               |  13 33 |   5 00 |  18 33
---------------+--------+--------+
Total               55        5      60
                 91 67     8 33  100 00

Frequency Missing = 11

       STATISTICS FOR TABLE OF RINF11 BY VIS7

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     2     8 165     0 017
Likelihood Ratio Chi-Square    2     8 971     0 011
Mantel-Haenszel Chi-Square     1     7 934     0 005
Phi Coefficient                      0 369
Contingency Coefficient              0 346
Cramer's V                           0 369

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF8 BY VIS8

INF8            VIS8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     61 |      0 |     61
               | 60 141 | 0 8592 |
               | 0 0123 | 0 8592 |
               |  85 92 |   0 00 |  85 92
---------------+--------+--------+
             2 |      9 |      1 |     10
               | 9 8592 | 0 1408 |
               | 0 0749 | 5 2408 |
               |  12 68 |   1 41 |  14 08
---------------+--------+--------+
Total               70        1      71
                 98 59     1 41  100 00

       STATISTICS FOR TABLE OF INF8 BY VIS8

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1     6 187     0 013
Likelihood Ratio Chi-Square    1     4 010     0 045
Continuity Adj  Chi-Square     1     1 081     0 298
Mantel-Haenszel Chi-Square     1     6 100     0 014
Fisher's Exact Test (Left)                     1 000
                    (Right)                    0 141
                    (2-Tail)                   0 141
Phi Coefficient                      0 295
Contingency Coefficient              0 283
Cramer's V                           0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
             TABLE OF INF9_6 BY VIS8

INF9_6          VIS8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     67 |      0 |     67
               | 66 056 | 0 9437 |
               | 0 0135 | 0 9437 |
               |  94 37 |   0 00 |  94 37
---------------+--------+--------+
             1 |      3 |      1 |      4
               | 3 9437 | 0 0563 |
               | 0 2258 | 15 806 |
               |   4 23 |   1 41 |   5 63
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00

         STATISTICS FOR TABLE OF INF9_6 BY VIS8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      16 989     0 000
Likelihood Ratio Chi-Square    1       6 013     0 014
Continuity Adj  Chi-Square     1       3 755     0 053
Mantel-Haenszel Chi-Square     1      16 750     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 056
                    (2-Tail)                     0 056
Phi Coefficient                        0 489
Contingency Coefficient                0 439
Cramer's V                             0 489

Sample Size = 71
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
             TABLE OF RINF12 BY VIS8

RINF12          VIS8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     49 |      0 |     49
               |  48 31 | 0 6901 |
               | 0 0099 | 0 6901 |
               |  69 01 |   0 00 |  69 01
---------------+--------+--------+
             2 |     13 |      0 |     13
               | 12 817 | 0 1831 |
               | 0 0026 | 0 1831 |
               |  18 31 |   0 00 |  18 31
---------------+--------+--------+
             3 |      8 |      1 |      9
               | 8 8732 | 0 1268 |
               | 0 0859 | 6 0156 |
               |  11 27 |   1 41 |  12 68
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00

         STATISTICS FOR TABLE OF RINF12 BY VIS8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       6 987     0 030
Likelihood Ratio Chi-Square    2       4 232     0 120
Mantel-Haenszel Chi-Square     1       4 893     0 027
Phi Coefficient                        0 314
Contingency Coefficient                0 299
Cramer's V                             0 314

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
             TABLE OF INF4 BY VIS9

INF4            VIS9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      7 |      1 |      8
               |    4 8 |    3 2 |
               | 1 0083 | 1 5125 |
               |  10 00 |   1 43 |  11 43
---------------+--------+--------+
             3 |     14 |      2 |     16
               |    9 6 |    6 4 |
               | 2 0167 |  3 025 |
               |  20 00 |   2 86 |  22 86
---------------+--------+--------+
             4 |     21 |     25 |     46
               |   27 6 |   18 4 |
               | 1 5783 | 2 3674 |
               |  30 00 |  35 71 |  65 71
---------------+--------+--------+
Total                42       28       70
                  60 00    40 00   100 00

Frequency Missing = 1

         STATISTICS FOR TABLE OF INF4 BY VIS9

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      11 508     0 003
Likelihood Ratio Chi-Square    2      12 715     0 002
Mantel-Haenszel Chi-Square     1       7 629     0 006
Phi Coefficient                        0 405
Contingency Coefficient                0 376
Cramer's V                             0 405

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
             TABLE OF INF5_1 BY VIS9

INF5_1          VIS9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     28 |      9 |     37
               | 22 408 | 14 592 |
               | 1 3953 | 2 1427 |
               |  39 44 |  12 68 |  52 11
---------------+--------+--------+
             1 |     15 |     19 |     34
               | 20 592 | 13 408 |
               | 1 5184 | 2 3318 |
               |  21 13 |  26 76 |  47 89
---------------+--------+--------+
Total                43       28       71
                  60 56    39 44   100 00

         STATISTICS FOR TABLE OF INF5_1 BY VIS9

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       7 388     0 007
Likelihood Ratio Chi-Square    1       7 517     0 006
Continuity Adj  Chi-Square     1       6 126     0 013
Mantel-Haenszel Chi-Square     1       7 284     0 007
Fisher's Exact Test (Left)                       0 999
                    (Right)                   6 40E-03
                    (2-Tail)                  8 22E-03
Phi Coefficient                        0 323
Contingency Coefficient                0 307
Cramer's V                             0 323

Sample Size = 71
```

```
              TABLE OF INF5_2 BY VIS9

      INF5_2          VIS9

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     28 |     10 |     38
                     | 23 014 | 14 986 |
                     | 1 0802 | 1 6588 |
                     |  39 44 |  14 08 |  53 52
      ---------------+--------+--------+
                   1 |     15 |     18 |     33
                     | 19 986 | 13 014 |
                     | 1 2438 | 1 9102 |
                     |  21 13 |  25 35 |  46 48
      ---------------+--------+--------+
      Total              43       28       71
                      60 56    39 44   100 00

         STATISTICS FOR TABLE OF INF5_2 BY VIS9

Statistic                        DF     Value       Prob
---------------------------------------------------------
Chi-Square                        1     5 893      0 015
Likelihood Ratio Chi-Square       1     5 958      0 015
Continuity Adj  Chi-Square        1     4 770      0 029
Mantel-Haenszel Chi-Square        1     5 810      0 016
Fisher’s Exact Test (Left)                         0 996
                    (Right)                        0 014
                    (2-Tail)                       0 028
Phi Coefficient                         0 288
Contingency Coefficient                 0 277
Cramer’s V                              0 288

Sample Size = 71
```

```
              TABLE OF INF5_4 BY VIS9

      INF5_4          VIS9

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     35 |     14 |     49
                     | 29 676 | 19 324 |
                     | 0 9551 | 1 4668 |
                     |  49 30 |  19 72 |  69 01
      ---------------+--------+--------+
                   1 |      8 |     14 |     22
                     | 13 324 | 8 6761 |
                     | 2 1273 |  3 267 |
                     |  11 27 |  19 72 |  30 99
      ---------------+--------+--------+
      Total              43       28       71
                      60 56    39 44   100 00

         STATISTICS FOR TABLE OF INF5_4 BY VIS9

Statistic                        DF     Value       Prob
---------------------------------------------------------
Chi-Square                        1     7 816      0 005
Likelihood Ratio Chi-Square       1     7 762      0 005
Continuity Adj  Chi-Square        1     6 417      0 011
Mantel-Haenszel Chi-Square        1     7 706      0 006
Fisher’s Exact Test (Left)                         0 999
                    (Right)                     5 81E-03
                    (2-Tail)                    8 24E-03
Phi Coefficient                         0 332
Contingency Coefficient                 0 315
Cramer’s V                              0 332

Sample Size = 71
```

```
              TABLE OF INF5_6 BY VIS9

      INF5_6          VIS9

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     21 |     25 |     46
                     | 27 859 | 18 141 |
                     | 1 6888 | 2 5935 |
                     |  29 58 |  35 21 |  64 79
      ---------------+--------+--------+
                   1 |     22 |      3 |     25
                     | 15 141 | 9 8592 |
                     | 3 1074 |  4 772 |
                     |  30 99 |   4 23 |  35 21
      ---------------+--------+--------+
      Total              43       28       71
                      60 56    39 44   100 00

         STATISTICS FOR TABLE OF INF5_6 BY VIS9

Statistic                        DF     Value       Prob
---------------------------------------------------------
Chi-Square                        1    12 162      0 000
Likelihood Ratio Chi-Square       1    13 466      0 000
Continuity Adj  Chi-Square        1    10 453      0 001
Mantel-Haenszel Chi-Square        1    11 990      0 001
Fisher’s Exact Test (Left)                      3 85E-04
                    (Right)                        1 000
                    (2-Tail)                    7 44E-04
Phi Coefficient                        -0 414
Contingency Coefficient                 0 382
Cramer’s V                             -0 414

Sample Size = 71
```

```
              TABLE OF RINF6 BY VIS9

      RINF6           VIS9

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
      ADM            |      2 |      1 |      3
                     | 1 7826 | 1 2174 |
                     | 0 0265 | 0 0388 |
                     |   2 90 |   1 45 |   4 35
      ---------------+--------+--------+
      DHD            |     20 |     24 |     44
                     | 26 145 | 17 855 |
                     | 1 4443 | 2 1148 |
                     |  28 99 |  34 78 |  63 77
      ---------------+--------+--------+
      DIET           |      3 |      2 |      5
                     |  2 971 |  2 029 |
                     | 0 0003 | 0 0004 |
                     |   4 35 |   2 90 |   7 25
      ---------------+--------+--------+
      MGR            |     16 |      1 |     17
                     | 10 101 | 6 8986 |
                     | 3 4443 | 5 0435 |
                     |  23 19 |   1 45 |  24 64
      ---------------+--------+--------+
      Total              41       28       69
                      59 42    40 58   100 00

      Frequency Missing = 2

         STATISTICS FOR TABLE OF RINF6 BY VIS9

Statistic                        DF     Value       Prob
---------------------------------------------------------
Chi-Square                        3    12 113      0 007
Likelihood Ratio Chi-Square       3    14 402      0 002
Mantel-Haenszel Chi-Square        1     9 626      0 002
Phi Coefficient                         0 419
Contingency Coefficient                 0 386
Cramer’s V                              0 419

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
          TABLE OF INF9_4 BY VIS9

INF9_4          VIS9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     36 |     28 |     64
               | 38 761 | 25 239 |
               | 0 1966 | 0 3019 |
               |  50 70 |  39 44 |  90 14
---------------+--------+--------+
             1 |      7 |      0 |      7
               | 4 2394 | 2 7606 |
               | 1 7976 | 2 7606 |
               |   9 86 |   0 00 |   9 86
---------------+--------+--------+
Total                43       28       71
                  60 56    39 44   100 00

      STATISTICS FOR TABLE OF INF9_4 BY VIS9

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     1     5 057      0 025
Likelihood Ratio Chi-Square    1     7 514      0 006
Continuity Adj  Chi-Square     1     3 391      0 066
Mantel-Haenszel Chi-Square     1     4 985      0 026
Fisher's Exact Test (Left)                      0 024
                    (Right)                     1 000
                    (2-Tail)                    0 037
Phi Coefficient                     -0 267
Contingency Coefficient              0 258
Cramer's V                          -0 267

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
          TABLE OF RINF10 BY VIS9

RINF10          VIS9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               | 17 182 | 9 8182 |
               | 3 5575 | 6 2256 |
               |  45 45 |   3 64 |  49 09
---------------+--------+--------+
             2 |      8 |     11 |     19
               | 12 091 | 6 9091 |
               | 1 3841 | 2 4222 |
               |  14 55 |  20 00 |  34 55
---------------+--------+--------+
             3 |      2 |      7 |      9
               | 5 7273 | 3 2727 |
               | 2 4257 | 4 2449 |
               |   3 64 |  12 73 |  16 36
---------------+--------+--------+
Total                35       20       55
                  63 64    36 36   100 00

Frequency Missing = 16

      STATISTICS FOR TABLE OF RINF10 BY VIS9

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     2    20 260      0 000
Likelihood Ratio Chi-Square    2    22 446      0 000
Mantel-Haenszel Chi-Square     1    18 784      0 000
Phi Coefficient                      0 607
Contingency Coefficient              0 519
Cramer's V                           0 607

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
          TABLE OF RINF11 BY VIS9

RINF11          VIS9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     27 |      4 |     31
               | 19 117 | 11 883 |
               | 3 2509 | 5 2298 |
               |  45 00 |   6 67 |  51 67
---------------+--------+--------+
             2 |      9 |      9 |     18
               |   11 1 |    6 9 |
               | 0 3973 | 0 6391 |
               |  15 00 |  15 00 |  30 00
---------------+--------+--------+
             3 |      1 |     10 |     11
               | 6 7833 | 4 2167 |
               | 4 9308 | 7 9321 |
               |   1 67 |  16 67 |  18 33
---------------+--------+--------+
Total                37       23       60
                  61 67    38 33   100 00

Frequency Missing = 11

      STATISTICS FOR TABLE OF RINF11 BY VIS9

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     2    22 380      0 000
Likelihood Ratio Chi-Square    2    24 384      0 000
Mantel-Haenszel Chi-Square     1    21 989      0 000
Phi Coefficient                      0 611
Contingency Coefficient              0 521
Cramer's V                           0 611

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
          TABLE OF RINF12 BY VIS9

RINF12          VIS9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     36 |     13 |     49
               | 29 676 | 19 324 |
               | 1 3476 | 2 0696 |
               |  50 70 |  18 31 |  69 01
---------------+--------+--------+
             2 |      5 |      8 |     13
               | 7 8732 | 5 1268 |
               | 1 0486 | 1 6103 |
               |   7 04 |  11 27 |  18 31
---------------+--------+--------+
             3 |      2 |      7 |      9
               | 5 4507 | 3 5493 |
               | 2 1846 | 3 3549 |
               |   2 82 |   9 86 |  12 68
---------------+--------+--------+
Total                43       28       71
                  60 56    39 44   100 00


      STATISTICS FOR TABLE OF RINF12 BY VIS9

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     2    11 615      0 003
Likelihood Ratio Chi-Square    2    11 680      0 003
Mantel-Haenszel Chi-Square     1    11 121      0 001
Phi Coefficient                      0 404
Contingency Coefficient              0 375
Cramer's V                           0 404

Sample Size = 71
```

```
                 TABLE OF INF13 BY VIS9

        INF13           VIS9

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     1 |      8 |     20 |     28
                       | 16 958 | 11 042 |
                       | 4 7318 | 7 2667 |
                       |  11 27 |  28 17 |  39 44
        ---------------+--------+--------+
                     2 |     35 |      8 |     43
                       | 26 042 | 16 958 |
                       | 3 0812 | 4 7318 |
                       |  49 30 |  11 27 |  60 56
        ---------------+--------+--------+
        Total                43       28       71
                          60 56    39 44   100 00

         STATISTICS FOR TABLE OF INF13 BY VIS9

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1    19 812     0 000
Likelihood Ratio Chi-Square    1    20 413     0 000
Continuity Adj  Chi-Square     1    17 662     0 000
Mantel-Haenszel Chi-Square     1    19 533     0 000
Fisher's Exact Test (Left)                  1 06E-05
                    (Right)                    1 000
                    (2-Tail)                1 43E-05
Phi Coefficient                     -0 528
Contingency Coefficient              0 467
Cramer's V                          -0 528

Sample Size = 71
```

```
                 TABLE OF INF15 BY VIS9

        INF15           VIS9

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     2 |     15 |      7 |     22
                       | 12 806 |  9 194 |
                       | 0 3759 | 0 5236 |
                       |  22 39 |  10 45 |  32 84
        ---------------+--------+--------+
                     3 |      8 |     15 |     23
                       | 13 388 | 9 6119 |
                       | 2 1684 | 3 0203 |
                       |  11 94 |  22 39 |  34 33
        ---------------+--------+--------+
                     4 |      7 |      3 |     10
                       | 5 8209 | 4 1791 |
                       | 0 2388 | 0 3327 |
                       |  10 45 |   4 48 |  14 93
        ---------------+--------+--------+
                     5 |      9 |      3 |     12
                       | 6 9851 | 5 0149 |
                       | 0 5812 | 0 8096 |
                       |  13 43 |   4 48 |  17 91
        ---------------+--------+--------+
        Total                39       28       67
                          58 21    41 79   100 00

        Frequency Missing = 4

         STATISTICS FOR TABLE OF INF15 BY VIS9

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     3     8 051     0 045
Likelihood Ratio Chi-Square    3     8 112     0 044
Mantel-Haenszel Chi-Square     1     0 473     0 492
Phi Coefficient                      0 347
Contingency Coefficient              0 328
Cramer's V                           0 347

Effective Sample Size = 67
Frequency Missing = 4
```

```
                 TABLE OF INF5_9 BY VIS10

        INF5_9          VIS10

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     0 |     12 |     58 |     70
                       | 12 817 | 57 183 |
                       | 0 0521 | 0 0117 |
                       |  16 90 |  81 69 |  98 59
        ---------------+--------+--------+
                     1 |      1 |      0 |      1
                       | 0 1831 | 0 8169 |
                       | 3 6446 | 0 8169 |
                       |   1 41 |   0 00 |   1 41
        ---------------+--------+--------+
        Total                13       58       71
                          18 31    81 69   100 00

         STATISTICS FOR TABLE OF INF5_9 BY VIS10

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1     4 525     0 033
Likelihood Ratio Chi-Square    1     3 460     0 063
Continuity Adj  Chi-Square     1     0 681     0 409
Mantel-Haenszel Chi-Square     1     4 462     0 035
Fisher's Exact Test (Left)                     0 183
                    (Right)                    1 000
                    (2-Tail)                   0 183
Phi Coefficient                     -0 252
Contingency Coefficient              0 245
Cramer's V                          -0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_5 BY VIS11

        INF5_5          VIS11

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     0 |     44 |     21 |     65
                       | 41 197 | 23 803 |
                       | 0 1907 |   0 33 |
                       |  61 97 |  29 58 |  91 55
        ---------------+--------+--------+
                     1 |      1 |      5 |      6
                       | 3 8028 | 2 1972 |
                       | 2 0658 | 3 5754 |
                       |   1 41 |   7 04 |   8 45
        ---------------+--------+--------+
        Total                45       26       71
                          63 38    36 62   100 00

         STATISTICS FOR TABLE OF INF5_5 BY VIS11

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1     6 162     0 013
Likelihood Ratio Chi-Square    1     6 081     0 014
Continuity Adj  Chi-Square     1     4 160     0 041
Mantel-Haenszel Chi-Square     1     6 075     0 014
Fisher's Exact Test (Left)                     0 998
                    (Right)                    0 022
                    (2-Tail)                   0 022
Phi Coefficient                      0 295
Contingency Coefficient              0 283
Cramer's V                           0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF9_5 BY VIS11

INF9_5          VIS11

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     33 |     25 |     58
               | 36 761 | 21 239 |
               | 0 3847 | 0 6658 |
               |  46 48 |  35 21 |  81 69
---------------+--------+--------+
             1 |     12 |      1 |     13
               | 8 2394 | 4 7606 |
               | 1 7164 | 2 9706 |
               |  16 90 |   1 41 |  18 31
---------------+--------+--------+
Total               45       26       71
                 63 38    36 62   100 00


      STATISTICS FOR TABLE OF INF9_5 BY VIS11

Statistic                     DF       Value        Prob
------------ -------------------------------------------
Chi-Square                     1       5 738       0 017
Likelihood Ratio Chi-Square    1       6 931       0 008
Continuity Adj  Chi-Square     1       4 313       0 038
Mantel-Haenszel Chi-Square     1       5 657       0 017
Fisher's Exact Test (Left)                         0 014
                    (Right)                        0 999
                    (2-Tail)                       0 024
Phi Coefficient                       -0 284
Contingency Coefficient                0 273
Cramer's V                            -0 284

Sample Size = 71
WARNING   25% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF9_8 BY VIS11

INF9_8          VIS11

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     45 |     23 |     68
               | 43 099 | 24 901 |
               | 0 0839 | 0 1452 |
               |  63 38 |  32 39 |  95 77
---------------+--------+--------+
             1 |      0 |      3 |      3
               | 1 9014 | 1 0986 |
               | 1 9014 | 3 2909 |
               |   0 00 |   4 23 |   4 23
---------------+--------+--------+
Total               45       26       71
                 63 38    36 62   100 00


      STATISTICS FOR TABLE OF INF9_8 BY VIS11

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       5 421       0 020
Likelihood Ratio Chi-Square    1       6 259       0 012
Continuity Adj  Chi-Square     1       2 945       0 086
Mantel-Haenszel Chi-Square     1       5 345       0 021
Fisher's Exact Test (Left)                         1 000
                    (Right)                        0 045
                    (2-Tail)                       0 045
Phi Coefficient                        0 276
Contingency Coefficient                0 266
Cramer's V                             0 276

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF4 BY VIS12

INF4            VIS12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      6 |      2 |      8
               | 3 3143 | 4 6857 |
               | 2 1764 | 1 5394 |
               |   8 57 |   2 86 |  11 43
---------------+--------+--------+
             3 |     12 |      4 |     16
               | 6 6286 | 9 3714 |
               | 4 3527 | 3 0787 |
               |  17 14 |   5 71 |  22 86
---------------+--------+--------+
             4 |     11 |     35 |     46
               | 19 057 | 26 943 |
               | 3 4065 | 2 4095 |
               |  15 71 |  50 00 |  65 71
---------------+--------+--------+
Total               29       41       70
                 41 43    58 57   100 00

Frequency Missing = 1

      STATISTICS FOR TABLE OF INF4 BY VIS12

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     2      16 963       0 000
Likelihood Ratio Chi-Square    2      17 374       0 000
Mantel-Haenszel Chi-Square     1      11 245       0 001
Phi Coefficient                        0 492
Contingency Coefficient                0 442
Cramer's V                             0 492

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF5_1 BY VIS12

INF5_1          VIS12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     25 |     12 |     37
               | 15 634 | 21 366 |
               | 5 6113 | 4 1058 |
               |  35 21 |  16 90 |  52 11
---------------+--------+--------+
             1 |      5 |     29 |     34
               | 14 366 | 19 634 |
               | 6 1064 | 4 4681 |
               |   7 04 |  40 85 |  47 89
---------------+--------+--------+
Total               30       41       71
                 42 25    57 75   100 00

      STATISTICS FOR TABLE OF INF5_1 BY VIS12

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1      20 292       0 000
Likelihood Ratio Chi-Square    1      21 694       0 000
Continuity Adj  Chi-Square     1      18 183       0 000
Mantel-Haenszel Chi-Square     1      20 006       0 000
Fisher's Exact Test (Left)                         1 000
                    (Right)                     5 81E-06
                    (2-Tail)                    9 25E-06
Phi Coefficient                        0 535
Contingency Coefficient                0 471
Cramer's V                             0 535

Sample Size = 71
```

```
              TABLE OF INF5_2 BY VIS12

INF5_2          VIS12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     25 |     13 |     38
               | 16 056 | 21 944 |
               | 4 9818 | 3 6452 |
               |  35 21 |  18 31 |  53 52
---------------+--------+--------+
             1 |      5 |     28 |     33
               | 13 944 | 19 056 |
               | 5 7366 | 4 1975 |
               |   7 04 |  39 44 |  46 48
---------------+--------+--------+
Total               30       41       71
                 42 25    57 75   100 00

       STATISTICS FOR TABLE OF INF5_2 BY VIS12

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1    18 561     0 000
Likelihood Ratio Chi-Square    1    19 820     0 000
Continuity Adj  Chi-Square     1    16 544     0 000
Mantel-Haenszel Chi-Square     1    18 300     0 000
Fisher's Exact Test (Left)                     1 000
                    (Right)                 1 46E-05
                    (2-Tail)                2 80E-05
Phi Coefficient                      0 511
Contingency Coefficient              0 455
Cramer's V                           0 511

Sample Size = 71
```

```
              TABLE OF INF5_4 BY VIS12

INF5_4          VIS12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     28 |     21 |     49
               | 20 704 | 28 296 |
               | 2 5709 | 1 8811 |
               |  39 44 |  29 58 |  69 01
---------------+--------+--------+
             1 |      2 |     20 |     22
               | 9 2958 | 12 704 |
               | 5 7261 | 4 1898 |
               |   2 82 |  28 17 |  30 99
---------------+--------+--------+
Total               30       41       71
                 42 25    57 75   100 00

       STATISTICS FOR TABLE OF INF5_4 BY VIS12

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1    14 368     0 000
Likelihood Ratio Chi-Square    1    16 387     0 000
Continuity Adj  Chi-Square     1    12 466     0 000
Mantel-Haenszel Chi-Square     1    14 166     0 000
Fisher's Exact Test (Left)                     1 000
                    (Right)                 1 01E-04
                    (2-Tail)                1 80E-04
Phi Coefficient                      0 450
Contingency Coefficient              0 410
Cramer's V                           0 450

Sample Size = 71
```

```
              TABLE OF INF5_6 BY VIS12

INF5_6          VIS12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     13 |     33 |     46
               | 19 437 | 26 563 |
               | 2 1315 | 1 5597 |
               |  18 31 |  46 48 |  64 79
---------------+--------+--------+
             1 |     17 |      8 |     25
               | 10 563 | 14 437 |
               |  3 922 | 2 8698 |
               |  23 94 |  11 27 |  35 21
---------------+--------+--------+
Total               30       41       71
                 42 25    57 75   100 00

       STATISTICS FOR TABLE OF INF5_6 BY VIS12

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1    10 483     0 001
Likelihood Ratio Chi-Square    1    10 595     0 001
Continuity Adj  Chi-Square     1     8 918     0 003
Mantel-Haenszel Chi-Square     1    10 335     0 001
Fisher's Exact Test (Left)                  1 37E-03
                    (Right)                    1 000
                    (2-Tail)                2 22E-03
Phi Coefficient                     -0 384
Contingency Coefficient              0 359
Cramer's V                          -0 384

Sample Size = 71
```

```
              TABLE OF RINF6 BY VIS12

RINF6           VIS12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      3 |      0 |      3
               | 1 2174 | 1 7826 |
               | 2 6102 | 1 7826 |
               |   4 35 |   0 00 |   4 35
---------------+--------+--------+
DHD            |      9 |     35 |     44
               | 17 855 | 26 145 |
               | 4 3916 | 2 9991 |
               |  13 04 |  50 72 |  63 77
---------------+--------+--------+
DIET           |      1 |      4 |      5
               |  2 029 |  2 971 |
               | 0 5218 | 0 3564 |
               |   1 45 |   5 80 |   7 25
---------------+--------+--------+
MGR            |     15 |      2 |     17
               | 6 8986 | 10 101 |
               | 9 5141 | 6 4974 |
               |  21 74 |   2 90 |  24 64
---------------+--------+--------+
Total               28       41       69
                 40 58    59 42   100 00

Frequency Missing = 2

       STATISTICS FOR TABLE OF RINF6 BY VIS12

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     3    28 673     0 000
Likelihood Ratio Chi-Square    3    31 287     0 000
Mantel-Haenszel Chi-Square     1    12 810     0 000
Phi Coefficient                      0 645
Contingency Coefficient              0 542
Cramer's V                           0 645

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY VIS12

      INF8            VIS12

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     29 |     32 |     61
                     | 25 775 | 35 225 |
                     | 0 4036 | 0 2953 |
                     |  40 85 |  45 07 |  85 92
      ---------------+--------+--------+
                   2 |      1 |      9 |     10
                     | 4 2254 | 5 7746 |
                     |  2 462 | 1 8015 |
                     |   1 41 |  12 68 |  14 08
      ---------------+--------+--------+
      Total               30       41       71
                       42 25    57 75   100 00


        STATISTICS FOR TABLE OF INF8 BY VIS12

Statistic                        DF     Value      Prob
------------------------------------------------------
Chi-Square                        1     4 962     0 026
Likelihood Ratio Chi-Square       1     5 798     0 016
Continuity Adj  Chi-Square        1     3 543     0 060
Mantel-Haenszel Chi-Square        1     4 893     0 027
Fisher's Exact Test (Left)                        0 998
                    (Right)                       0 025
                    (2-Tail)                      0 037
Phi Coefficient                         0 264
Contingency Coefficient                 0 256
Cramer's V                              0 264

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_5 BY VIS12

      INF9_5          VIS12

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     21 |     37 |     58
                     | 24 507 | 33 493 |
                     | 0 5019 | 0 3672 |
                     |  29 58 |  52 11 |  81 69
      ---------------+--------+--------+
                   1 |      9 |      4 |     13
                     |  5 493 |  7 507 |
                     | 2 2391 | 1 6384 |
                     |  12 68 |   5 63 |  18 31
      ---------------+--------+--------+
      Total               30       41       71
                       42 25    57 75   100 00


        STATISTICS FOR TABLE OF INF9_5 BY VIS12

Statistic                        DF     Value      Prob
------------------------------------------------------
Chi-Square                        1     4 747     0 029
Likelihood Ratio Chi-Square       1     4 734     0 030
Continuity Adj  Chi-Square        1     3 490     0 062
Mantel-Haenszel Chi-Square        1     4 680     0 031
Fisher's Exact Test (Left)                        0 031
                    (Right)                       0 994
                    (2-Tail)                      0 059
Phi Coefficient                        -0 259
Contingency Coefficient                 0 250
Cramer's V                             -0 259

Sample Size = 71
```

```
                TABLE OF RINF10 BY VIS12

      RINF10          VIS12

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     21 |      6 |     27
                     | 11 782 | 15 218 |
                     | 7 2124 | 5 5838 |
                     |  38 18 |  10 91 |  49 09
      ---------------+--------+--------+
                   2 |      2 |     17 |     19
                     | 8 2909 | 10 709 |
                     | 4 7734 | 3 6955 |
                     |   3 64 |  30 91 |  34 55
      ---------------+--------+--------+
                   3 |      1 |      8 |      9
                     | 3 9273 | 5 0727 |
                     | 2 1819 | 1 6892 |
                     |   1 82 |  14 55 |  16 36
      ---------------+--------+--------+
      Total               24       31       55
                       43 64    56 36   100 00

      Frequency Missing = 16


        STATISTICS FOR TABLE OF RINF10 BY VIS12

Statistic                        DF     Value      Prob
------------------------------------------------------
Chi-Square                        2    25 136     0 000
Likelihood Ratio Chi-Square       2    27 683     0 000
Mantel-Haenszel Chi-Square        1    19 558     0 000
Phi Coefficient                         0 676
Contingency Coefficient                 0 560
Cramer's V                              0 676

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF RINF11 BY VIS12

      RINF11          VIS12

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     22 |      9 |     31
                     | 11 367 | 19 633 |
                     | 9 9473 |  5 759 |
                     |  36 67 |  15 00 |  51 67
      ---------------+--------+--------+
                   2 |      0 |     18 |     18
                     |    6 6 |   11 4 |
                     |    6 6 | 3 8211 |
                     |   0 00 |  30 00 |  30 00
      ---------------+--------+--------+
                   3 |      0 |     11 |     11
                     | 4 0333 | 6 9667 |
                     | 4 0333 | 2 3351 |
                     |   0 00 |  18 33 |  18 33
      ---------------+--------+--------+
      Total               22       38       60
                       36 67    63 33   100 00

      Frequency Missing = 11


        STATISTICS FOR TABLE OF RINF11 BY VIS12

Statistic                        DF     Value      Prob
------------------------------------------------------
Chi-Square                        2    32 496     0 000
Likelihood Ratio Chi-Square       2    41 508     0 000
Mantel-Haenszel Chi-Square        1    25 780     0 000
Phi Coefficient                         0 736
Contingency Coefficient                 0 593
Cramer's V                              0 736

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
              TABLE OF RINF12 BY VIS12

    RINF12          VIS12

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                  1 |     26 |     23 |     49
                   | 20 704 | 28 296 |
                   | 1 3546 | 0 9911 |
                   |  36 62 |  32 39 |  69 01
    ---------------+--------+--------+
                  2 |      2 |     11 |     13
                   |  5 493 |  7 507 |
                   | 2 2212 | 1 6252 |
                   |   2 82 |  15 49 |  18 31
    ---------------+--------+--------+
                  3 |      2 |      7 |      9
                   | 3 8028 | 5 1972 |
                   | 0 8547 | 0 6254 |
                   |   2 82 |   9 86 |  12 68
    ---------------+--------+--------+
    Total                30       41       71
                      42 25    57 75   100 00

        STATISTICS FOR TABLE OF RINF12 BY VIS12

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     2       7 672       0 022
Likelihood Ratio Chi-Square    2       8 274       0 016
Mantel-Haenszel Chi-Square     1       5 741       0 017
Phi Coefficient                        0 329
Contingency Coefficient                0 312
Cramer's V                             0 329

Sample Size = 71
```

```
              TABLE OF INF13 BY VIS12

    INF13           VIS12

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                  1 |      4 |     24 |     28
                   | 11 831 | 16 169 |
                   | 5 1834 | 3 7927 |
                   |   5 63 |  33 80 |  39 44
    ---------------+--------+--------+
                  2 |     26 |     17 |     43
                   | 18 169 | 24 831 |
                   | 3 3752 | 2 4697 |
                   |  36 62 |  23 94 |  60 56
    ---------------+--------+--------+
    Total                30       41       71
                      42 25    57 75   100 00

        STATISTICS FOR TABLE OF INF13 BY VIS12

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1      14 821       0 000
Likelihood Ratio Chi-Square    1      16 036       0 000
Continuity Adj  Chi-Square     1      12 989       0 000
Mantel-Haenszel Chi-Square     1      14 612       0 000
Fisher's Exact Test (Left)                      9 97E-05
                    (Right)                        1 000
                    (2-Tail)                    1 69E-04
Phi Coefficient                       -0 457
Contingency Coefficient                0 416
Cramer's V                            -0 457

Sample Size = 71
```

```
              TABLE OF INF15 BY VIS12

    INF15           VIS12

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                  2 |     13 |      9 |     22
                   | 8 5373 | 13 463 |
                   | 2 3328 | 1 4793 |
                   |  19 40 |  13 43 |  32 84
    ---------------+--------+--------+
                  3 |      6 |     17 |     23
                   | 8 9254 | 14 075 |
                   | 0 9588 |  0 608 |
                   |   8 96 |  25 37 |  34 33
    ---------------+--------+--------+
                  4 |      5 |      5 |     10
                   | 3 8806 | 6 1194 |
                   | 0 3229 | 0 2048 |
                   |   7 46 |   7 46 |  14 93
    ---------------+--------+--------+
                  5 |      2 |     10 |     12
                   | 4 6567 | 7 3433 |
                   | 1 5157 | 0 8612 |
                   |   2 99 |  14 93 |  17 91
    ---------------+--------+--------+
    Total                26       41       67
                      38 81    61 19   100 00

    Frequency Missing = 4

        STATISTICS FOR TABLE OF INF15 BY VIS12

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     3       8 383       0 039
Likelihood Ratio Chi-Square    3       8 649       0 034
Mantel-Haenszel Chi-Square     1       3 993       0 046
Phi Coefficient                        0 354
Contingency Coefficient                0 333
Cramer's V                             0 354

Effective Sample Size = 67
Frequency Missing = 4
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_4 BY VIS13

    INF5_4          VIS13

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                  0 |     49 |      0 |     49
                   |  47 62 | 1 3803 |
                   |   0 04 | 1 3803 |
                   |  69 01 |   0 00 |  69 01
    ---------------+--------+--------+
                  1 |     20 |      2 |     22
                   |  21 38 | 0 6197 |
                   | 0 0891 | 3 0743 |
                   |  28 17 |   2 82 |  30 99
    ---------------+--------+--------+
    Total                69        2       71
                      97 18     2 82   100 00

        STATISTICS FOR TABLE OF INF5_4 BY VIS13

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       4 584       0 032
Likelihood Ratio Chi-Square    1       4 817       0 028
Continuity Adj  Chi-Square     1       1 864       0 172
Mantel-Haenszel Chi-Square     1       4 519       0 034
Fisher's Exact Test (Left)                         1 000
                    (Right)                        0 093
                    (2-Tail)                       0 093
Phi Coefficient                        0 254
Contingency Coefficient                0 246
Cramer's V                             0 254

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF5_9 BY VIS13

INF5_9          VIS13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     69 |      1 |     70
               | 68 028 | 1 9718 |
               | 0 0139 |  0 479 |
               |  97 18 |   1 41 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9718 | 0 0282 |
               | 0 9718 | 33 528 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total               69        2       71
                 97 18     2 82   100 00

     STATISTICS FQR TABLE OF INF5_9 BY VIS13

Statistic                      DF     Value      Prob
------------------------------------------------------
Chi-Square                      1    34 993     0 000
Likelihood Ratio Chi-Square     1     7 739     0 005
Continuity Adj  Chi-Square      1     8 248     0 004
Mantel-Haenszel Chi-Square      1    34 500     0 000
Fisher's Exact Test (Left)                      1 000
                    (Right)                     0 028
                    (2-Tail)                    0 028
Phi Coefficient                       0 702
Contingency Coefficient               0 575
Cramer's V                            0 702

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF9_5 BY VIS15

INF9_5          VIS15

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     58 |      0 |     58
               | 57 183 | 0 8169 |
               | 0 0117 | 0 8169 |
               |  81 69 |   0 00 |  81 69
---------------+--------+--------+
             1 |     12 |      1 |     13
               | 12 817 | 0 1831 |
               | 0 0521 | 3 6446 |
               |  16 90 |   1 41 |  18 31
---------------+--------+--------+
Total               70        1       71
                 98 59     1 41   100 00

     STATISTICS FOR TABLE OF INF9_5 BY VIS15

Statistic                      DF     Value      Prob
------------------------------------------------------
Chi-Square                      1     4 525     0 033
Likelihood Ratio Chi-Square     1     3 460     0 063
Continuity Adj  Chi-Square      1     0 681     0 409
Mantel-Haenszel Chi-Square      1     4 462     0 035
Fisher's Exact Test (Left)                      1 000
                    (Right)                     0 183
                    (2-Tail)                    0 183
Phi Coefficient                       0 252
Contingency Coefficient               0 245
Cramer's V                            0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF7 BY VIS13

INF7            VIS13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     67 |      1 |     68
               | 66 085 | 1 9155 |
               | 0 0127 | 0 4376 |
               |  94 37 |   1 41 |  95 77
---------------+--------+--------+
             2 |      2 |      1 |      3
               | 2 9155 | 0 0845 |
               | 0 2875 | 9 9178 |
               |   2 82 |   1 41 |   4 23
---------------+--------+--------+
Total               69        2       71
                 97 18     2 82   100 00

     STATISTICS FOR TABLE OF INF7 BY VIS13

Statistic                      DF     Value      Prob
------------------------------------------------------
Chi-Square                      1    10 656     0 001
Likelihood Ratio Chi-Square     1     3 978     0 046
Continuity Adj  Chi-Square      1     2 195     0 138
Mantel-Haenszel Chi-Square      1    10 505     0 001
Fisher's Exact Test (Left)                      0 999
                    (Right)                     0 083
                    (2-Tail)                    0 083
Phi Coefficient                       0 387
Contingency Coefficient               0 361
Cramer's V                            0 387

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF14 BY VIS15

INF14           VIS15

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     27 |      0 |     27
               | 26 341 | 0 6585 |
               | 0 0165 | 0 6585 |
               |  65 85 |   0 00 |  65 85
---------------+--------+--------+
             2 |      5 |      0 |      5
               |  4 878 |  0 122 |
               |  0 003 |  0 122 |
               |  12 20 |   0 00 |  12 20
---------------+--------+--------+
             3 |      5 |      0 |      5
               |  4 878 |  0 122 |
               |  0 003 |  0 122 |
               |  12 20 |   0 00 |  12 20
---------------+--------+--------+
             4 |      3 |      1 |      4
               | 3 9024 | 0 0976 |
               | 0 2087 | 8 3476 |
               |   7 32 |   2 44 |   9 76
---------------+--------+--------+
Total               40        1       41
                 97 56     2 44   100 00

Frequency Missing = 30

     STATISTICS FOR TABLE OF INF14 BY VIS15

Statistic                      DF     Value      Prob
------------------------------------------------------
Chi-Square                      3     9 481     0 024
Likelihood Ratio Chi-Square     3     4 904     0 179
Mantel-Haenszel Chi-Square      1     5 201     0 023
Phi Coefficient                       0 481
Contingency Coefficient               0 433
Cramer's V                            0 481

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF3 BY VIS16

   INF3           VIS16

   Frequency     |
   Expected      |
   Cell Chi-Square|
   Percent       |       0|       1|  Total
   --------------+--------+--------+
               3 |     20 |      0 |     20
                 | 19 437 | 0 5634 |
                 | 0 0163 | 0 5634 |
                 |  28 17 |   0 00 |  28 17
   --------------+--------+--------+
               5 |     27 |      1 |     28
                 | 27 211 | 0 7887 |
                 | 0 0016 | 0 0566 |
                 |  38 03 |   1 41 |  39 44
   --------------+--------+--------+
               7 |     19 |      0 |     19
                 | 18 465 | 0 5352 |
                 | 0 0155 | 0 5352 |
                 |  26 76 |   0 00 |  26 76
   --------------+--------+--------+
               8 |      3 |      1 |      4
                 | 3 8873 | 0 1127 |
                 | 0 2025 | 6 9877 |
                 |   4 23 |   1 41 |   5 63
   --------------+--------+--------+
   Total              69        2       71
                   97 18     2 82   100 00

            STATISTICS FOR TABLE OF INF3 BY VIS16

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3       8 379     0 039
Likelihood Ratio Chi-Square    3       5 094     0 165
Mantel-Haenszel Chi-Square     1       1 396     0 237
Phi Coefficient                        0 344
Contingency Coefficient                0 325
Cramer's V                             0 344

Sample Size = 71
WARNING   63% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_9 BY VIS17

   INF5_9         VIS17

   Frequency     |
   Expected      |
   Cell Chi-Square|
   Percent       |       0|       1|  Total
   --------------+--------+--------+
               0 |     70 |      0 |     70
                 | 69 014 | 0 9859 |
                 | 0 0141 | 0 9859 |
                 |  98 59 |   0 00 |  98 59
   --------------+--------+--------+
               1 |      0 |      1 |      1
                 | 0 9859 | 0 0141 |
                 | 0 9859 | 69 014 |
                 |   0 00 |   1 41 |   1 41
   --------------+--------+--------+
   Total              70        1       71
                   98 59     1 41   100 00

          STATISTICS FOR TABLE OF INF5_9 BY VIS17

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      71 000     0 000
Likelihood Ratio Chi-Square    1      10 511     0 001
Continuity Adj  Chi-Square     1      17 246     0 000
Mantel-Haenszel Chi-Square     1      70 000     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 014
                    (2-Tail)                     0 014
Phi Coefficient                        1 000
Contingency Coefficient                0 707
Cramer's V                             1 000

Sample Size = 71
WARNING   75% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF7 BY VIS17

   INF7           VIS17

   Frequency     |
   Expected      |
   Cell Chi-Square|
   Percent       |       0|       1|  Total
   --------------+--------+--------+
               1 |     68 |      0 |     68
                 | 67 042 | 0 9577 |
                 | 0 0137 | 0 9577 |
                 |  95 77 |   0 00 |  95 77
   --------------+--------+--------+
               2 |      2 |      1 |      3
                 | 2 9577 | 0 0423 |
                 | 0 3101 | 21 709 |
                 |   2 82 |   1 41 |   4 23
   --------------+--------+--------+
   Total              70        1       71
                   98 59     1 41   100 00

            STATISTICS FOR TABLE OF INF7 BY VIS17

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      22 990     0 000
Likelihood Ratio Chi-Square    1       6 692     0 010
Continuity Adj  Chi-Square     1       5 252     0 022
Mantel-Haenszel Chi-Square     1      22 667     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 042
                    (2-Tail)                     0 042
Phi Coefficient                        0 569
Contingency Coefficient                0 495
Cramer's V                             0 569

Sample Size = 71
WARNING   75% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF12 BY VIS17

   RINF12         VIS17

   Frequency     |
   Expected      |
   Cell Chi-Square|
   Percent       |       0|       1|  Total
   --------------+--------+--------+
               1 |     49 |      0 |     49
                 |  48 31 | 0 6901 |
                 | 0 0099 | 0 6901 |
                 |  69 01 |   0 00 |  69 01
   --------------+--------+--------+
               2 |     13 |      0 |     13
                 | 12 817 | 0 1831 |
                 | 0 0026 | 0 1831 |
                 |  18 31 |   0 00 |  18 31
   --------------+--------+--------+
               3 |      8 |      1 |      9
                 | 8 8732 | 0 1268 |
                 | 0 0859 | 6 0156 |
                 |  11 27 |   1 41 |  12 68
   --------------+--------+--------+
   Total              70        1       71
                   98 59     1 41   100 00

          STATISTICS FOR TABLE OF RINF12 BY VIS17

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       6 987     0 030
Likelihood Ratio Chi-Square    2       4 232     0 120
Mantel-Haenszel Chi-Square     1       4 893     0 027
Phi Coefficient                        0 314
Contingency Coefficient                0 299
Cramer's V                             0 314

Sample Size = 71
WARNING   50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF6 BY EMP1

     RINF6          EMP1

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
     ADM            |      0 |      3 |      3
                    | 0 3043 | 2 6957 |
                    | 0 3043 | 0 0344 |
                    |   0 00 |   4 35 |   4 35
     ---------------+--------+--------+
     DHD            |      1 |     43 |     44
                    | 4 4638 | 39 536 |
                    | 2 6878 | 0 3035 |
                    |   1 45 |  62 32 |  63 77
     ---------------+--------+--------+
     DIET           |      2 |      3 |      5
                    | 0 5072 | 4 4928 |
                    |  4 393 |  0 496 |
                    |   2 90 |   4 35 |   7 25
     ---------------+--------+--------+
     MGR            |      4 |     13 |     17
                    | 1 7246 | 15 275 |
                    | 3 0019 | 0 3389 |
                    |   5 80 |  18 84 |  24 64
     ---------------+--------+--------+
     Total                 7       62       69
                       10 14    89 86   100 00

     Frequency Missing = 2


         STATISTICS FOR TABLE OF RINF6 BY EMP1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      11 560     0 009
Likelihood Ratio Chi-Square    3      10 473     0 015
Mantel-Haenszel Chi-Square     1       7 614     0 006
Phi Coefficient                        0 409
Contingency Coefficient                0 379
Cramer's V                             0 409

Effective Sample Size = 69
Frequency Missing = 2
WARNING   75% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_1 BY EMP1

     INF9_1         EMP1

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent \      |       0|       1|  Total
     ---------------+--------+--------+
                  0 |      5 |     21 |     26
                    | 2 5634 | 23 437 |
                    | 2 3161 | 0 2533 |
                    |   7 04 |  29 58 |  36 62
     ---------------+--------+--------+
                  1 |      2 |     43 |     45
                    | 4 4366 | 40 563 |
                    | 1 3382 | 0 1464 |
                    |   2 82 |  60 56 |  63 38
     ---------------+--------+--------+
     Total                 7       64       71
                        9 86    90 14   100 00


          STATISTICS FOR TABLE OF INF9_1 BY EMP1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 054     0 044
Likelihood Ratio Chi-Square    1       3 900     0 048
Continuity Adj  Chi-Square     1       2 561     0 110
Mantel-Haenszel Chi-Square     1       3 997     0 046
Fisher's Exact Test (Left)                       0 992
                    (Right)                      0 057
                    (2-Tail)                     0 091
Phi Coefficient                        0 239
Contingency Coefficient                0 232
Cramer's V                             0 239

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_4 BY EMP1

     INF9_4         EMP1

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |      3 |     61 |     64
                    | 6 3099 |  57 69 |
                    | 1 7362 | 0 1899 |
                    |   4 23 |  85 92 |  90 14
     ---------------+--------+--------+
                  1 |      4 |      3 |      7
                    | 0 6901 | 6 3099 |
                    | 15 874 | 1 7362 |
                    |   5 63 |   4 23 |   9 86
     ---------------+--------+--------+
     Total                 7       64       71
                        9 86    90 14   100 00


         STATISTICS FOR TABLE OF INF9_4 BY EMP1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      19 536     0 000
Likelihood Ratio Chi-Square    1      11 941     0 001
Continuity Adj  Chi-Square     1      14 080     0 000
Mantel-Haenszel Chi-Square     1      19 261     0 000
Fisher's Exact Test (Left)                     1 13E-03
                    (Right)                      1 000
                    (2-Tail)                   1 13E-03
Phi Coefficient                       -0 525
Contingency Coefficient                0 465
Cramer's V                            -0 525

Sample Size = 71
WARNING   25% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY EMP1

     INF13          EMP1

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |      0 |     28 |     28
                    | 2 7606 | 25 239 |
                    | 2 7606 | 0 3019 |
                    |   0 00 |  39 44 |  39 44
     ---------------+--------+--------+
                  2 |      7 |     36 |     43
                    | 4 2394 | 38 761 |
                    | 1 7976 | 0 1966 |
                    |   9 86 |  50 70 |  60 56
     ---------------+--------+--------+
     Total                 7       64       71
                        9 86    90 14   100 00


          STATISTICS FOR TABLE OF INF13 BY EMP1

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 057     0 025
Likelihood Ratio Chi-Square    1       7 514     0 006
Continuity Adj  Chi-Square     1       3 391     0 066
Mantel-Haenszel Chi-Square     1       4 985     0 026
Fisher's Exact Test (Left)                       0 024
                    (Right)                      1 000
                    (2-Tail)                     0 037
Phi Coefficient                       -0 267
Contingency Coefficient                0 258
Cramer's V                            -0 267

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_4 BY EMP2

      INF5_4          EMP2

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     40 |      9 |     49
                     | 36 577 | 12 423 |
                     | 0 3202 | 0 9429 |
                     |  56 34 |  12 68 |  69 01
      ---------------+--------+--------+
                   1 |     13 |      9 |     22
                     | 16 423 | 5 5775 |
                     | 0 7133 | 2 1002 |
                     |  18 31 |  12 68 |  30 99
      ---------------+--------+--------+
      Total               53       18       71
                       74 65    25 35   100 00

        STATISTICS FOR TABLE OF INF5_4 BY EMP2

Statistic                       DF     Value       Prob
-------------------------------------------------------
Chi-Square                       1     4 077      0 043
Likelihood Ratio Chi-Square      1     3 891      0 049
Continuity Adj  Chi-Square       1     2 973      0 085
Mantel-Haenszel Chi-Square       1     4 019      0 045
Fisher's Exact Test (Left)                        0 988
                    (Right)                       0 045
                    (2-Tail)                      0 074
Phi Coefficient                        0 240
Contingency Coefficient                0 233
Cramer's V                             0 240

Sample Size = 71
```

```
                TABLE OF INF5_5 BY EMP2

      INF5_5          EMP2

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     51 |     14 |     65
                     | 48 521 | 16 479 |
                     | 0 1266 | 0 3729 |
                     |  71 83 |  19 72 |  91 55
      ---------------+--------+--------+
                   1 |      2 |      4 |      6
                     | 4 4789 | 1 5211 |
                     |  1 372 | 4 0396 |
                     |   2 82 |   5 63 |   8 45
      ---------------+--------+--------+
      Total               53       18       71
                       74 65    25 35   100 00

        STATISTICS FOR TABLE OF INF5_5 BY EMP2

Statistic                       DF     Value       Prob
-------------------------------------------------------
Chi-Square                       1     5 911      0 015
Likelihood Ratio Chi-Square      1     5 028      0 025
Continuity Adj  Chi-Square       1     3 767      0 052
Mantel-Haenszel Chi-Square       1     5 828      0 016
Fisher's Exact Test (Left)                        0 997
                    (Right)                       0 033
                    (2-Tail)                      0 033
Phi Coefficient                        0 289
Contingency Coefficient                0 277
Cramer's V                             0 289

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY EMP2

      RINF10          EMP2

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     25 |      2 |     27
                     | 19 145 | 7 8545 |
                     | 1 7903 | 4 3638 |
                     |  45 45 |   3 64 |  49 09
      ---------------+--------+--------+
                   2 |     11 |      8 |     19
                     | 13 473 | 5 5273 |
                     | 0 4538 | 1 1062 |
                     |  20 00 |  14 55 |  34 55
      ---------------+--------+--------+
                   3 |      3 |      6 |      9
                     | 6 3818 | 2 6182 |
                     | 1 7921 | 4 3682 |
                     |   5 45 |  10 91 |  16 36
      ---------------+--------+--------+
      Total               39       16       55
                       70 91    29 09   100 00

      Frequency Missing = 16

        STATISTICS FOR TABLE OF RINF10 BY EMP2

Statistic                       DF     Value       Prob
-------------------------------------------------------
Chi-Square                       2    13 874      0 001
Likelihood Ratio Chi-Square      2    14 746      0 001
Mantel-Haenszel Chi-Square       1    13 486      0 000
Phi Coefficient                        0 502
Contingency Coefficient                0 449
Cramer's V                             0 502

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF RINF11 BY EMP2

      RINF11          EMP2

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     27 |      4 |     31
                     | 22 733 | 8 2667 |
                     | 0 8008 | 2 2022 |
                     |  45 00 |   6 67 |  51 67
      ---------------+--------+--------+
                   2 |     15 |      3 |     18
                     |   13 2 |    4 8 |
                     | 0 2455 |  0 675 |
                     |  25 00 |   5 00 |  30 00
      ---------------+--------+--------+
                   3 |      2 |      9 |     11
                     | 8 0667 | 2 9333 |
                     | 4 5625 | 12 547 |
                     |   3 33 |  15 00 |  18 33
      ---------------+--------+--------+
      Total               44       16       60
                       73 33    26 67   100 00

      Frequency Missing = 11

        STATISTICS FOR TABLE OF RINF11 BY EMP2

Statistic                       DF     Value       Prob
-------------------------------------------------------
Chi-Square                       2    21 033      0 000
Likelihood Ratio Chi-Square      2    19 097      0 000
Mantel-Haenszel Chi-Square       1    15 196      0 000
Phi Coefficient                        0 592
Contingency Coefficient                0 509
Cramer's V                             0 592

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF12 BY EMP2

    RINF12          EMP2

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                 1 |     41 |      8 |     49
                   | 36 577 | 12 423 |
                   | 0 5347 | 1 5745 |
                   |  57 75 |  11 27 |  69 01
    ---------------+--------+--------+
                 2 |      8 |      5 |     13
                   | 9 7042 | 3 2958 |
                   | 0 2993 | 0 8812 |
                   |  11 27 |   7 04 |  18 31
    ---------------+--------+--------+
                 3 |      4 |      5 |      9
                   | 6 7183 | 2 2817 |
                   | 1 0999 | 3 2385 |
                   |   5 63 |   7 04 |  12 68
    ---------------+--------+--------+
    Total               53       18       71
                     74 65    25 35   100 00


          STATISTICS FOR TABLE OF RINF12 BY EMP2

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     2       7 628      0 022
Likelihood Ratio Chi-Square    2       7 093      0 029
Mantel-Haenszel Chi-Square     1       7 490      0 006
Phi Coefficient                        0 328
Contingency Coefficient                0 311
Cramer's V                             0 328

Sample Size = 71
WARNING   33% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF13 BY EMP2

    INF13           EMP2

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                 1 |     15 |     13 |     28
                   | 20 901 | 7 0986 |
                   | 1 6662 | 4 9061 |
                   |  21 13 |  18 31 |  39 44
    ---------------+--------+--------+
                 2 |     38 |      5 |     43
                   | 32 099 | 10 901 |
                   |  1 085 | 3 1947 |
                   |  53 52 |   7 04 |  60 56
    ---------------+--------+--------+
    Total               53       18       71
                     74 65    25 35   100 00


          STATISTICS FOR TABLE OF INF13 BY EMP2

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     1      10 852      0 001
Likelihood Ratio Chi-Square    1      10 811      0 001
Continuity Adj  Chi-Square     1       9 091      0 003
Mantel-Haenszel Chi-Square     1      10 699      0 001
Fisher's Exact Test (Left)                     1 33E-03
                    (Right)                       1 000
                    (2-Tail)                   1 73E-03
Phi Coefficient                       -0 391
Contingency Coefficient                0 364
Cramer's V                            -0 391

Sample Size = 71
```

```
              TABLE OF INF8 BY EMP3

    INF8            EMP3

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                 1 |     59 |      2 |     61
                   | 57 563 | 3 4366 |
                   | 0 0359 | 0 6006 |
                   |  83 10 |   2 82 |  85 92
    ---------------+--------+--------+
                 2 |      8 |      2 |     10
                   | 9 4366 | 0 5634 |
                   | 0 2187 | 3 6634 |
                   |  11 27 |   2 82 |  14 08
    ---------------+--------+--------+
    Total               67        4       71
                     94 37     5 63   100 00


          STATISTICS FOR TABLE OF INF8 BY EMP3

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     1       4 518      0 034
Likelihood Ratio Chi-Square    1       3 169      0 075
Continuity Adj  Chi-Square     1       1 921      0 166
Mantel-Haenszel Chi-Square     1       4 455      0 035
Fisher's Exact Test (Left)                        0 992
                    (Right)                       0 093
                    (2-Tail)                      0 093
Phi Coefficient                        0 252
Contingency Coefficient                0 245
Cramer's V                             0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY EMP3

    RINF10          EMP3

    Frequency      |
    Expected       |
    Cell Chi-Square|
    Percent        |       0|       1|  Total
    ---------------+--------+--------+
                 1 |     26 |      1 |     27
                   | 25 036 | 1 9636 |
                   | 0 0371 | 0 4729 |
                   |  47 27 |   1 82 |  49 09
    ---------------+--------+--------+
                 2 |     19 |      0 |     19
                   | 17 618 | 1 3818 |
                   | 0 1084 | 1 3818 |
                   |  34 55 |   0 00 |  34 55
    ---------------+--------+--------+
                 3 |      6 |      3 |      9
                   | 8 3455 | 0 6545 |
                   | 0 6592 | 8 4045 |
                   |  10 91 |   5 45 |  16 36
    ---------------+--------+--------+
    Total               51        4       55
                     92 73     7 27   100 00

    Frequency Missing = 16


          STATISTICS FOR TABLE OF RINF10 BY EMP3

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     2      11 064      0 004
Likelihood Ratio Chi-Square    2       8 659      0 013
Mantel-Haenszel Chi-Square     1       5 295      0 021
Phi Coefficient                        0 449
Contingency Coefficient                0 409
Cramer's V                             0 449

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
            TABLE OF RINF11 BY EMP3

RINF11        EMP3

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     30 |      1 |     31
               | 28 933 | 2 0667 |
               | 0 0393 | 0 5505 |
               |  50 00 |   1 67 |  51 67
---------------+--------+--------+
             2 |     18 |      0 |     18
               |   16 8 |    1 2 |
               | 0 0857 |    1 2 |
               |  30 00 |   0 00 |  30 00
---------------+--------+--------+
             3 |      8 |      3 |     11
               | 10 267 | 0 7333 |
               | 0 5004 | 7 0061 |
               |  13 33 |   5 00 |  18 33
---------------+--------+--------+
Total               56        4      60
                 93 33     6 67   100 00

Frequency Missing = 11


     STATISTICS FOR TABLE OF RINF11 BY EMP3

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       9 382     0 009
Likelihood Ratio Chi-Square    2       7 665     0 022
Mantel-Haenszel Chi-Square     1       4 970     0 026
Phi Coefficient                        0 395
Contingency Coefficient                0 368
Cramer's V                             0 395

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF1 BY EMP4

INF1          EMP4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |      9 |     17 |     26
               | 13 915 | 12 085 |
               | 1 7363 | 1 9994 |
               |  12 68 |  23 94 |  36 62
---------------+--------+--------+
             3 |     29 |     16 |     45
               | 24 085 | 20 915 |
               | 1 0032 | 1 1552 |
               |  40 85 |  22 54 |  63 38
---------------+--------+--------+
Total               38       33      71
                 53 52    46 48   100 00

      STATISTICS FOR TABLE OF INF1 BY EMP4

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 894     0 015
Likelihood Ratio Chi-Square    1       5 959     0 015
Continuity Adj  Chi-Square     1       4 756     0 029
Mantel-Haenszel Chi-Square     1       5 811     0 016
Fisher's Exact Test (Left)                       0 014
                    (Right)                      0 996
                    (2-Tail)                     0 025
Phi Coefficient                       -0 288
Contingency Coefficient                0 277
Cramer's V                            -0 288

Sample Size = 71
```

```
            TABLE OF INF2 BY EMP4

INF2          EMP4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     35 |     20 |     55
               | 29 437 | 25 563 |
               | 1 0515 | 1 2108 |
               |  49 30 |  28 17 |  77 46
---------------+--------+--------+
             2 |      3 |     13 |     16
               | 8 5634 | 7 4366 |
               | 3 6144 |  4 162 |
               |   4 23 |  18 31 |  22 54
---------------+--------+--------+
Total               38       33      71
                 53 52    46 48   100 00

      STATISTICS FOR TABLE OF INF2 BY EMP4

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      10 039     0 002
Likelihood Ratio Chi-Square    1      10 529     0 001
Continuity Adj  Chi-Square     1       8 315     0 004
Mantel-Haenszel Chi-Square     1       9 897     0 002
Fisher's Exact Test (Left)                       1 000
                    (Right)                   1 70E-03
                    (2-Tail)                  1 87E-03
Phi Coefficient                        0 376
Contingency Coefficient                0 352
Cramer's V                             0 376

Sample Size = 71
```

```
            TABLE OF INF9_4 BY EMP4

INF9_4        EMP4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     31 |     33 |     64
               | 34 254 | 29 746 |
               |  0 309 | 0 3559 |
               |  43 66 |  46 48 |  90 14
---------------+--------+--------+
             1 |      7 |      0 |      7
               | 3 7465 | 3 2535 |
               | 2 8254 | 3 2535 |
               |   9 86 |   0 00 |   9 86
---------------+--------+--------+
Total               38       33      71
                 53 52    46 48   100 00

      STATISTICS FOR TABLE OF INF9_4 BY EMP4

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 744     0 009
Likelihood Ratio Chi-Square    1       9 414     0 002
Continuity Adj  Chi-Square     1       4 830     0 028
Mantel-Haenszel Chi-Square     1       6 649     0 010
Fisher's Exact Test (Left)                    9 49E-03
                    (Right)                      1 000
                    (2-Tail)                     0 013
Phi Coefficient                       -0 308
Contingency Coefficient                0 295
Cramer's V                            -0 308

Sample Size = 71
WARNING   50% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF9_7 BY EMP4

INF9_7          EMP4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     38 |     28 |     66
               | 35 324 | 30 676 |
               | 0 2027 | 0 2334 |
               |  53 52 |  39 44 |  92 96
---------------+--------+--------+
             1 |      0 |      5 |      5
               | 2 6761 | 2 3239 |
               | 2 6761 | 3 0815 |
               |   0 00 |   7 04 |   7 04
---------------+--------+--------+
Total                38       33       71
                  53 52    46 48   100 00


        STATISTICS FOR TABLE OF INF9_7 BY EMP4

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      6 194      0 013
Likelihood Ratio Chi-Square     1      8 100      0 004
Continuity Adj  Chi-Square      1      4 095      0 043
Mantel-Haenszel Chi-Square      1      6 107      0 013
Fisher's Exact Test (Left)                        1 000
                    (Right)                       0 018
                    (2-Tail)                      0 018
Phi Coefficient                        0 295
Contingency Coefficient                0 283
Cramer's V                             0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF5_4 BY EMP5

INF5_4          EMP5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     31 |     18 |     49
               | 24 845 | 24 155 |
               | 1 5248 | 1 5683 |
               |  43 66 |  25 35 |  69 01
---------------+--------+--------+
             1 |      5 |     17 |     22
               | 11 155 | 10 845 |
               | 3 3961 | 3 4931 |
               |   7 04 |  23 94 |  30 99
---------------+--------+--------+
Total                36       35       71
                  50 70    49 30   100 00


        STATISTICS FOR TABLE OF INF5_4 BY EMP5

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      9 982      0 002
Likelihood Ratio Chi-Square     1     10 393      0 001
Continuity Adj  Chi-Square      1      8 426      0 004
Mantel-Haenszel Chi-Square      1      9 842      0 002
Fisher's Exact Test (Left)                        1 000
                    (Right)                   1 62E-03
                    (2-Tail)                  2 05E-03
Phi Coefficient                        0 375
Contingency Coefficient                0 351
Cramer's V                             0 375

Sample Size = 71
```

```
           TABLE OF INF13 BY EMP4

INF13           EMP4

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      9 |     19 |     28
               | 14 986 | 13 014 |
               |  2 391 | 2 7533 |
               |  12 68 |  26 76 |  39 44
---------------+--------+--------+
             2 |     29 |     14 |     43
               | 23 014 | 19 986 |
               | 1 5569 | 1 7928 |
               |  40 85 |  19 72 |  60 56
---------------+--------+--------+
Total                38       33       71
                  53 52    46 48   100 00


        STATISTICS FOR TABLE OF INF13 BY EMP4

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      8 494      0 004
Likelihood Ratio Chi-Square     1      8 643      0 003
Continuity Adj  Chi-Square      1      7 134      0 008
Mantel-Haenszel Chi-Square      1      8 374      0 004
Fisher's Exact Test (Left)                    3 61E-03
                    (Right)                       0 999
                    (2-Tail)                  6 89E-03
Phi Coefficient                       -0 346
Contingency Coefficient                0 327
Cramer's V                            -0 346

Sample Size = 71
```

```
           TABLE OF RINF6 BY EMP5

RINF6           EMP5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      3 |      0 |      3
               | 1 4783 | 1 5217 |
               | 1 5665 | 1 5217 |
               |   4 35 |   0 00 |   4 35
---------------+--------+--------+
DHD            |     16 |     28 |     44
               | 21 681 | 22 319 |
               | 1 4886 | 1 4461 |
               |  23 19 |  40 58 |  63 77
---------------+--------+--------+
DIET           |      4 |      1 |      5
               | 2 4638 | 2 5362 |
               | 0 9579 | 0 9305 |
               |   5 80 |   1 45 |   7 25
---------------+--------+--------+
MGR            |     11 |      6 |     17
               | 8 3768 | 8 6232 |
               | 0 8214 |  0 798 |
               |  15 94 |   8 70 |  24 64
---------------+--------+--------+
Total                34       35       69
                  49 28    50 72   100 00

Frequency Missing = 2


        STATISTICS FOR TABLE OF RINF6 BY EMP5

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      3      9 531      0 023
Likelihood Ratio Chi-Square     3     10 879      0 012
Mantel-Haenszel Chi-Square      1      1 907      0 167
Phi Coefficient                        0 372
Contingency Coefficient                0 348
Cramer's V                             0 372

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF10 BY EMP5

RINF10          EMP5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     22 |      5 |     27
               | 14 236 | 12 764 |
               | 4 2338 | 4 7223 |
               |  40 00 |   9 09 |  49 09
---------------+--------+--------+
             2 |      5 |     14 |     19
               | 10 018 | 8 9818 |
               | 2 5136 | 2 8037 |
               |   9 09 |  25 45 |  34 55
---------------+--------+--------+
             3 |      2 |      7 |      9
               | 4 7455 | 4 2545 |
               | 1 5884 | 1 7716 |
               |   3 64 |  12 73 |  16 36
---------------+--------+--------+
Total               29       26       55
                 52 73    47 27   100 00

Frequency Missing = 16

        STATISTICS FOR TABLE OF RINF10 BY EMP5

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      17 633     0 000
Likelihood Ratio Chi-Square    2      18 772     0 000
Mantel-Haenszel Chi-Square     1      14 448     0 000
Phi Coefficient                        0 566
Contingency Coefficient                0 493
Cramer's V                             0 566

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   33% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF11 BY EMP5

RINF11          EMP5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     22 |      9 |     31
               | 14 983 | 16 017 |
               | 3 2859 | 3 0739 |
               |  36 67 |  15 00 |  51 67
---------------+--------+--------+
             2 |      4 |     14 |     18
               |    8 7 |    9 3 |
               | 2 5391 | 2 3753 |
               |   6 67 |  23 33 |  30 00
---------------+--------+--------+
             3 |      3 |      8 |     11
               | 5 3167 | 5 6833 |
               | 1 0095 | 0 9443 |
               |   5 00 |  13 33 |  18 33
---------------+--------+--------+
Total               29       31       60
                 48 33    51 67   100 00

Frequency Missing = 11

        STATISTICS FOR TABLE OF RINF11 BY EMP5

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      13 228     0 001
Likelihood Ratio Chi-Square    2      13 799     0 001
Mantel-Haenszel Chi-Square     1       9 708     0 002
Phi Coefficient                        0 470
Contingency Coefficient                0 425
Cramer's V                             0 470

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
                 TABLE OF RINF12 BY EMP5

RINF12          EMP5

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     31 |     18 |     49
               | 24 845 | 24 155 |
               | 1 5248 | 1 5683 |
               |  43 66 |  25 35 |  69 01
---------------+--------+--------+
             2 |      2 |     11 |     13
               | 6 5915 | 6 4085 |
               | 3 1984 | 3 2898 |
               |   2 82 |  15 49 |  18 31
---------------+--------+--------+
             3 |      3 |      6 |      9
               | 4 5634 | 4 4366 |
               | 0 5356 | 0 5509 |
               |   4 23 |   8 45 |  12 68
---------------+--------+--------+
Total               36       35       71
                 50 70    49 30   100 00

        STATISTICS FOR TABLE OF RINF12 BY EMP5

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      10 668     0 005
Likelihood Ratio Chi-Square    2      11 355     0 003
Mantel-Haenszel Chi-Square     1       6 626     0 010
Phi Coefficient                        0 388
Contingency Coefficient                0 361
Cramer's V                             0 388

Sample Size = 71
WARNING   33% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_5 BY EMP6

INF5_5          EMP6

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     57 |      8 |     65
               |  54 93 |  10 07 |
               |  0 078 | 0 4257 |
               |  80 28 |  11 27 |  91 55
---------------+--------+--------+
             1 |      3 |      3 |      6
               | 5 0704 | 0 9296 |
               | 0 8454 | 4 6114 |
               |   4 23 |   4 23 |   8 45
---------------+--------+--------+
Total               60       11       71
                 84 51    15 49   100 00

        STATISTICS FOR TABLE OF INF5_5 BY EMP6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 961     0 015
Likelihood Ratio Chi-Square    1       4 416     0 036
Continuity Adj  Chi-Square     1       3 429     0 064
Mantel-Haenszel Chi-Square     1       5 877     0 015
Fisher's Exact Test (Left)                       0 996
                    (Right)                      0 044
                    (2-Tail)                     0 044
Phi Coefficient                        0 290
Contingency Coefficient                0 278
Cramer's V                             0 290

Sample Size = 71
WARNING   25% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_9 BY EMP6

INF5_9          EMP6

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     60 |     10 |     70
               | 59 155 | 10 845 |
               | 0 0121 | 0 0658 |
               |  84 51 |  14 08 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 8451 | 0 1549 |
               | 0 8451 | 4 6095 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total               60       11       71
                 84 51    15 49   100 00

         STATISTICS FOR TABLE OF INF5_9 BY EMP6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 532     0 019
Likelihood Ratio Chi-Square    1       3 809     0 051
Continuity Adj  Chi-Square     1       0 922     0 337
Mantel-Haenszel Chi-Square     1       5 455     0 020
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 155
                    (2-Tail)                     0 155
Phi Coefficient                        0 279
Contingency Coefficient                0 269
Cramer's V                             0 279

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF7 BY EMP6

INF7            EMP6

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     59 |      9 |     68
               | 57 465 | 10 535 |
               |  0 041 | 0 2237 |
               |  83 10 |  12 68 |  95 77
---------------+--------+--------+
             2 |      1 |      2 |      3
               | 2 5352 | 0 4648 |
               | 0 9297 | 5 0708 |
               |   1 41 |   2 82 |   4 23
---------------+--------+--------+
Total               60       11       71
                 84 51    15 49   100 00

         STATISTICS FOR TABLE OF INF7 BY EMP6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 265     0 012
Likelihood Ratio Chi-Square    1       4 253     0 039
Continuity Adj  Chi-Square     1       2 849     0 091
Mantel-Haenszel Chi-Square     1       6 177     0 013
Fisher's Exact Test (Left)                       0 997
                    (Right)                      0 061
                    (2-Tail)                     0 061
Phi Coefficient                        0 297
Contingency Coefficient                0 285
Cramer's V                             0 297

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_4 BY EMP7

INF5_4          EMP7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     47 |      2 |     49
               | 44 859 | 4 1408 |
               | 0 1022 | 1 1068 |
               |  66 20 |   2 82 |  69 01
---------------+--------+--------+
             1 |     18 |      4 |     22
               | 20 141 | 1 8592 |
               | 0 2276 | 2 4652 |
               |  25 35 |   5 63 |  30 99
---------------+--------+--------+
Total               65        6       71
                 91 55     8 45   100 00

         STATISTICS FOR TABLE OF INF5_4 BY EMP7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       3 902     0 048
Likelihood Ratio Chi-Square    1       3 555     0 059
Continuity Adj  Chi-Square     1       2 292     0 130
Mantel-Haenszel Chi-Square     1       3 847     0 050
Fisher's Exact Test (Left)                       0 990
                    (Right)                      0 070
                    (2-Tail)                     0 070
Phi Coefficient                        0 234
Contingency Coefficient                0 228
Cramer's V                             0 234

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY EMP7

INF5_5          EMP7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     61 |      4 |     65
               | 59 507 |  5 493 |
               | 0 0375 | 0 4058 |
               |  85 92 |   5 63 |  91 55
---------------+--------+--------+
             1 |      4 |      2 |      6
               |  5 493 |  0 507 |
               | 0 4058 | 4 3959 |
               |   5 63 |   2 82 |   8 45
---------------+--------+--------+
Total               65        6       71
                 91 55     8 45   100 00

         STATISTICS FOR TABLE OF INF5_5 BY EMP7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       5 245     0 022
Likelihood Ratio Chi-Square    1       3 438     0 064
Continuity Adj  Chi-Square     1       2 320     0 128
Mantel-Haenszel Chi-Square     1       5 171     0 023
Fisher's Exact Test (Left)                       0 994
                    (Right)                      0 077
                    (2-Tail)                     0 077
Phi Coefficient                        0 272
Contingency Coefficient                0 262
Cramer's V                             0 272

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_8 BY EMP7

      INF5_8          EMP7

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     64 |      5 |     69
                     | 63 169 |  5 831 |
                     | 0 0109 | 0 1184 |
                     |  90 14 |   7 04 |  97 18
      ---------------+--------+--------+
                   1 |      1 |      1 |      2
                     |  1 831 |  0 169 |
                     | 0 3771 | 4 0857 |
                     |   1 41 |   1 41 |   2 82
      ---------------+--------+--------+
      Total               65        6       71
                       91 55     8 45   100 00

          STATISTICS FOR TABLE OF INF5_8 BY EMP7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 592     0 032
Likelihood Ratio Chi-Square    1       2 481     0 115
Continuity Adj  Chi-Square     1       0 729     0 393
Mantel-Haenszel Chi-Square     1       4 527     0 033
Fisher's Exact Test (Left)                       0 994
                    (Right)                      0 163
                    (2-Tail)                     0 163
Phi Coefficient                        0 254
Contingency Coefficient                0 246
Cramer's V                             0 254

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_9 BY EMP7

      INF5_9          EMP7

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     65 |      5 |     70
                     | 64 085 | 5 9155 |
                     | 0 0131 | 0 1417 |
                     |  91 55 |   7 04 |  98 59
      ---------------+--------+--------+
                   1 |      0 |      1 |      1
                     | 0 9155 | 0 0845 |
                     | 0 9155 | 9 9178 |
                     |   0 00 |   1 41 |   1 41
      ---------------+--------+--------+
      Total               65        6       71
                       91 55     8 45   100 00

          STATISTICS FOR TABLE OF INF5_9 BY EMP7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      10 988     0 001
Likelihood Ratio Chi-Square    1       5 104     0 024
Continuity Adj  Chi-Square     1       2 263     0 132
Mantel-Haenszel Chi-Square     1      10 833     0 001
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 085
                    (2-Tail)                     0 085
Phi Coefficient                        0 393
Contingency Coefficient                0 366
Cramer's V                             0 393

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY EMP7

      RINF10          EMP7

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     27 |      0 |     27
                     | 25 036 | 1 9636 |
                     |  0 154 | 1 9636 |
                     |  49 09 |   0 00 |  49 09
      ---------------+--------+--------+
                   2 |     18 |      1 |     19
                     | 17 618 | 1 3818 |
                     | 0 0083 | 0 1055 |
                     |  32 73 |   1 82 |  34 55
      ---------------+--------+--------+
                   3 |      6 |      3 |      9
                     | 8 3455 | 0 6545 |
                     | 0 6592 | 8 4045 |
                     |  10 91 |   5 45 |  16 36
      ---------------+--------+--------+
      Total               51        4       55
                       92 73     7 27   100 00

      Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY EMP7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      11 295     0 004
Likelihood Ratio Chi-Square    2       9 378     0 009
Mantel-Haenszel Chi-Square     1       8 978     0 003
Phi Coefficient                        0 453
Contingency Coefficient                0 413
Cramer's V                             0 453

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF11 BY EMP7

      RINF11          EMP7

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     31 |      0 |     31
                     | 28 417 | 2 5833 |
                     | 0 2348 | 2 5833 |
                     |  51 67 |   0 00 |  51 67
      ---------------+--------+--------+
                   2 |     16 |      2 |     18
                     |   16 5 |    1 5 |
                     | 0 0152 | 0 1667 |
                     |  26 67 |   3 33 |  30 00
      ---------------+--------+--------+
                   3 |      8 |      3 |     11
                     | 10 083 | 0 9167 |
                     | 0 4304 | 4 7348 |
                     |  13 33 |   5 00 |  18 33
      ---------------+--------+--------+
      Total               55        5       60
                       91 67     8 33   100 00

      Frequency Missing = 11

          STATISTICS FOR TABLE OF RINF11 BY EMP7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       8 165     0 017
Likelihood Ratio Chi-Square    2       8 971     0 011
Mantel-Haenszel Chi-Square     1       7 934     0 005
Phi Coefficient                        0 369
Contingency Coefficient                0 346
Cramer's V                             0 369

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF12 BY EMP7

RINF12             EMP7

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     48 |      1 |     49
                | 44 859 | 4 1408 |
                | 0 2199 | 2 3823 |
                |  67 61 |   1 41 |  69 01
----------------+--------+--------+
              2 |     11 |      2 |     13
                | 11 901 | 1 0986 |
                | 0 0683 | 0 7396 |
                |  15 49 |   2 82 |  18 31
----------------+--------+--------+
              3 |      6 |      3 |      9
                | 8 2394 | 0 7606 |
                | 0 6087 | 6 5939 |
                |   8 45 |   4 23 |  12 68
----------------+--------+--------+
Total                 65        6       71
                   91 55     8 45   100 00


        STATISTICS FOR TABLE OF RINF12 BY EMP7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      10 613     0 005
Likelihood Ratio Chi-Square    2       8 746     0 013
Mantel-Haenszel Chi-Square     1      10 402     0 001
Phi Coefficient                        0 387
Contingency Coefficient                0 361
Cramer's V                             0 387

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF4 BY EMP8

INF4               EMP8

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |      7 |      1 |      8
                | 4 9143 | 3 0857 |
                | 0 8852 | 1 4098 |
                |  10 00 |   1 43 |  11 43
----------------+--------+--------+
              3 |     13 |      3 |     16
                | 9 8286 | 6 1714 |
                | 1 0233 | 1 6298 |
                |  18 57 |   4 29 |  22 86
----------------+--------+--------+
              4 |     23 |     23 |     46
                | 28 257 | 17 743 |
                | 0 9781 | 1 5577 |
                |  32 86 |  32 86 |  65 71
----------------+--------+--------+
Total                 43       27       70
                   61 43    38 57   100 00

Frequency Missing = 1


        STATISTICS FOR TABLE OF INF4 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       7 484     0 024
Likelihood Ratio Chi-Square    2       8 111     0 017
Mantel-Haenszel Chi-Square     1       5 677     0 017
Phi Coefficient                        0 327
Contingency Coefficient                0 311
Cramer's V                             0 327

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_1 BY EMP8

INF5_1             EMP8

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     28 |      9 |     37
                |  22 93 |  14 07 |
                | 1 1212 | 1 8272 |
                |  39 44 |  12 68 |  52 11
----------------+--------+--------+
              1 |     16 |     18 |     34
                |  21 07 |  12 93 |
                | 1 2202 | 1 9884 |
                |  22 54 |  25 35 |  47 89
----------------+--------+--------+
Total                 44       27       71
                   61 97    38 03   100 00


        STATISTICS FOR TABLE OF INF5_1 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 157     0 013
Likelihood Ratio Chi-Square    1       6 246     0 012
Continuity Adj  Chi-Square     1       5 003     0 025
Mantel-Haenszel Chi-Square     1       6 070     0 014
Fisher's Exact Test (Left)                       0 997
                    (Right)                      0 012
                    (2-Tail)                     0 016
Phi Coefficient                        0 294
Contingency Coefficient                0 282
Cramer's V                             0 294

Sample Size = 71
```

```
              TABLE OF INF5_2 BY EMP8

INF5_2             EMP8

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     28 |     10 |     38
                | 23 549 | 14 451 |
                | 0 8412 | 1 3708 |
                |  39 44 |  14 08 |  53 52
----------------+--------+--------+
              1 |     16 |     17 |     33
                | 20 451 | 12 549 |
                | 0 9686 | 1 5785 |
                |  22 54 |  23 94 |  46 48
----------------+--------+--------+
Total                 44       27       71
                   61 97    38 03   100 00


        STATISTICS FOR TABLE OF INF5_2 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 759     0 029
Likelihood Ratio Chi-Square    1       4 798     0 028
Continuity Adj  Chi-Square     1       3 750     0 053
Mantel-Haenszel Chi-Square     1       4 692     0 030
Fisher's Exact Test (Left)                       0 993
                    (Right)                      0 026
                    (2-Tail)                     0 049
Phi Coefficient                        0 259
Contingency Coefficient                0 251
Cramer's V                             0 259

Sample Size = 71
```

```
                TABLE OF INF5_4 BY EMP8

      INF5_4          EMP8

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                    0 |     35 |     14 |     49
                     | 30 366 | 18 634 |
                     | 0 7071 | 1 1523 |
                     |  49 30 |  19 72 |  69 01
      ---------------+--------+--------+
                    1 |      9 |     13 |     22
                     | 13 634 | 8 3662 |
                     | 1 5749 | 2 5665 |
                     |  12 68 |  18 31 |  30 99
      ---------------+--------+--------+
      Total               44       27       71
                       61 97    38 03   100 00

         STATISTICS FOR TABLE OF INF5_4 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 001     0 014
Likelihood Ratio Chi-Square    1       5 919     0 015
Continuity Adj  Chi-Square     1       4 776     0 029
Mantel-Haenszel Chi-Square     1       5 916     0 015
Fisher's Exact Test (Left)                       0 997
                    (Right)                      0 015
                    (2-Tail)                     0 019
Phi Coefficient                        0 291
Contingency Coefficient                0 279
Cramer's V                             0 291

Sample Size = 71
```

```
                TABLE OF RINF6 BY EMP8

      RINF6           EMP8

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
      ADM            |      3 |      0 |      3
                     | 1 8261 | 1 1739 |
                     | 0 7547 | 1 1739 |
                     |   4 35 |   0 00 |   4 35
      ---------------+--------+--------+
      DHD            |     21 |     23 |     44
                     | 26 783 | 17 217 |
                     | 1 2485 | 1 9421 |
                     |  30 43 |  33 33 |  63 77
      ---------------+--------+--------+
      DIET           |      3 |      2 |      5
                     | 3 0435 | 1 9565 |
                     | 0 0006 |  0 001 |
                     |   4 35 |   2 90 |   7 25
      ---------------+--------+--------+
      MGR            |     15 |      2 |     17
                     | 10 348 | 6 6522 |
                     | 2 0915 | 3 2535 |
                     |  21 74 |   2 90 |  24 64
      ---------------+--------+--------+
      Total               42       27       69
                       60 87    39 13   100 00

      Frequency Missing = 2

         STATISTICS FOR TABLE OF RINF6 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      10 466     0 015
Likelihood Ratio Chi-Square    3      12 416     0 006
Mantel-Haenszel Chi-Square     1       4 729     0 030
Phi Coefficient                        0 389
Contingency Coefficient                0 363
Cramer's V                             0 389

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_6 BY EMP8

      INF5_6          EMP8

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                    0 |     23 |     23 |     46
                     | 28 507 | 17 493 |
                     | 1 0639 | 1 7337 |
                     |  32 39 |  32 39 |  64 79
      ---------------+--------+--------+
                    1 |     21 |      4 |     25
                     | 15 493 |  9 507 |
                     | 1 9575 |   3 19 |
                     |  29 58 |   5 63 |  35 21
      ---------------+--------+--------+
      Total               44       27       71
                       61 97    38 03   100 00

         STATISTICS FOR TABLE OF INF5_6 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       7 945     0 005
Likelihood Ratio Chi-Square    1       8 564     0 003
Continuity Adj  Chi-Square     1       6 568     0 010
Mantel-Haenszel Chi-Square     1       7 833     0 005
Fisher's Exact Test (Left)                    4 24E-03
                    (Right)                      0 999
                    (2-Tail)                  5 34E-03
Phi Coefficient                       -0 335
Contingency Coefficient                0 317
Cramer's V                            -0 335

Sample Size = 71
```

```
                TABLE OF INF9_4 BY EMP8

      INF9_4          EMP8

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                    0 |     37 |     27 |     64
                     | 39 662 | 24 338 |
                     | 0 1787 | 0 2912 |
                     |  52 11 |  38 03 |  90 14
      ---------------+--------+--------+
                    1 |      7 |      0 |      7
                     |  4 338 |  2 662 |
                     | 1 6335 |  2 662 |
                     |   9 86 |   0 00 |   9 86
      ---------------+--------+--------+
      Total               44       27       71
                       61 97    38 03   100 00

         STATISTICS FOR TABLE OF INF9_4 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 765     0 029
Likelihood Ratio Chi-Square    1       7 163     0 007
Continuity Adj  Chi-Square     1       3 143     0 076
Mantel-Haenszel Chi-Square     1       4 698     0 030
Fisher's Exact Test (Left)                       0 029
                    (Right)                      1 000
                    (2-Tail)                     0 039
Phi Coefficient                       -0 259
Contingency Coefficient                0 251
Cramer's V                            -0 259

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY EMP8

RINF10          EMP8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               | 18 164 | 8 8364 |
               |  2 573 |  5 289 |
               |  45 45 |   3 64 |  49 09
---------------+--------+--------+
             2 |      8 |     11 |     19
               | 12 782 | 6 2182 |
               | 1 7889 | 3 6772 |
               |  14 55 |  20 00 |  34 55
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 0545 | 2 9455 |
               | 0 6972 | 1 4331 |
               |   7 27 |   9 09 |  16 36
---------------+--------+--------+
Total               37       18       55
                 67 27    32 73   100 00

Frequency Missing = 16

        STATISTICS FOR TABLE OF RINF10 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      15 459     0 000
Likelihood Ratio Chi-Square    2      17 057     0 000
Mantel-Haenszel Chi-Square     1      11 708     0 001
Phi Coefficient                        0 530
Contingency Coefficient                0 468
Cramer's V                             0 530

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
              TABLE OF RINF11 BY EMP8

RINF11          EMP8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     26 |      5 |     31
               | 19 117 | 11 883 |
               | 2 4785 | 3 9871 |
               |  43 33 |   8 33 |  51 67
---------------+--------+--------+
             2 |      8 |     10 |     18
               |   11 1 |    6 9 |
               | 0 8658 | 1 3928 |
               |  13 33 |  16 67 |  30 00
---------------+--------+--------+
             3 |      3 |      8 |     11
               | 6 7833 | 4 2167 |
               | 2 1101 | 3 3945 |
               |   5 00 |  13 33 |  18 33
---------------+--------+--------+
Total               37       23       60
                 61 67    38 33   100 00

Frequency Missing = 11

        STATISTICS FOR TABLE OF RINF11 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      14 229     0 001
Likelihood Ratio Chi-Square    2      14 867     0 001
Mantel-Haenszel Chi-Square     1      13 395     0 000
Phi Coefficient                        0 487
Contingency Coefficient                0 438
Cramer's V                             0 487

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
              TABLE OF RINF12 BY EMP8

RINF12          EMP8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     36 |     13 |     49
               | 30 366 | 18 634 |
               | 1 0452 | 1 7033 |
               |  50 70 |  18 31 |  69 01
---------------+--------+--------+
             2 |      4 |      9 |     13
               | 8 0563 | 4 9437 |
               | 2 0424 | 3 3283 |
               |   5 63 |  12 68 |  18 31
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 5 5775 | 3 4225 |
               | 0 4462 | 0 7271 |
               |   5 63 |   7 04 |  12 68
---------------+--------+--------+
Total               44       27       71
                 61 97    38 03   100 00

        STATISTICS FOR TABLE OF RINF12 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       9 292     0 010
Likelihood Ratio Chi-Square    2       9 207     0 010
Mantel-Haenszel Chi-Square     1       6 134     0 013
Phi Coefficient                        0 362
Contingency Coefficient                0 340
Cramer's V                             0 362

Sample Size = 71
WARNING   33% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF13 BY EMP8

INF13           EMP8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      9 |     19 |     28
               | 17 352 | 10 648 |
               | 4 0201 | 6 5513 |
               |  12 68 |  26 76 |  39 44
---------------+--------+--------+
             2 |     35 |      8 |     43
               | 26 648 | 16 352 |
               | 2 6178 |  4 266 |
               |  49 30 |  11 27 |  60 56
---------------+--------+--------+
Total               44       27       71
                 61 97    38 03   100 00

        STATISTICS FOR TABLE OF INF13 BY EMP8

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      17 455     0 000
Likelihood Ratio Chi-Square    1      17 834     0 000
Continuity Adj  Chi-Square     1      15 428     0 000
Mantel-Haenszel Chi-Square     1      17 209     0 000
Fisher's Exact Test (Left)                    3 78E-05
                    (Right)                      1 000
                    (2-Tail)                  4 60E-05
Phi Coefficient                       -0 496
Contingency Coefficient                0 444
Cramer's V                            -0 496

Sample Size = 71
```

```
              TABLE OF RINF11 BY EMP9

RINF11           EMP9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     30 |      1 |     31
               | 28 933 | 2 0667 |
               | 0 0393 | 0 5505 |
               |  50 00 |   1 67 |  51 67
---------------+--------+--------+
             2 |     18 |      0 |     18
               |   16 8 |    1 2 |
               | 0 0857 |    1 2 |
               |  30 00 |   0 00 |  30 00
---------------+--------+--------+
             3 |      8 |      3 |     11
               | 10 267 | 0 7333 |
               | 0 5004 | 7 0061 |
               |  13 33 |   5 00 |  18 33
---------------+--------+--------+
Total                56        4       60
                  93 33     6 67   100 00

Frequency Missing = 11
```

```
         STATISTICS FOR TABLE OF RINF11 BY EMP9

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     2       9 382      0 009
Likelihood Ratio Chi-Square    2       7 665      0 022
Mantel-Haenszel Chi-Square     1       4 970      0 026
Phi Coefficient                        0 395
Contingency Coefficient                0 368
Cramer's V                             0 395

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF4 BY EMP10

INF4             EMP10

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      8 |      0 |      8
               | 6 0571 | 1 9429 |
               | 0 6232 | 1 9429 |
               |  11 43 |   0 00 |  11 43
---------------+--------+--------+
             3 |     15 |      1 |     16
               | 12 114 | 3 8857 |
               | 0 6874 | 2 1431 |
               |  21 43 |   1 43 |  22 86
---------------+--------+--------+
             4 |     30 |     16 |     46
               | 34 829 | 11 171 |
               | 0 6694 |  2 087 |
               |  42 86 |  22 86 |  65 71
---------------+--------+--------+
Total                53       17       70
                  75 71    24 29   100 00

Frequency Missing = 1
```

```
         STATISTICS FOR TABLE OF INF4 BY EMP10

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     2       8 153      0 017
Likelihood Ratio Chi-Square    2      10 687      0 005
Mantel-Haenszel Chi-Square     1       6 249      0 012
Phi Coefficient                        0 341
Contingency Coefficient                0 323
Cramer's V                             0 341

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_1 BY EMP10

INF5_1           EMP10

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     32 |      5 |     37
               | 28 141 | 8 8592 |
               | 0 5292 | 1 6811 |
               |  45 07 |   7 04 |  52 11
---------------+--------+--------+
             1 |     22 |     12 |     34
               | 25 859 | 8 1408 |
               | 0 5759 | 1 8294 |
               |  30 99 |  16 90 |  47 89
---------------+--------+--------+
Total                54       17       71
                  76 06    23 94   100 00
```

```
         STATISTICS FOR TABLE OF INF5_1 BY EMP10

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1       4 616      0 032
Likelihood Ratio Chi-Square    1       4 706      0 030
Continuity Adj  Chi-Square     1       3 497      0 061
Mantel-Haenszel Chi-Square     1       4 551      0 033
Fisher's Exact Test (Left)                        0 993
                    (Right)                       0 030
                    (2-Tail)                      0 050
Phi Coefficient                        0 255
Contingency Coefficient                0 247
Cramer's V                             0 255

Sample Size = 71
```

```
              TABLE OF INF5_2 BY EMP10

INF5_2           EMP10

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     33 |      5 |     38
               | 28 901 | 9 0986 |
               | 0 5812 | 1 8463 |
               |  46 48 |   7 04 |  53 52
---------------+--------+--------+
             1 |     21 |     12 |     33
               | 25 099 | 7 9014 |
               | 0 6693 |  2 126 |
               |  29 58 |  16 90 |  46 48
---------------+--------+--------+
Total                54       17       71
                  76 06    23 94   100 00
```

```
         STATISTICS FOR TABLE OF INF5_2 BY EMP10

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1       5 223      0 022
Likelihood Ratio Chi-Square    1       5 307      0 021
Continuity Adj  Chi-Square     1       4 026      0 045
Mantel-Haenszel Chi-Square     1       5 149      0 023
Fisher's Exact Test (Left)                        0 995
                    (Right)                       0 022
                    (2-Tail)                      0 028
Phi Coefficient                        0 271
Contingency Coefficient                0 262
Cramer's V                             0 271

Sample Size = 71
```

```
                 TABLE OF INF15 BY EMP8

INF15           EMP8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     15 |      7 |     22
               | 13 134 | 8 8657 |
               |  0 265 | 0 3926 |
               |  22 39 |  10 45 |  32 84
---------------+--------+--------+
             3 |      8 |     15 |     23
               | 13 731 | 9 2687 |
               | 2 3922 |  3 544 |
               |  11 94 |  22 39 |  34 33
---------------+--------+--------+
             4 |      8 |      2 |     10
               | 5 9701 | 4 0299 |
               | 0 6901 | 1 0224 |
               |  11 94 |   2 99 |  14 93
---------------+--------+--------+
             5 |      9 |      3 |     12
               | 7 1642 | 4 8358 |
               | 0 4704 | 0 6969 |
               |  13 43 |   4 48 |  17 91
---------------+--------+--------+
Total                40       27       67
                  59 70    40 30   100 00

Frequency Missing = 4


            STATISTICS FOR TABLE OF INF15 BY EMP8

Statistic                       DF       Value        Prob
-----------------------------------------------------------
Chi-Square                       3       9 474       0 024
Likelihood Ratio Chi-Square      3       9 597       0 022
Mantel-Haenszel Chi-Square       1       0 774       0 379
Phi Coefficient                          0 376
Contingency Coefficient                  0 352
Cramer's V                               0 376

Effective Sample Size = 67
Frequency Missing = 4
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_1 BY EMP9

INF5_1          EMP9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     37 |      0 |     37
               | 34 915 | 2 0845 |
               | 0 1244 | 2 0845 |
               |  52 11 |   0 00 |  52 11
---------------+--------+--------+
             1 |     30 |      4 |     34
               | 32 085 | 1 9155 |
               | 0 1354 | 2 2684 |
               |  42 25 |   5 63 |  47 89
---------------+--------+--------+
Total                67        4       71
                  94 37     5 63   100 00


            STATISTICS FOR TABLE OF INF5_1 BY EMP9

Statistic                       DF       Value        Prob
-----------------------------------------------------------
Chi-Square                       1       4 613       0 032
Likelihood Ratio Chi-Square      1       6 151       0 013
Continuity Adj  Chi-Square       1       2 665       0 103
Mantel-Haenszel Chi-Square       1       4 548       0 033
Fisher's Exact Test (Left)                           1 000
                    (Right)                          0 048
                    (2-Tail)                         0 048
Phi Coefficient                          0 255
Contingency Coefficient                  0 247
Cramer's V                               0 255

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_3 BY EMP9

INF5_3          EMP9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     67 |      3 |     70
               | 66 056 | 3 9437 |
               | 0 0135 | 0 2258 |
               |  94 37 |   4 23 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9437 | 0 0563 |
               | 0 9437 | 15 806 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total                67        4       71
                  94 37     5 63   100 00


            STATISTICS FOR TABLE OF INF5_3 BY EMP9

Statistic                       DF       Value        Prob
-----------------------------------------------------------
Chi-Square                       1      16 989       0 000
Likelihood Ratio Chi-Square      1       6 013       0 014
Continuity Adj  Chi-Square       1       3 755       0 053
Mantel-Haenszel Chi-Square       1      16 750       0 000
Fisher's Exact Test (Left)                           1 000
                    (Right)                          0 056
                    (2-Tail)                         0 056
Phi Coefficient                          0 489
Contingency Coefficient                  0 439
Cramer's V                               0 489

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF10 BY EMP9

RINF10          EMP9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     26 |      1 |     27
               | 25 036 | 1 9636 |
               | 0 0371 | 0 4729 |
               |  47 27 |   1 82 |  49 09
---------------+--------+--------+
             2 |     19 |      0 |     19
               | 17 618 | 1 3818 |
               | 0 1084 | 1 3818 |
               |  34 55 |   0 00 |  34 55
---------------+--------+--------+
             3 |      6 |      3 |      9
               | 8 3455 | 0 6545 |
               | 0 6592 | 8 4045 |
               |  10 91 |   5 45 |  16 36
---------------+--------+--------+
Total                51        4       55
                  92 73     7 27   100 00

Frequency Missing = 16


            STATISTICS FOR TABLE OF RINF10 BY EMP9

Statistic                       DF       Value        Prob
-----------------------------------------------------------
Chi-Square                       2      11 064       0 004
Likelihood Ratio Chi-Square      2       8 659       0 013
Mantel-Haenszel Chi-Square       1       5 295       0 021
Phi Coefficient                          0 449
Contingency Coefficient                  0 409
Cramer's V                               0 449

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF5_4 BY EMP10

         INF5_4          EMP10

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
                       0|     41 |      8 |     49
                        | 37 268 | 11 732 |
                        | 0 3738 | 1 1874 |
                        |  57 75 |  11 27 |  69 01
         ---------------+--------+--------+
                       1|     13 |      9 |     22
                        | 16 732 | 5 2676 |
                        | 0 8326 | 2 6446 |
                        |  18 31 |  12 68 |  30 99
         ---------------+--------+--------+
         Total               54       17       71
                          76 06    23 94   100 00

             STATISTICS FOR TABLE OF INF5_4 BY EMP10

      Statistic                       DF       Value      Prob
      ------------------------------------------------------
      Chi-Square                       1       5 038     0 025
      Likelihood Ratio Chi-Square      1       4 779     0 029
      Continuity Adj  Chi-Square       1       3 779     0 052
      Mantel-Haenszel Chi-Square       1       4 967     0 026
      Fisher's Exact Test (Left)                         0 994
                          (Right)                        0 028
                          (2-Tail)                       0 036
      Phi Coefficient                          0 266
      Contingency Coefficient                  0 257
      Cramer's V                               0 266

      Sample Size = 71
```

```
                  TABLE OF INF8 BY EMP10

         INF8            EMP10

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
                       1|     50 |     11 |     61
                        | 46 394 | 14 606 |
                        | 0 2802 | 0 8901 |
                        |  70 42 |  15 49 |  85 92
         ---------------+--------+--------+
                       2|      4 |      6 |     10
                        | 7 6056 | 2 3944 |
                        | 1 7093 | 5 4297 |
                        |   5 63 |   8 45 |  14 08
         ---------------+--------+--------+
         Total               54       17       71
                          76 06    23 94   100 00

             STATISTICS FOR TABLE OF INF8 BY EMP10

      Statistic                       DF       Value      Prob
      ------------------------------------------------------
      Chi-Square                       1       8 309     0 004
      Likelihood Ratio Chi-Square      1       7 130     0 008
      Continuity Adj  Chi-Square       1       6 165     0 013
      Mantel-Haenszel Chi-Square       1       8 192     0 004
      Fisher's Exact Test (Left)                         0 999
                          (Right)                     9 60E-03
                          (2-Tail)                    9 60E-03
      Phi Coefficient                          0 342
      Contingency Coefficient                  0 324
      Cramer's V                               0 342

      Sample Size = 71
      WARNING   25% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF RINF6 BY EMP10

         RINF6           EMP10

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
         ADM            |      3 |      0 |      3
                        | 2 2609 | 0 7391 |
                        | 0 2416 | 0 7391 |
                        |   4 35 |   0 00 |   4 35
         ---------------+--------+--------+
         DHD            |     27 |     17 |     44
                        | 33 159 | 10 841 |
                        | 1 1441 | 3 4997 |
                        |  39 13 |  24 64 |  63 77
         ---------------+--------+--------+
         DIET           |      5 |      0 |      5
                        | 3 7681 | 1 2319 |
                        | 0 4027 | 1 2319 |
                        |   7 25 |   0 00 |   7 25
         ---------------+--------+--------+
         MGR            |     17 |      0 |     17
                        | 12 812 | 4 1884 |
                        | 1 3693 | 4 1884 |
                        |  24 64 |   0 00 |  24 64
         ---------------+--------+--------+
         Total               52       17       69
                          75 36    24 64   100 00

         Frequency Missing = 2

             STATISTICS FOR TABLE OF RINF6 BY EMP10

      Statistic                       DF       Value      Prob
      ------------------------------------------------------
      Chi-Square                       3      12 817     0 005
      Likelihood Ratio Chi-Square      3      18 344     0 000
      Mantel-Haenszel Chi-Square       1       7 298     0 007
      Phi Coefficient                          0 431
      Contingency Coefficient                  0 396
      Cramer's V                               0 431

      Effective Sample Size = 69
      Frequency Missing = 2
      WARNING   63% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF RINF10 BY EMP10

         RINF10          EMP10

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
                       1|     27 |      0 |     27
                        | 20 618 | 6 3818 |
                        | 1 9753 | 6 3818 |
                        |  49 09 |   0 00 |  49 09
         ---------------+--------+--------+
                       2|     11 |      8 |     19
                        | 14 509 | 4 4909 |
                        | 0 8487 | 2 7419 |
                        |  20 00 |  14 55 |  34 55
         ---------------+--------+--------+
                       3|      4 |      5 |      9
                        | 6 8727 | 2 1273 |
                        | 1 2008 | 3 8794 |
                        |   7 27 |   9 09 |  16 36
         ---------------+--------+--------+
         Total               42       13       55
                          76 36    23 64   100 00

         Frequency Missing = 16

             STATISTICS FOR TABLE OF RINF10 BY EMP10

      Statistic                       DF       Value      Prob
      ------------------------------------------------------
      Chi-Square                       2      17 028     0 000
      Likelihood Ratio Chi-Square      2      21 924     0 000
      Mantel-Haenszel Chi-Square       1      15 473     0 000
      Phi Coefficient                          0 556
      Contingency Coefficient                  0 486
      Cramer's V                               0 556

      Effective Sample Size = 55
      Frequency Missing = 16
      WARNING   23% of the data are missing
      WARNING   33% of the cells have expected counts less
                than 5  Chi-Square may not be a valid test
         TABLE OF RINF11 BY EMP10

RINF11          EMP10

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     31 |      0 |     31
               |  23 25 |  7 75  |
               | 2 5833 |  7 75  |
               |  51 67 |  0 00  |  51 67
---------------+--------+--------+
             2 |      8 |     10 |     18
               |  13 5  |  4 5   |
               | 2 2407 | 6 7222 |
               |  13 33 |  16 67 |  30 00
---------------+--------+--------+
             3 |      6 |      5 |     11
               |  8 25  |  2 75  |
               | 0 6136 | 1 8409 |
               |  10 00 |  8 33  |  18 33
---------------+--------+--------+
Total               45       15       60
                 75 00    25 00   100 00

Frequency Missing = 11

      STATISTICS FOR TABLE OF RINF11 BY EMP10

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     2     21 751      0 000
Likelihood Ratio Chi-Square    2     27 591      0 000
Mantel-Haenszel Chi-Square     1     14 843      0 000
Phi Coefficient                       0 602
Contingency Coefficient               0 516
Cramer's V                            0 602

Effective Sample Size = 60
Frequency Missing = 11
WARNING  15% of the data are missing
WARNING  33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
         TABLE OF INF13 BY EMP10

INF13           EMP10

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     13 |     15 |     28
               | 21 296 | 6 7042 |
               | 3 2316 | 10 265 |
               |  18 31 |  21 13 |  39 44
---------------+--------+--------+
             2 |     41 |      2 |     43
               | 32 704 | 10 296 |
               | 2 1043 | 6 6843 |
               |  57 75 |  2 82  |  60 56
---------------+--------+--------+
Total               54       17       71
                 76 06    23 94   100 00

      STATISTICS FOR TABLE OF INF13 BY EMP10

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     1     22 285      0 000
Likelihood Ratio Chi-Square    1     23 310      0 000
Continuity Adj  Chi-Square     1     19 680      0 000
Mantel-Haenszel Chi-Square     1     21 971      0 000
Fisher's Exact Test (Left)                    3 39E-06
                    (Right)                      1 000
                    (2-Tail)                  3 39E-06
Phi Coefficient                      -0 560
Contingency Coefficient               0 489
Cramer's V                           -0 560

Sample Size = 71
```

```
         TABLE OF RINF12 BY EMP10

RINF12          EMP10

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     42 |      7 |     49
               | 37 268 | 11 732 |
               | 0 6009 | 1 9089 |
               |  59 15 |  9 86  |  69 01
---------------+--------+--------+
             2 |      8 |      5 |     13
               | 9 8873 | 3 1127 |
               | 0 3603 | 1 1444 |
               |  11 27 |  7 04  |  18 31
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 8451 | 2 1549 |
               | 1 1825 | 3 7562 |
               |  5 63  |  7 04  |  12 68
---------------+--------+--------+
Total               54       17       71
                 76 06    23 94   100 00

      STATISTICS FOR TABLE OF RINF12 BY EMP10

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     2      8 953      0 011
Likelihood Ratio Chi-Square    2      8 281      0 016
Mantel-Haenszel Chi-Square     1      8 765      0 003
Phi Coefficient                       0 355
Contingency Coefficient               0 335
Cramer's V                            0 355

Sample Size = 71
WARNING  33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
         TABLE OF INF14 BY EMP10

INF14           EMP10

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     21 |      6 |     27
               | 17 122 | 9 878  |
               | 0 8784 | 1 5225 |
               |  51 22 |  14 63 |  65 85
---------------+--------+--------+
             2 |      2 |      3 |      5
               | 3 1707 | 1 8293 |
               | 0 4323 | 0 7493 |
               |  4 88  |  7 32  |  12 20
---------------+--------+--------+
             3 |      1 |      4 |      5
               | 3 1707 | 1 8293 |
               | 1 4861 | 2 5759 |
               |  2 44  |  9 76  |  12 20
---------------+--------+--------+
             4 |      2 |      2 |      4
               | 2 5366 | 1 4634 |
               | 0 1135 | 0 1967 |
               |  4 88  |  4 88  |  9 76
---------------+--------+--------+
Total               26       15       41
                 63 41    36 59   100 00

Frequency Missing = 30

      STATISTICS FOR TABLE OF INF14 BY EMP10

Statistic                     DF      Value       Prob
------------------------------------------------------
Chi-Square                     3      7 955      0 047
Likelihood Ratio Chi-Square    3      7 967      0 047
Mantel-Haenszel Chi-Square     1      4 935      0 026
Phi Coefficient                       0 440
Contingency Coefficient               0 403
Cramer's V                            0 440

Effective Sample Size = 41
Frequency Missing = 30
WARNING  42% of the data are missing
WARNING  75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF4 BY EMP11

       INF4            EMP11

       Frequency       |
       Expected        |
       Cell Chi-Square |
       Percent         |       0|       1|  Total
       ----------------+--------+--------+
                     1 |      8 |      0 |      8
                       | 5 3714 | 2 6286 |
                       | 1 2863 | 2 6286 |
                       |  11 43 |   0 00 |  11 43
       ----------------+--------+--------+
                     3 |     13 |      3 |     16
                       | 10 743 | 5 2571 |
                       | 0 4742 | 0 9691 |
                       |  18 57 |   4 29 |  22 86
       ----------------+--------+--------+
                     4 |     26 |     20 |     46
                       | 30 886 | 15 114 |
                       | 0 7729 | 1 5793 |
                       |  37 14 |  28 57 |  65 71
       ----------------+--------+--------+
       Total               47       23       70
                         67 14    32 86   100 00

       Frequency Missing = 1

        STATISTICS FOR TABLE OF INF4 BY EMP11

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     2       7 710       0 021
Likelihood Ratio Chi-Square    2      10 216       0 006
Mantel-Haenszel Chi-Square     1       7 056       0 008
Phi Coefficient                        0 332
Contingency Coefficient                0 315
Cramer's V                             0 332

Effective Sample Size = 70
Frequency Missing = 1
```

```
                TABLE OF INF5_1 BY EMP11

       INF5_1          EMP11

       Frequency       |
       Expected        |
       Cell Chi-Square |
       Percent         |       0|       1|  Total
       ----------------+--------+--------+
                     0 |     30 |      7 |     37
                       | 25 014 | 11 986 |
                       | 0 9938 |  2 074 |
                       |  42 25 |   9 86 |  52 11
       ----------------+--------+--------+
                     1 |     18 |     16 |     34
                       | 22 986 | 11 014 |
                       | 1 0815 | 2 2571 |
                       |  25 35 |  22 54 |  47 89
       ----------------+--------+--------+
       Total               48       23       71
                         67 61    32 39   100 00

        STATISTICS FOR TABLE OF INF5_1 BY EMP11

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       6 406       0 011
Likelihood Ratio Chi-Square    1       6 523       0 011
Continuity Adj  Chi-Square     1       5 186       0 023
Mantel-Haenszel Chi-Square     1       6 316       0 012
Fisher's Exact Test (Left)                         0 998
                    (Right)                        0 011
                    (2-Tail)                       0 021
Phi Coefficient                        0 300
Contingency Coefficient                0 288
Cramer's V                             0 300

Sample Size = 71
```

```
                TABLE OF INF5_2 BY EMP11

       INF5_2          EMP11

       Frequency       |
       Expected        |
       Cell Chi-Square |
       Percent         |       0|       1|  Total
       ----------------+--------+--------+
                     0 |     30 |      8 |     38
                       |  25 69 |  12 31 |
                       |  0 723 | 1 5089 |
                       |  42 25 |  11 27 |  53 52
       ----------------+--------+--------+
                     1 |     18 |     15 |     33
                       |  22 31 |  10 69 |
                       | 0 8326 | 1 7376 |
                       |  25 35 |  21 13 |  46 48
       ----------------+--------+--------+
       Total               48       23       71
                         67 61    32 39   100 00

        STATISTICS FOR TABLE OF INF5_2 BY EMP11

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       4 802       0 028
Likelihood Ratio Chi-Square    1       4 844       0 028
Continuity Adj  Chi-Square     1       3 753       0 053
Mantel-Haenszel Chi-Square     1       4 735       0 030
Fisher's Exact Test (Left)                         0 993
                    (Right)                        0 026
                    (2-Tail)                       0 042
Phi Coefficient                        0 260
Contingency Coefficient                0 252
Cramer's V                             0 260

Sample Size = 71
```

```
                TABLE OF INF5_4 BY EMP11

       INF5_4          EMP11

       Frequency       |
       Expected        |
       Cell Chi-Square |
       Percent         |       0|       1|  Total
       ----------------+--------+--------+
                     0 |     40 |      9 |     49
                       | 33 127 | 15 873 |
                       | 1 4261 | 2 9762 |
                       |  56 34 |  12 68 |  69 01
       ----------------+--------+--------+
                     1 |      8 |     14 |     22
                       | 14 873 | 7 1268 |
                       | 3 1763 | 6 6287 |
                       |  11 27 |  19 72 |  30 99
       ----------------+--------+--------+
       Total               48       23       71
                         67 61    32 39   100 00

        STATISTICS FOR TABLE OF INF5_4 BY EMP11

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1      14 207       0 000
Likelihood Ratio Chi-Square    1      13 853       0 000
Continuity Adj  Chi-Square     1      12 215       0 000
Mantel-Haenszel Chi-Square     1      14 007       0 000
Fisher's Exact Test (Left)                         1 000
                    (Right)                     2 79E-04
                    (2-Tail)                    3 01E-04
Phi Coefficient                        0 447
Contingency Coefficient                0 408
Cramer's V                             0 447

Sample Size = 71
```

```
                TABLE OF INF5_5 BY EMP11

INF5_5          EMP11

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     47 |     18 |     65
               | 43 944 | 21 056 |
               | 0 2126 | 0 4436 |
               |  66 20 |  25 35 |  91 55
---------------+--------+--------+
             1 |      1 |      5 |      6
               | 4 0563 | 1 9437 |
               | 2 3029 |  4 806 |
               |   1 41 |   7 04 |   8 45
---------------+--------+--------+
Total                48       23       71
                  67 61    32 39   100 00


       STATISTICS FOR TABLE OF INF5_5 BY EMP11

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       7 765     0 005
Likelihood Ratio Chi-Square    1       7 323     0 007
Continuity Adj  Chi-Square     1       5 432     0 020
Mantel-Haenszel Chi-Square     1       7 656     0 006
Fisher's Exact Test (Left)                       0 999
                    (Right)                      0 012
                    (2-Tail)                     0 012
Phi Coefficient                        0 331
Contingency Coefficient                0 314
Cramer's V                             0 331

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_8 BY EMP11

INF5_8          EMP11

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     48 |     21 |     69
               | 46 648 | 22 352 |
               | 0 0392 | 0 0818 |
               |  67 61 |  29 58 |  97 18
---------------+--------+--------+
             1 |      0 |      2 |      2
               | 1 3521 | 0 6479 |
               | 1 3521 | 2 8218 |
               |   0 00 |   2 82 |   2 82
---------------+--------+--------+
Total                48       23       71
                  67 61    32 39   100 00


       STATISTICS FOR TABLE OF INF5_8 BY EMP11

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 295     0 038
Likelihood Ratio Chi-Square    1       4 631     0 031
Continuity Adj  Chi-Square     1       1 706     0 192
Mantel-Haenszel Chi-Square     1       4 234     0 040
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 102
                    (2-Tail)                     0 102
Phi Coefficient                        0 246
Contingency Coefficient                0 239
Cramer's V                             0 246

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF6 BY EMP11

RINF6           EMP11

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      3 |      0 |      3
               |      2 |      1 |
               |    0 5 |      1 |
               |   4 35 |   0 00 |   4 35
---------------+--------+--------+
DHD            |     22 |     22 |     44
               | 29 333 | 14 667 |
               | 1 8333 | 3 6667 |
               |  31 88 |  31 88 |  63 77
---------------+--------+--------+
DIET           |      5 |      0 |      5
               | 3 3333 | 1 6667 |
               | 0 8333 | 1 6667 |
               |   7 25 |   0 00 |   7 25
---------------+--------+--------+
MGR            |     16 |      1 |     17
               | 11 333 | 5 6667 |
               | 1 9216 | 3 8431 |
               |  23 19 |   1 45 |  24 64
---------------+--------+--------+
Total                46       23       69
                  66 67    33 33   100 00

Frequency Missing = 2


       STATISTICS FOR TABLE OF RINF6 BY EMP11

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      15 265     0 002
Likelihood Ratio Chi-Square    3      19 236     0 000
Mantel-Haenszel Chi-Square     1       7 751     0 005
Phi Coefficient                        0 470
Contingency Coefficient                0 426
Cramer's V                             0 470

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY EMP11

INF8            EMP11

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     44 |     17 |     61
               | 41 239 | 19 761 |
               | 0 1848 | 0 3857 |
               |  61 97 |  23 94 |  85 92
---------------+--------+--------+
             2 |      4 |      6 |     10
               | 6 7606 | 3 2394 |
               | 1 1272 | 2 3525 |
               |   5 63 |   8 45 |  14 08
---------------+--------+--------+
Total                48       23       71
                  67 61    32 39   100 00


       STATISTICS FOR TABLE OF INF8 BY EMP11

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 050     0 044
Likelihood Ratio Chi-Square    1       3 784     0 052
Continuity Adj  Chi-Square     1       2 716     0 099
Mantel-Haenszel Chi-Square     1       3 993     0 046
Fisher's Exact Test (Left)                       0 990
                    (Right)                      0 053
                    (2-Tail)                     0 067
Phi Coefficient                        0 239
Contingency Coefficient                0 232
Cramer's V                             0 239

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_5 BY EMP11

      INF9_5          EMP11

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     36 |     22 |     58
                     | 39 211 | 18 789 |
                     |  0 263 | 0 5489 |
                     |  50 70 |  30 99 |  81 69
      ---------------+--------+--------+
                   1 |     12 |      1 |     13
                     | 8 7887 | 4 2113 |
                     | 1 1733 | 2 4487 |
                     |  16 90 |   1 41 |  18 31
      ---------------+--------+--------+
      Total               48       23       71
                       67 61    32 39   100 00


       STATISTICS FOR TABLE OF INF9_5 BY EMP11

Statistic                        DF       Value       Prob
-----------------------------------------------------------
Chi-Square                        1       4 434      0 035
Likelihood Ratio Chi-Square       1       5 389      0 020
Continuity Adj  Chi-Square        1       3 161      0 075
Mantel-Haenszel Chi-Square        1       4 371      0 037
Fisher's Exact Test (Left)                           0 031
                    (Right)                          0 997
                    (2-Tail)                         0 048
Phi Coefficient                          -0 250
Contingency Coefficient                   0 242
Cramer's V                               -0 250

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY EMP11

      RINF10          EMP11

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     24 |      3 |     27
                     | 17 673 | 9 3273 |
                     | 2 2653 | 4 2922 |
                     |  43 64 |   5 45 |  49 09
      ---------------+--------+--------+
                   2 |      9 |     10 |     19
                     | 12 436 | 6 5636 |
                     | 0 9495 | 1 7991 |
                     |  16 36 |  18 18 |  34 55
      ---------------+--------+--------+
                   3 |      3 |      6 |      9
                     | 5 8909 | 3 1091 |
                     | 1 4187 |  2 688 |
                     |   5 45 |  10 91 |  16 36
      ---------------+--------+--------+
      Total               36       19       55
                       65 45    34 55   100 00

      Frequency Missing = 16


       STATISTICS FOR TABLE OF RINF10 BY EMP11

Statistic                        DF       Value       Prob
-----------------------------------------------------------
Chi-Square                        2      13 413      0 001
Likelihood Ratio Chi-Square       2      14 323      0 001
Mantel-Haenszel Chi-Square        1      12 254      0 000
Phi Coefficient                           0 494
Contingency Coefficient                   0 443
Cramer's V                                0 494

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF RINF11 BY EMP11

      RINF11          EMP11

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     28 |      3 |     31
                     | 20 667 | 10 333 |
                     | 2 6022 | 5 2043 |
                     |  46 67 |   5 00 |  51 67
      ---------------+--------+--------+
                   2 |      7 |     11 |     18
                     |     12 |      6 |
                     | 2 0833 | 4 1667 |
                     |  11 67 |  18 33 |  30 00
      ---------------+--------+--------+
                   3 |      5 |      6 |     11
                     | 7 3333 | 3 6667 |
                     | 0 7424 | 1 4848 |
                     |   8 33 |  10 00 |  18 33
      ---------------+--------+--------+
      Total               40       20       60
                       66 67    33 33   100 00

      Frequency Missing = 11


       STATISTICS FOR TABLE OF RINF11 BY EMP11

Statistic                        DF       Value       Prob
-----------------------------------------------------------
Chi-Square                        2      16 284      0 000
Likelihood Ratio Chi-Square       2      17 454      0 000
Mantel-Haenszel Chi-Square        1      11 703      0 001
Phi Coefficient                           0 521
Contingency Coefficient                   0 462
Cramer's V                                0 521

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
                TABLE OF RINF12 BY EMP11

      RINF12          EMP11

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     38 |     11 |     49
                     | 33 127 | 15 873 |
                     | 0 7169 | 1 4961 |
                     |  53 52 |  15 49 |  69 01
      ---------------+--------+--------+
                   2 |      7 |      6 |     13
                     | 8 7887 | 4 2113 |
                     | 0 3641 | 0 7598 |
                     |   9 86 |   8 45 |  18 31
      ---------------+--------+--------+
                   3 |      3 |      6 |      9
                     | 6 0845 | 2 9155 |
                     | 1 5637 | 3 2633 |
                     |   4 23 |   8 45 |  12 68
      ---------------+--------+--------+
      Total               48       23       71
                       67 61    32 39   100 00


       STATISTICS FOR TABLE OF RINF12 BY EMP11

Statistic                        DF       Value       Prob
-----------------------------------------------------------
Chi-Square                        2       8 164      0 017
Likelihood Ratio Chi-Square       2       7 842      0 020
Mantel-Haenszel Chi-Square        1       8 038      0 005
Phi Coefficient                           0 339
Contingency Coefficient                   0 321
Cramer's V                                0 339

Sample Size = 71
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY EMP11

INF13           EMP11

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     11 |     17 |     28
               |  18 93 | 9 0704 |
               | 3 3217 | 6 9322 |
               |  15 49 |  23 94 |  39 44
---------------+--------+--------+
             2 |     37 |      6 |     43
               |  29 07 |  13 93 |
               |  2 163 |  4 514 |
               |  52 11 |   8 45 |  60 56
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00


          STATISTICS FOR TABLE OF INF13 BY EMP11

Statistic                     DF       Value        Prob
---------------------------------------------------------
Chi-Square                     1      16 931       0 000
Likelihood Ratio Chi-Square    1      17 158       0 000
Continuity Adj  Chi-Square     1      14 863       0 000
Mantel-Haenszel Chi-Square     1      16 692       0 000
Fisher's Exact Test (Left)                      5 45E-05
                    (Right)                        1 000
                    (2-Tail)                    6 60E-05
Phi Coefficient                       -0 488
Contingency Coefficient                0 439
Cramer's V                            -0 488

Sample Size = 71
```

```
                TABLE OF INF5_1 BY EMP12

INF5_1          EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     31 |      6 |     37
               | 25 014 | 11 986 |
               | 1 4324 | 2 9894 |
               |  43 66 |   8 45 |  52 11
---------------+--------+--------+
             1 |     17 |     17 |     34
               | 22 986 | 11 014 |
               | 1 5588 | 3 2532 |
               |  23 94 |  23 94 |  47 89
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00


          STATISTICS FOR TABLE OF INF5_1 BY EMP12

Statistic                     DF       Value        Prob
---------------------------------------------------------
Chi-Square                     1       9 234       0 002
Likelihood Ratio Chi-Square    1       9 499       0 002
Continuity Adj  Chi-Square     1       7 756       0 005
Mantel-Haenszel Chi-Square     1       9 104       0 003
Fisher's Exact Test (Left)                         1 000
                    (Right)                     2 46E-03
                    (2-Tail)                    4 66E-03
Phi Coefficient                        0 361
Contingency Coefficient                0 339
Cramer's V                             0 361

Sample Size = 71
```

```
                TABLE OF INF5_2 BY EMP12

INF5_2          EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     32 |      6 |     38
               |  25 69 |  12 31 |
               | 1 5498 | 3 2343 |
               |  45 07 |   8 45 |  53 52
---------------+--------+--------+
             1 |     16 |     17 |     33
               |  22 31 |  10 69 |
               | 1 7846 | 3 7244 |
               |  22 54 |  23 94 |  46 48
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00


          STATISTICS FOR TABLE OF INF5_2 BY EMP12

Statistic                     DF       Value        Prob
---------------------------------------------------------
Chi-Square                     1      10 293       0 001
Likelihood Ratio Chi-Square    1      10 567       0 001
Continuity Adj  Chi-Square     1       8 726       0 003
Mantel-Haenszel Chi-Square     1      10 148       0 001
Fisher's Exact Test (Left)                         1 000
                    (Right)                     1 44E-03
                    (2-Tail)                    2 06E-03
Phi Coefficient                        0 381
Contingency Coefficient                0 356
Cramer's V                             0 381

Sample Size = 71
```

```
                TABLE OF INF5_4 BY EMP12

INF5_4          EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     38 |     11 |     49
               | 33 127 | 15 873 |
               | 0 7169 | 1 4961 |
               |  53 52 |  15 49 |  69 01
---------------+--------+--------+
             1 |     10 |     12 |     22
               | 14 873 | 7 1268 |
               | 1 5967 | 3 3323 |
               |  14 08 |  16 90 |  30 99
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00


          STATISTICS FOR TABLE OF INF5_4 BY EMP12

Statistic                     DF       Value        Prob
---------------------------------------------------------
Chi-Square                     1       7 142       0 008
Likelihood Ratio Chi-Square    1       6 928       0 008
Continuity Adj  Chi-Square     1       5 752       0 016
Mantel-Haenszel Chi-Square     1       7 041       0 008
Fisher's Exact Test (Left)                         0 998
                    (Right)                     8 93E-03
                    (2-Tail)                       0 013
Phi Coefficient                        0 317
Contingency Coefficient                0 302
Cramer's V                             0 317

Sample Size = 71
```

```
              TABLE OF INF5_6 BY EMP12

INF5_6          EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     27 |     19 |     46
               | 31 099 | 14 901 |
               | 0 5402 | 1 1273 |
               |  38 03 |  26 76 |  64 79
---------------+--------+--------+
             1 |     21 |      4 |     25
               | 16 901 | 8 0986 |
               | 0 9939 | 2 0742 |
               |  29 58 |   5 63 |  35 21
---------------+--------+--------+
Total                48       23       71
                  67 61    32 39   100 00

         STATISTICS FOR TABLE OF INF5_6 BY EMP12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 736     0 030
Likelihood Ratio Chi-Square    1       5 078     0 024
Continuity Adj  Chi-Square     1       3 651     0 056
Mantel-Haenszel Chi-Square     1       4 669     0 031
Fisher's Exact Test (Left)                       0 026
                    (Right)                      0 994
                    (2-Tail)                     0 036
Phi Coefficient                       -0 258
Contingency Coefficient                0 250
Cramer's V                            -0 258

Sample Size = 71
```

```
              TABLE OF RINF6 BY EMP12

RINF6           EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      3 |      0 |      3
               | 2 0435 | 0 9565 |
               | 0 4477 | 0 9565 |
               |   4 35 |   0 00 |   4 35
---------------+--------+--------+
DHD            |     24 |     20 |     44
               | 29 971 | 14 029 |
               | 1 1896 | 2 5414 |
               |  34 78 |  28 99 |  63 77
---------------+--------+--------+
DIET           |      4 |      1 |      5
               | 3 4058 | 1 5942 |
               | 0 1037 | 0 2215 |
               |   5 80 |   1 45 |   7 25
---------------+--------+--------+
MGR            |     16 |      1 |     17
               |  11 58 | 5 4203 |
               | 1 6873 | 3 6048 |
               |  23 19 |   1 45 |  24 64
---------------+--------+--------+
Total                47       22       69
                  68 12    31 88   100 00

Frequency Missing = 2

        STATISTICS FOR TABLE OF RINF6 BY EMP12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      10 752     0 013
Likelihood Ratio Chi-Square    3      13 144     0 004
Mantel-Haenszel Chi-Square     1       5 701     0 017
Phi Coefficient                        0 395
Contingency Coefficient                0 367
Cramer's V                             0 395

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY EMP12

RINF10          EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     24 |      3 |     27
               | 17 673 | 9 3273 |
               | 2 2653 | 4 2922 |
               |  43 64 |   5 45 |  49 09
---------------+--------+--------+
             2 |     10 |      9 |     19
               | 12 436 | 6 5636 |
               | 0 4773 | 0 9044 |
               |  18 18 |  16 36 |  34 55
---------------+--------+--------+
             3 |      2 |      7 |      9
               | 5 8909 | 3 1091 |
               | 2 5699 | 4 8693 |
               |   3 64 |  12 73 |  16 36
---------------+--------+--------+
Total                36       19       55
                  65 45    34 55   100 00

Frequency Missing = 16

         STATISTICS FOR TABLE OF RINF10 BY EMP12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      15 378     0 000
Likelihood Ratio Chi-Square    2      16 246     0 000
Mantel-Haenszel Chi-Square     1      15 057     0 000
Phi Coefficient                        0 529
Contingency Coefficient                0 467
Cramer's V                             0 529

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
              TABLE OF RINF11 BY EMP12

RINF11          EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     28 |      3 |     31
               |  20 15 |  10 85 |
               | 3 0582 | 5 6795 |
               |  46 67 |   5 00 |  51 67
---------------+--------+--------+
             2 |      7 |     11 |     18
               |   11 7 |    6 3 |
               |  1 888 | 3 5063 |
               |  11 67 |  18 33 |  30 00
---------------+--------+--------+
             3 |      4 |      7 |     11
               |   7 15 |   3 85 |
               | 1 3878 | 2 5773 |
               |   6 67 |  11 67 |  18 33
---------------+--------+--------+
Total                39       21       60
                  65 00    35 00   100 00

Frequency Missing = 11

         STATISTICS FOR TABLE OF RINF11 BY EMP12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      18 097     0 000
Likelihood Ratio Chi-Square    2      19 504     0 000
Mantel-Haenszel Chi-Square     1      14 802     0 000
Phi Coefficient                        0 549
Contingency Coefficient                0 481
Cramer's V                             0 549

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
              TABLE OF RINF12 BY EMP12

RINF12         EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     36 |     13 |     49
               | 33 127 | 15 873 |
               | 0 2492 | 0 5201 |
               |  50 70 |  18 31 |  69 01
---------------+--------+--------+
             2 |     10 |      3 |     13
               | 8 7887 | 4 2113 |
               | 0 1669 | 0 3484 |
               |  14 08 |   4 23 |  18 31
---------------+--------+--------+
             3 |      2 |      7 |      9
               | 6 0845 | 2 9155 |
               | 2 7419 | 5 7223 |
               |   2 82 |   9 86 |  12 68
---------------+--------+--------+
Total                48       23       71
                  67 61    32 39   100 00

       STATISTICS FOR TABLE OF RINF12 BY EMP12

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     2     9 749      0 008
Likelihood Ratio Chi-Square    2     9 156      0 010
Mantel-Haenszel Chi-Square     1     6 145      0 013
Phi Coefficient                      0 371
Contingency Coefficient              0 347
Cramer's V                           0 371

Sample Size = 71
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF13 BY EMP12

INF13          EMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     11 |     17 |     28
               |  18 93 | 9 0704 |
               | 3 3217 | 6 9322 |
               |  15 49 |  23 94 |  39 44
---------------+--------+--------+
             2 |     37 |      6 |     43
               |  29 07 |  13 93 |
               |  2 163 |  4 514 |
               |  52 11 |   8 45 |  60 56
---------------+--------+--------+
Total                48       23       71
                  67 61    32 39   100 00

       STATISTICS FOR TABLE OF INF13 BY EMP12

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     1    16 931      0 000
Likelihood Ratio Chi-Square    1    17 158      0 000
Continuity Adj  Chi-Square     1    14 863      0 000
Mantel-Haenszel Chi-Square     1    16 692      0 000
Fisher's Exact Test (Left)                  5 45E-05
                    (Right)                    1 000
                    (2-Tail)                6 60E-05
Phi Coefficient                     -0 488
Contingency Coefficient              0 439
Cramer's V                          -0 488

Sample Size = 71
```

```
              TABLE OF INF9_2 BY EMP13

INF9_2         EMP13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     50 |     10 |     60
               | 46 479 | 13 521 |
               | 0 2668 |  0 917 |
               |  70 42 |  14 08 |  84 51
---------------+--------+--------+
             1 |      5 |      6 |     11
               | 8 5211 | 2 4789 |
               |  1 455 | 5 0016 |
               |   7 04 |   8 45 |  15 49
---------------+--------+--------+
Total                55       16       71
                  77 46    22 54   100 00

       STATISTICS FOR TABLE OF INF9_2 BY EMP13

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     1     7 640      0 006
Likelihood Ratio Chi-Square    1     6 546      0 011
Continuity Adj  Chi-Square     1     5 625      0 018
Mantel-Haenszel Chi-Square     1     7 533      0 006
Fisher's Exact Test (Left)                      0 998
                    (Right)                     0 013
                    (2-Tail)                    0 013
Phi Coefficient                      0 328
Contingency Coefficient              0 312
Cramer's V                           0 328

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY EMP13

RINF10         EMP13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               | 21 109 | 5 8909 |
               | 0 7172 | 2 5699 |
               |  45 45 |   3 64 |  49 09
---------------+--------+--------+
             2 |     12 |      7 |     19
               | 14 855 | 4 1455 |
               | 0 5485 | 1 9656 |
               |  21 82 |  12 73 |  34 55
---------------+--------+--------+
             3 |      6 |      3 |      9
               | 7 0364 | 1 9636 |
               | 0 1526 |  0 547 |
               |  10 91 |   5 45 |  16 36
---------------+--------+--------+
Total                43       12       55
                  78 18    21 82   100 00

Frequency Missing = 16

       STATISTICS FOR TABLE OF RINF10 BY EMP13

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     2     6 501      0 039
Likelihood Ratio Chi-Square    2     6 981      0 030
Mantel-Haenszel Chi-Square     1     4 641      0 031
Phi Coefficient                      0 344
Contingency Coefficient              0 325
Cramer's V                           0 344

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF11 BY EMP13

      RINF11            EMP13

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     1 |     29 |      2 |     31
                       | 24 283 | 6 7167 |
                       | 0 9161 | 3 3122 |
                       |  48 33 |   3 33 |  51 67
      -----------------+--------+--------+
                     2 |     10 |      8 |     18
                       |   14 1 |    3 9 |
                       | 1 1922 | 4 3103 |
                       |  16 67 |  13 33 |  30 00
      -----------------+--------+--------+
                     3 |      8 |      3 |     11
                       | 8 6167 | 2 3833 |
                       | 0 0441 | 0 1596 |
                       |  13 33 |   5 00 |  18 33
      -----------------+--------+--------+
      Total                 47       13       60
                         78 33    21 67   100 00

      Frequency Missing = 11


        STATISTICS FOR TABLE OF RINF11 BY EMP13

Statistic                      DF      Value       Prob
---------------------------------------------------------
Chi-Square                      2      9 934      0 007
Likelihood Ratio Chi-Square     2     10 266      0 006
Mantel-Haenszel Chi-Square      1      4 664      0 031
Phi Coefficient                        0 407
Contingency Coefficient                0 377
Cramer's V                             0 407

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY EMP13

      INF13             EMP13

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     1 |     18 |     10 |     28
                       |  21 69 | 6 3099 |
                       | 0 6278 | 2 1581 |
                       |  25 35 |  14 08 |  39 44
      -----------------+--------+--------+
                     2 |     37 |      6 |     43
                       |  33 31 | 9 6901 |
                       | 0 4088 | 1 4053 |
                       |  52 11 |   8 45 |  60 56
      -----------------+--------+--------+
      Total                 55       16       71
                         77 46    22 54   100 00


        STATISTICS FOR TABLE OF INF13 BY EMP13

Statistic                      DF      Value       Prob
---------------------------------------------------------
Chi-Square                      1      4 600      0 032
Likelihood Ratio Chi-Square     1      4 519      0 034
Continuity Adj  Chi-Square      1      3 438      0 064
Mantel-Haenszel Chi-Square      1      4 535      0 033
Fisher's Exact Test (Left)                        0 033
                    (Right)                       0 992
                    (2-Tail)                      0 043
Phi Coefficient                       -0 255
Contingency Coefficient                0 247
Cramer's V                            -0 255

Sample Size = 71
```

```
                TABLE OF INF5_5 BY EMP14

      INF5_5            EMP14

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     0 |     55 |     10 |     65
                       | 53 099 | 11 901 |
                       | 0 0681 | 0 3038 |
                       |  77 46 |  14 08 |  91 55
      -----------------+--------+--------+
                     1 |      3 |      3 |      6
                       | 4 9014 | 1 0986 |
                       | 0 7376 | 3 2909 |
                       |   4 23 |   4 23 |   8 45
      -----------------+--------+--------+
      Total                 58       13       71
                         81 69    18 31   100 00


        STATISTICS FOR TABLE OF INF5_5 BY EMP14

Statistic                      DF      Value       Prob
---------------------------------------------------------
Chi-Square                      1      4 400      0 036
Likelihood Ratio Chi-Square     1      3 471      0 062
Continuity Adj  Chi-Square      1      2 390      0 122
Mantel-Haenszel Chi-Square      1      4 338      0 037
Fisher's Exact Test (Left)                        0 991
                    (Right)                       0 070
                    (2-Tail)                      0 070
Phi Coefficient                        0 249
Contingency Coefficient                0 242
Cramer's V                             0 249

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_7 BY EMP14

      INF5_7            EMP14

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     0 |     58 |     12 |     70
                       | 57 183 | 12 817 |
                       | 0 0117 | 0 0521 |
                       |  81 69 |  16 90 |  98 59
      -----------------+--------+--------+
                     1 |      0 |      1 |      1
                       | 0 8169 | 0 1831 |
                       | 0 8169 | 3 6446 |
                       |   0 00 |   1 41 |   1 41
      -----------------+--------+--------+
      Total                 58       13       71
                         81 69    18 31   100 00


        STATISTICS FOR TABLE OF INF5_7 BY EMP14

Statistic                      DF      Value       Prob
---------------------------------------------------------
Chi-Square                      1      4 525      0 033
Likelihood Ratio Chi-Square     1      3 460      0 063
Continuity Adj  Chi-Square      1      0 681      0 409
Mantel-Haenszel Chi-Square      1      4 462      0 035
Fisher's Exact Test (Left)                        1 000
                    (Right)                       0 183
                    (2-Tail)                      0 183
Phi Coefficient                        0 252
Contingency Coefficient                0 245
Cramer's V                             0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_9 BY EMP14

     INF5_9          EMP14

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     58 |     12 |     70
                    | 57 183 | 12 817 |
                    | 0 0117 | 0 0521 |
                    |  81 69 |  16 90 |  98 59
     ---------------+--------+--------+
                  1 |      0 |      1 |      1
                    | 0 8169 | 0 1831 |
                    | 0 8169 | 3 6446 |
                    |   0 00 |   1 41 |   1 41
     ---------------+--------+--------+
     Total               58       13       71
                      81 69    18 31   100 00

          STATISTICS FOR TABLE OF INF5_9 BY EMP14

Statistic                          DF     Value        Prob
------------------------------------------------------------
Chi-Square                          1     4 525       0 033
Likelihood Ratio Chi-Square         1     3 460       0 063
Continuity Adj  Chi-Square          1     0 681       0 409
Mantel-Haenszel Chi-Square          1     4 462       0 035
Fisher's Exact Test (Left)                            1 000
                    (Right)                           0 183
                    (2-Tail)                          0 183
Phi Coefficient                           0 252
Contingency Coefficient                   0 245
Cramer's V                                0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY EMP16

     INF5_5          EMP16

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     56 |      9 |     65
                    | 54 014 | 10 986 |
                    |  0 073 |  0 359 |
                    |  78 87 |  12 68 |  91 55
     ---------------+--------+--------+
                  1 |      3 |      3 |      6
                    | 4 9859 | 1 0141 |
                    |  0 791 | 3 8891 |
                    |   4 23 |   4 23 |   8 45
     ---------------+--------+--------+
     Total               59       12       71
                      83 10    16 90   100 00

          STATISTICS FOR TABLE OF INF5_5 BY EMP16

Statistic                          DF     Value        Prob
------------------------------------------------------------
Chi-Square                          1     5 112       0 024
Likelihood Ratio Chi-Square         1     3 915       0 048
Continuity Adj  Chi-Square          1     2 862       0 091
Mantel-Haenszel Chi-Square          1     5 040       0 025
Fisher's Exact Test (Left)                            0 994
                    (Right)                           0 056
                    (2-Tail)                          0 056
Phi Coefficient                           0 268
Contingency Coefficient                   0 259
Cramer's V                                0 268

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_1 BY EMP15

     INF9_1          EMP15

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     19 |      7 |     26
                    | 14 282 | 11 718 |
                    | 1 5588 | 1 8998 |
                    |  26 76 |   9 86 |  36 62
     ---------------+--------+--------+
                  1 |     20 |     25 |     45
                    | 24 718 | 20 282 |
                    | 0 9006 | 1 0977 |
                    |  28 17 |  35 21 |  63 38
     ---------------+--------+--------+
     Total               39       32       71
                      54 93    45 07   100 00

          STATISTICS FOR TABLE OF INF9_1 BY EMP15

Statistic                          DF     Value        Prob
------------------------------------------------------------
Chi-Square                          1     5 457       0 019
Likelihood Ratio Chi-Square         1     5 619       0 018
Continuity Adj  Chi-Square          1     4 362       0 037
Mantel-Haenszel Chi-Square          1     5 380       0 020
Fisher's Exact Test (Left)                            0 996
                    (Right)                           0 018
                    (2-Tail)                          0 026
Phi Coefficient                           0 277
Contingency Coefficient                   0 267
Cramer's V                                0 277

Sample Size = 71
```

```
                TABLE OF INF9_3 BY EMP16

     INF9_3          EMP16

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     56 |      9 |     65
                    | 54 014 | 10 986 |
                    |  0 073 |  0 359 |
                    |  78 87 |  12 68 |  91 55
     ---------------+--------+--------+
                  1 |      3 |      3 |      6
                    | 4 9859 | 1 0141 |
                    |  0 791 | 3 8891 |
                    |   4 23 |   4 23 |   8 45
     ---------------+--------+--------+
     Total               59       12       71
                      83 10    16 90   100 00

          STATISTICS FOR TABLE OF INF9_3 BY EMP16

Statistic                          DF     Value        Prob
------------------------------------------------------------
Chi-Square                          1     5 112       0 024
Likelihood Ratio Chi-Square         1     3 915       0 048
Continuity Adj  Chi-Square          1     2 862       0 091
Mantel-Haenszel Chi-Square          1     5 040       0 025
Fisher's Exact Test (Left)                            0 994
                    (Right)                           0 056
                    (2-Tail)                          0 056
Phi Coefficient                           0 268
Contingency Coefficient                   0 259
Cramer's V                                0 268

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY EMP16

INF13              EMP16

Frequency         |
Expected          |
Cell Chi-Square   |
Percent           |       0|       1|  Total
------------------+--------+--------+
                1 |     20 |      8 |     28
                  | 23 268 | 4 7324 |
                  | 0 4589 | 2 2562 |
                  |  28 17 |  11 27 |  39 44
------------------+--------+--------+
                2 |     39 |      4 |     43
                  | 35 732 | 7 2676 |
                  | 0 2988 | 1 4692 |
                  |  54 93 |   5 63 |  60 56
------------------+--------+--------+
Total                  59       12       71
                    83 10    16 90   100 00


        STATISTICS FOR TABLE OF INF13 BY EMP16

Statistic                        DF      Value        Prob
------------------------------------------------------------
Chi-Square                        1      4 483       0 034
Likelihood Ratio Chi-Square       1      4 395       0 036
Continuity Adj  Chi-Square        1      3 216       0 073
Mantel-Haenszel Chi-Square        1      4 420       0 036
Fisher's Exact Test (Left)                           0 038
                    (Right)                          0 992
                    (2-Tail)                         0 051
Phi Coefficient                         -0 251
Contingency Coefficient                  0 244
Cramer's V                              -0 251

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY EMP17

INF5_5             EMP17

Frequency         |
Expected          |
Cell Chi-Square   |
Percent           |       0|       1|  Total
------------------+--------+--------+
                0 |     34 |     31 |     65
                  | 31 127 | 33 873 |
                  | 0 2652 | 0 2437 |
                  |  47 89 |  43 66 |  91 55
------------------+--------+--------+
                1 |      0 |      6 |      6
                  | 2 8732 | 3 1268 |
                  | 2 8732 | 2 6403 |
                  |   0 00 |   8 45 |   8 45
------------------+--------+--------+
Total                  34       37       71
                    47 89    52 11   100 00

       STATISTICS FOR TABLE OF INF5_5 BY EMP17

Statistic                        DF      Value        Prob
------------------------------------------------------------
Chi-Square                        1      6 022       0 014
Likelihood Ratio Chi-Square       1      8 329       0 004
Continuity Adj  Chi-Square        1      4 109       0 043
Mantel-Haenszel Chi-Square        1      5 938       0 015
Fisher's Exact Test (Left)                           1 000
                    (Right)                          0 016
                    (2-Tail)                         0 026
Phi Coefficient                          0 291
Contingency Coefficient                  0 280
Cramer's V                               0 291

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF15 BY EMP16

INF15              EMP16

Frequency         |
Expected          |
Cell Chi-Square   |
Percent           |       0|       1|  Total
------------------+--------+--------+
                2 |     22 |      0 |     22
                  | 18 388 | 3 6119 |
                  | 0 7095 | 3 6119 |
                  |  32 84 |   0 00 |  32 84
------------------+--------+--------+
                3 |     16 |      7 |     23
                  | 19 224 | 3 7761 |
                  | 0 5407 | 2 7524 |
                  |  23 88 |  10 45 |  34 33
------------------+--------+--------+
                4 |      9 |      1 |     10
                  | 8 3582 | 1 6418 |
                  | 0 0493 | 0 2509 |
                  |  13 43 |   1 49 |  14 93
------------------+--------+--------+
                5 |      9 |      3 |     12
                  |  10 03 | 1 9701 |
                  | 0 1057 | 0 5383 |
                  |  13 43 |   4 48 |  17 91
------------------+--------+--------+
Total                  56       11       67
                    83 58    16 42   100 00

Frequency Missing = 4

        STATISTICS FOR TABLE OF INF15 BY EMP16

Statistic                        DF      Value        Prob
------------------------------------------------------------
Chi-Square                        3      8 559       0 036
Likelihood Ratio Chi-Square       3     11 571       0 009
Mantel-Haenszel Chi-Square        1      2 333       0 127
Phi Coefficient                          0 357
Contingency Coefficient                  0 337
Cramer's V                               0 357

Effective Sample Size = 67
Frequency Missing = 4
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF6 BY EMP17

RINF6              EMP17

Frequency         |
Expected          |
Cell Chi-Square   |
Percent           |       0|       1|  Total
------------------+--------+--------+
ADM               |      3 |      0 |      3
                  | 1 4783 | 1 5217 |
                  | 1 5665 | 1 5217 |
                  |   4 35 |   0 00 |   4 35
------------------+--------+--------+
DHD               |     16 |     28 |     44
                  | 21 681 | 22 319 |
                  | 1 4886 | 1 4461 |
                  |  23 19 |  40 58 |  63 77
------------------+--------+--------+
DIET              |      3 |      2 |      5
                  | 2 4638 | 2 5362 |
                  | 0 1167 | 0 1134 |
                  |   4 35 |   2 90 |   7 25
------------------+--------+--------+
MGR               |     12 |      5 |     17
                  | 8 3768 | 8 6232 |
                  | 1 5671 | 1 5223 |
                  |  17 39 |   7 25 |  24 64
------------------+--------+--------+
Total                  34       35       69
                    49 28    50 72   100 00

Frequency Missing = 2

        STATISTICS FOR TABLE OF RINF6 BY EMP17

Statistic                        DF      Value        Prob
------------------------------------------------------------
Chi-Square                        3      9 343       0 025
Likelihood Ratio Chi-Square       3     10 630       0 014
Mantel-Haenszel Chi-Square        1      2 701       0 100
Phi Coefficient                          0 368
Contingency Coefficient                  0 345
Cramer's V                               0 368

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF RINF10 BY EMP17

RINF10            EMP17

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     19 |      8 |     27
                | 13 745 | 13 255 |
                | 2 0087 | 2 0831 |
                |  34 55 |  14 55 |  49 09
----------------+--------+--------+
              2 |      6 |     13 |     19
                | 9 6727 | 9 3273 |
                | 1 3945 | 1 4462 |
                |  10 91 |  23 64 |  34 55
----------------+--------+--------+
              3 |      3 |      6 |      9
                | 4 5818 | 4 4182 |
                | 0 5461 | 0 5663 |
                |   5 45 |  10 91 |  16 36
----------------+--------+--------+
Total                 28       27       55
                   50 91    49 09   100 00

Frequency Missing = 16
```

```
              STATISTICS FOR TABLE OF RINF10 BY EMP17

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      2       8 045      0 018
Likelihood Ratio Chi-Square     2       8 256      0 016
Mantel-Haenszel Chi-Square      1       6 098      0 014
Phi Coefficient                         0 382
Contingency Coefficient                 0 357
Cramer's V                              0 382

Effective Sample Size = 55
Frequency Missing = 16
WARNING  23% of the data are missing
WARNING  33% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF RINF11 BY EMP17

RINF11            EMP17

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     20 |     11 |     31
                | 14 467 | 16 533 |
                | 2 1164 | 1 8519 |
                |  33 33 |  18 33 |  51 67
----------------+--------+--------+
              2 |      4 |     14 |     18
                |    8 4 |    9 6 |
                | 2 3048 | 2 0167 |
                |   6 67 |  23 33 |  30 00
----------------+--------+--------+
              3 |      4 |      7 |     11
                | 5 1333 | 5 8667 |
                | 0 2502 | 0 2189 |
                |   6 67 |  11 67 |  18 33
----------------+--------+--------+
Total                 28       32       60
                   46 67    53 33   100 00

Frequency Missing = 11
```

```
              STATISTICS FOR TABLE OF RINF11 BY EMP17

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      2       8 759      0 013
Likelihood Ratio Chi-Square     2       9 097      0 011
Mantel-Haenszel Chi-Square      1       4 970      0 026
Phi Coefficient                         0 382
Contingency Coefficient                 0 357
Cramer's V                              0 382

Effective Sample Size = 60
Frequency Missing = 11
WARNING  15% of the data are missing
```

```
                  TABLE OF INF13 BY EMP17

INF13             EMP17

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |      8 |     20 |     28
                | 13 408 | 14 592 |
                | 2 1816 | 2 0047 |
                |  11 27 |  28 17 |  39 44
----------------+--------+--------+
              2 |     26 |     17 |     43
                | 20 592 | 22 408 |
                | 1 4206 | 1 3054 |
                |  36 62 |  23 94 |  60 56
----------------+--------+--------+
Total                 34       37       71
                   47 89    52 11   100 00
```

```
              STATISTICS FOR TABLE OF INF13 BY EMP17

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      1       6 912      0 009
Likelihood Ratio Chi-Square     1       7 084      0 008
Continuity Adj  Chi-Square      1       5 693      0 017
Mantel-Haenszel Chi-Square      1       6 815      0 009
Fisher's Exact Test (Left)                      8 07E-03
                    (Right)                        0 998
                    (2-Tail)                       0 014
Phi Coefficient                        -0 312
Contingency Coefficient                 0 298
Cramer's V                             -0 312

Sample Size = 71
```

```
                  TABLE OF INF5_1 BY EMP18

INF5_1            EMP18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     29 |      8 |     37
                | 24 493 | 12 507 |
                | 0 8294 | 1 6242 |
                |  40 85 |  11 27 |  52 11
----------------+--------+--------+
              1 |     18 |     16 |     34
                | 22 507 | 11 493 |
                | 0 9025 | 1 7675 |
                |  25 35 |  22 54 |  47 89
----------------+--------+--------+
Total                 47       24       71
                   66 20    33 80   100 00
```

```
              STATISTICS FOR TABLE OF INF5_1 BY EMP18

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      1       5 124      0 024
Likelihood Ratio Chi-Square     1       5 190      0 023
Continuity Adj  Chi-Square      1       4 050      0 044
Mantel-Haenszel Chi-Square      1       5 051      0 025
Fisher's Exact Test (Left)                         0 994
                    (Right)                        0 022
                    (2-Tail)                       0 027
Phi Coefficient                         0 269
Contingency Coefficient                 0 259
Cramer's V                              0 269

Sample Size = 71
```

```
                TABLE OF INF5_2 BY EMP18

INF5_2          EMP18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
               0 |     30 |      8 |     38
                 | 25 155 | 12 845 |
                 | 0 9332 | 1 8275 |
                 |  42 25 |  11 27 |  53 52
----------------+--------+--------+
               1 |     17 |     16 |     33
                 | 21 845 | 11 155 |
                 | 1 0746 | 2 1044 |
                 |  23 94 |  22 54 |  46 48
----------------+--------+--------+
Total                 47       24       71
                   66 20    33 80   100 00


           STATISTICS FOR TABLE OF INF5_2 BY EMP18

Statistic                      DF      Value       Prob
--------------------------------------------------------
Chi-Square                      1      5 940      0 015
Likelihood Ratio Chi-Square     1      6 009      0 014
Continuity Adj  Chi-Square      1      4 777      0 029
Mantel-Haenszel Chi-Square      1      5 856      0 016
Fisher's Exact Test (Left)                        0 997
                    (Right)                       0 014
                    (2-Tail)                      0 023
Phi Coefficient                        0 289
Contingency Coefficient                0 278
Cramer's V                             0 289

Sample Size = 71
```

```
                TABLE OF INF5_4 BY EMP18

INF5_4          EMP18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
               0 |     37 |     12 |     49
                 | 32 437 | 16 563 |
                 |  0 642 | 1 2573 |
                 |  52 11 |  16 90 |  69 01
----------------+--------+--------+
               1 |     10 |     12 |     22
                 | 14 563 | 7 4366 |
                 | 1 4299 | 2 8003 |
                 |  14 08 |  16 90 |  30 99
----------------+--------+--------+
Total                 47       24       71
                   66 20    33 80   100 00


           STATISTICS FOR TABLE OF INF5_4 BY EMP18

Statistic                      DF      Value       Prob
--------------------------------------------------------
Chi-Square                      1      6 129      0 013
Likelihood Ratio Chi-Square     1      5 971      0 015
Continuity Adj  Chi-Square      1      4 860      0 027
Mantel-Haenszel Chi-Square      1      6 043      0 014
Fisher's Exact Test (Left)                        0 997
                    (Right)                       0 015
                    (2-Tail)                      0 017
Phi Coefficient                        0 294
Contingency Coefficient                0 282
Cramer's V                             0 294

Sample Size = 71
```

```
                TABLE OF INF5_8 BY EMP18

INF5_8          EMP18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
               0 |     47 |     22 |     69
                 | 45 676 | 23 324 |
                 | 0 0384 | 0 0752 |
                 |  66 20 |  30 99 |  97 18
----------------+--------+--------+
               1 |      0 |      2 |      2
                 | 1 3239 | 0 6761 |
                 | 1 3239 | 2 5927 |
                 |   0 00 |   2 82 |   2 82
----------------+--------+--------+
Total                 47       24       71
                   66 20    33 80   100 00


           STATISTICS FOR TABLE OF INF5_8 BY EMP18

Statistic                      DF      Value       Prob
--------------------------------------------------------
Chi-Square                      1      4 030      0 045
Likelihood Ratio Chi-Square     1      4 453      0 035
Continuity Adj  Chi-Square      1      1 561      0 212
Mantel-Haenszel Chi-Square      1      3 973      0 046
Fisher's Exact Test (Left)                        1 000
                    (Right)                       0 111
                    (2-Tail)                      0 111
Phi Coefficient                        0 238
Contingency Coefficient                0 232
Cramer's V                             0 238

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF6 BY EMP18

RINF6           EMP18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
ADM              |      3 |      0 |      3
                 | 1 9565 | 1 0435 |
                 | 0 5565 | 1 0435 |
                 |   4 35 |   0 00 |   4 35
----------------+--------+--------+
DHD              |     22 |     22 |     44
                 | 28 696 | 15 304 |
                 | 1 5623 | 2 9293 |
                 |  31 88 |  31 88 |  63 77
----------------+--------+--------+
DIET             |      5 |      0 |      5
                 | 3 2609 | 1 7391 |
                 | 0 9275 | 1 7391 |
                 |   7 25 |   0 00 |   7 25
----------------+--------+--------+
MGR              |     15 |      2 |     17
                 | 11 087 |  5 913 |
                 | 1 3811 | 2 5895 |
                 |  21 74 |   2 90 |  24 64
----------------+--------+--------+
Total                 45       24       69
                   65 22    34 78   100 00

Frequency Missing = 2

           STATISTICS FOR TABLE OF RINF6 BY EMP18

Statistic                      DF      Value       Prob
--------------------------------------------------------
Chi-Square                      3     12 729      0 005
Likelihood Ratio Chi-Square     3     15 848      0 001
Mantel-Haenszel Chi-Square      1      5 514      0 019
Phi Coefficient                        0 430
Contingency Coefficient                0 395
Cramer's V                             0 430

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_1 BY EMP18

      INF9_1          EMP18

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     21 |      5 |     26
                     | 17 211 | 8 7887 |
                     |  0 834 | 1 6333 |
                     |  29 58 |   7 04 |  36 62
      ---------------+--------+--------+
                   1 |     26 |     19 |     45
                     | 29 789 | 15 211 |
                     | 0 4819 | 0 9437 |
                     |  36 62 |  26 76 |  63 38
      ---------------+--------+--------+
      Total              47       24       71
                      66 20    33 80   100 00

           STATISTICS FOR TABLE OF INF9_1 BY EMP18

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       3 893     0 048
Likelihood Ratio Chi-Square    1       4 093     0 043
Continuity Adj  Chi-Square     1       2 933     0 087
Mantel-Haenszel Chi-Square     1       3 838     0 050
Fisher's Exact Test (Left)                       0 989
                    (Right)                      0 041
                    (2-Tail)                     0 069
Phi Coefficient                        0 234
Contingency Coefficient                0 228
Cramer's V                             0 234

Sample Size = 71
```

```
                TABLE OF INF9_4 BY EMP18

      INF9_4          EMP18

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     40 |     24 |     64
                     | 42 366 | 21 634 |
                     | 0 1322 | 0 2588 |
                     |  56 34 |  33 80 |  90 14
      ---------------+--------+--------+
                   1 |      7 |      0 |      7
                     | 4 6338 | 2 3662 |
                     | 1 2083 | 2 3662 |
                     |   9 86 |   0 00 |   9 86
      ---------------+--------+--------+
      Total              47       24       71
                      66 20    33 80   100 00

           STATISTICS FOR TABLE OF INF9_4 BY EMP18

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       3 965     0 046
Likelihood Ratio Chi-Square    1       6 160     0 013
Continuity Adj  Chi-Square     1       2 467     0 116
Mantel-Haenszel Chi-Square     1       3 910     0 048
Fisher's Exact Test (Left)                       0 047
                    (Right)                      1 000
                    (2-Tail)                     0 087
Phi Coefficient                       -0 236
Contingency Coefficient                0 230
Cramer's V                            -0 236

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY EMP18

      RINF10          EMP18

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     22 |      5 |     27
                     | 16 691 | 10 309 |
                     | 1 6887 | 2 7341 |
                     |  40 00 |   9 09 |  49 09
      ---------------+--------+--------+
                   2 |      7 |     12 |     19
                     | 11 745 | 7 2545 |
                     | 1 9173 | 3 1042 |
                     |  12 73 |  21 82 |  34 55
      ---------------+--------+--------+
                   3 |      5 |      4 |      9
                     | 5 5636 | 3 4364 |
                     | 0 0571 | 0 0924 |
                     |   9 09 |   7 27 |  16 36
      ---------------+--------+--------+
      Total              34       21       55
                      61 82    38 18   100 00

      Frequency Missing = 16

           STATISTICS FOR TABLE OF RINF10 BY EMP18

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       9 594     0 008
Likelihood Ratio Chi-Square    2       9 896     0 007
Mantel-Haenszel Chi-Square     1       4 765     0 029
Phi Coefficient                        0 418
Contingency Coefficient                0 385
Cramer's V                             0 418

Effective Sample Size = 55
Frequency Missing = 16
WARNING  23% of the data are missing
```

```
                TABLE OF RINF11 BY EMP18

      RINF11          EMP18

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     25 |      6 |     31
                     |  20 15 |  10 85 |
                     | 1 1674 |  2 168 |
                     |  41 67 |  10 00 |  51 67
      ---------------+--------+--------+
                   2 |      8 |     10 |     18
                     |   11 7 |    6 3 |
                     | 1 1701 |  2 173 |
                     |  13 33 |  16 67 |  30 00
      ---------------+--------+--------+
                   3 |      6 |      5 |     11
                     |   7 15 |   3 85 |
                     |  0 185 | 0 3435 |
                     |  10 00 |   8 33 |  18 33
      ---------------+--------+--------+
      Total              39       21       60
                      65 00    35 00   100 00

      Frequency Missing = 11

           STATISTICS FOR TABLE OF RINF11 BY EMP18

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       7 207     0 027
Likelihood Ratio Chi-Square    2       7 342     0 025
Mantel-Haenszel Chi-Square     1       4 404     0 036
Phi Coefficient                        0 347
Contingency Coefficient                0 327
Cramer's V                             0 347

Effective Sample Size = 60
Frequency Missing = 11
WARNING  15% of the data are missing
```

```
                 TABLE OF INF5_1 BY EMP19

          INF5_1          EMP19

          Frequency     |
          Expected      |
          Cell Chi-Square|
          Percent       |       0|       1|  Total
          --------------+--------+--------+
                      0 |     34 |      3 |     37
                        | 30 746 | 6 2535 |
                        | 0 3443 | 1 6927 |
                        | 47 89  |  4 23  |  52 11
          --------------+--------+--------+
                      1 |     25 |      9 |     34
                        | 28 254 | 5 7465 |
                        | 0 3747 | 1 8421 |
                        | 35 21  | 12 68  |  47 89
          --------------+--------+--------+
          Total               59       12       71
                            83 10    16 90   100 00

          STATISTICS FOR TABLE OF INF5_1 BY EMP19

   Statistic                        DF       Value        Prob
   ------------------------------------------------------------
   Chi-Square                        1       4 254       0 039
   Likelihood Ratio Chi-Square       1       4 391       0 036
   Continuity Adj  Chi-Square        1       3 047       0 081
   Mantel-Haenszel Chi-Square        1       4 194       0 041
   Fisher's Exact Test (Left)                            0 992
                       (Right)                           0 040
                       (2-Tail)                          0 057
   Phi Coefficient                           0 245
   Contingency Coefficient                   0 238
   Cramer's V                                0 245

   Sample Size = 71
```

```
                 TABLE OF INF5_3 BY EMP19

          INF5_3          EMP19

          Frequency     |
          Expected      |
          Cell Chi-Square|
          Percent       |       0|       1|  Total
          --------------+--------+--------+
                      0 |     59 |     11 |     70
                        | 58 169 | 11 831 |
                        | 0 0119 | 0 0584 |
                        | 83 10  | 15 49  |  98 59
          --------------+--------+--------+
                      1 |      0 |      1 |      1
                        | 0 831  | 0 169  |
                        | 0 831  | 4 0857 |
                        | 0 00   |  1 41  |   1 41
          --------------+--------+--------+
          Total               59       12       71
                            83 10    16 90   100 00

          STATISTICS FOR TABLE OF INF5_3 BY EMP19

   Statistic                        DF       Value        Prob
   ------------------------------------------------------------
   Chi-Square                        1       4 987       0 026
   Likelihood Ratio Chi-Square       1       3 627       0 057
   Continuity Adj  Chi-Square        1       0 791       0 374
   Mantel-Haenszel Chi-Square        1       4 917       0 027
   Fisher's Exact Test (Left)                            1 000
                       (Right)                           0 169
                       (2-Tail)                          0 169
   Phi Coefficient                           0 265
   Contingency Coefficient                   0 256
   Cramer's V                                0 265

   Sample Size = 71
   WARNING  50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_5 BY EMP19

          INF5_5          EMP19

          Frequency     |
          Expected      |
          Cell Chi-Square|
          Percent       |       0|       1|  Total
          --------------+--------+--------+
                      0 |     56 |      9 |     65
                        | 54 014 | 10 986 |
                        | 0 073  | 0 359  |
                        | 78 87  | 12 68  |  91 55
          --------------+--------+--------+
                      1 |      3 |      3 |      6
                        | 4 9859 | 1 0141 |
                        | 0 791  | 3 8891 |
                        |  4 23  |  4 23  |   8 45
          --------------+--------+--------+
          Total               59       12       71
                            83 10    16 90   100 00

          STATISTICS FOR TABLE OF INF5_5 BY EMP19

   Statistic                        DF       Value        Prob
   ------------------------------------------------------------
   Chi-Square                        1       5 112       0 024
   Likelihood Ratio Chi-Square       1       3 915       0 048
   Continuity Adj  Chi-Square        1       2 862       0 091
   Mantel-Haenszel Chi-Square        1       5 040       0 025
   Fisher's Exact Test (Left)                            0 994
                       (Right)                           0 056
                       (2-Tail)                          0 056
   Phi Coefficient                           0 268
   Contingency Coefficient                   0 259
   Cramer's V                                0 268

   Sample Size = 71
   WARNING  50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_9 BY EMP19

          INF5_9          EMP19

          Frequency     |
          Expected      |
          Cell Chi-Square|
          Percent       |       0|       1|  Total
          --------------+--------+--------+
                      0 |     59 |     11 |     70
                        | 58 169 | 11 831 |
                        | 0 0119 | 0 0584 |
                        | 83 10  | 15 49  |  98 59
          --------------+--------+--------+
                      1 |      0 |      1 |      1
                        | 0 831  | 0 169  |
                        | 0 831  | 4 0857 |
                        | 0 00   |  1 41  |   1 41
          --------------+--------+--------+
          Total               59       12       71
                            83 10    16 90   100 00

          STATISTICS FOR TABLE OF INF5_9 BY EMP19

   Statistic                        DF       Value        Prob
   ------------------------------------------------------------
   Chi-Square                        1       4 987       0 026
   Likelihood Ratio Chi-Square       1       3 627       0 057
   Continuity Adj  Chi-Square        1       0 791       0 374
   Mantel-Haenszel Chi-Square        1       4 917       0 027
   Fisher's Exact Test (Left)                            1 000
                       (Right)                           0 169
                       (2-Tail)                          0 169
   Phi Coefficient                           0 265
   Contingency Coefficient                   0 256
   Cramer's V                                0 265

   Sample Size = 71
   WARNING  50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF10 BY EMP19

RINF10             EMP19

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     25 |      2 |     27
                | 22 582 | 4 4182 |
                |  0 259 | 1 3235 |
                |  45 45 |   3 64 |  49 09
----------------+--------+--------+
              2 |     16 |      3 |     19
                | 15 891 | 3 1091 |
                | 0 0007 | 0 0038 |
                |  29 09 |   5 45 |  34 55
----------------+--------+--------+
              3 |      5 |      4 |      9
                | 7 5273 | 1 4727 |
                | 0 8485 | 4 3369 |
                |   9 09 |   7 27 |  16 36
----------------+--------+--------+
Total                 46        9      55
                   83 64    16 36  100 00

Frequency Missing = 16
```

```
          STATISTICS FOR TABLE OF RINF10 BY EMP19

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     2       6 773      0 034
Likelihood Ratio Chi-Square    2       5 823      0 054
Mantel-Haenszel Chi-Square     1       5 827      0 016
Phi Coefficient                        0 351
Contingency Coefficient                0 331
Cramer's V                             0 351

Effective Sample Size = 55
Frequency Missing = 16
WARNING  23% of the data are missing
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF12 BY EMP19

RINF12             EMP19

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     44 |      5 |     49
                | 40 718 | 8 2817 |
                | 0 2645 | 1 3004 |
                |  61 97 |   7 04 |  69 01
----------------+--------+--------+
              2 |     10 |      3 |     13
                | 10 803 | 2 1972 |
                | 0 0597 | 0 2933 |
                |  14 08 |   4 23 |  18 31
----------------+--------+--------+
              3 |      5 |      4 |      9
                | 7 4789 | 1 5211 |
                | 0 8216 | 4 0396 |
                |   7 04 |   5 63 |  12 68
----------------+--------+--------+
Total                 59       12      71
                   83 10    16 90  100 00
```

```
          STATISTICS FOR TABLE OF RINF12 BY EMP19

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     2       6 779      0 034
Likelihood Ratio Chi-Square    2       5 807      0 055
Mantel-Haenszel Chi-Square     1       6 568      0 010
Phi Coefficient                        0 309
Contingency Coefficient                0 295
Cramer's V                             0 309

Sample Size = 71
WARNING  33% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF9_4 BY EMP20

INF9_4             EMP20

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     11 |     53 |     64
                | 14 423 | 49 577 |
                | 0 8122 | 0 2363 |
                |  15 49 |  74 65 |  90 14
----------------+--------+--------+
              1 |      5 |      2 |      7
                | 1 5775 | 5 4225 |
                | 7 4257 | 2 1602 |
                |   7 04 |   2 82 |   9 86
----------------+--------+--------+
Total                 16       55      71
                   22 54    77 46  100 00
```

```
          STATISTICS FOR TABLE OF INF9_4 BY EMP20

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1      10 634      0 001
Likelihood Ratio Chi-Square    1       8 663      0 003
Continuity Adj  Chi-Square     1       7 754      0 005
Mantel-Haenszel Chi-Square     1      10 485      0 001
Fisher's Exact Test (Left)                     5 22E-03
                    (Right)                       1 000
                    (2-Tail)                   5 22E-03
Phi Coefficient                       -0 387
Contingency Coefficient                0 361
Cramer's V                            -0 387

Sample Size = 71
WARNING  25% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF9_5 BY EMP20

INF9_5             EMP20

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     10 |     48 |     58
                |  13 07 |  44 93 |
                | 0 7213 | 0 2098 |
                |  14 08 |  67 61 |  81 69
----------------+--------+--------+
              1 |      6 |      7 |     13
                | 2 9296 |  10 07 |
                |  3 218 | 0 9362 |
                |   8 45 |   9 86 |  18 31
----------------+--------+--------+
Total                 16       55      71
                   22 54    77 46  100 00
```

```
          STATISTICS FOR TABLE OF INF9_5 BY EMP20

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1       5 085      0 024
Likelihood Ratio Chi-Square    1       4 502      0 034
Continuity Adj  Chi-Square     1       3 564      0 059
Mantel-Haenszel Chi-Square     1       5 014      0 025
Fisher's Exact Test (Left)                        0 035
                    (Right)                       0 993
                    (2-Tail)                      0 059
Phi Coefficient                       -0 268
Contingency Coefficient                0 259
Cramer's V                            -0 268

Sample Size = 71
WARNING  25% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_1 BY EMP21

      INF5_1          EMP21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     34 |      3 |     37
                      | 30 746 | 6 2535 |
                      | 0 3443 | 1 6927 |
                      |  47 89 |   4 23 |  52 11
      ----------------+--------+--------+
                    1 |     25 |      9 |     34
                      | 28 254 | 5 7465 |
                      | 0 3747 | 1 8421 |
                      |  35 21 |  12 68 |  47 89
      ----------------+--------+--------+
      Total               59       12       71
                       83 10    16 90   100 00


           STATISTICS FOR TABLE OF INF5_1 BY EMP21

   Statistic                      DF       Value        Prob
   ---------------------------------------------------------
   Chi-Square                      1       4 254       0 039
   Likelihood Ratio Chi-Square     1       4 391       0 036
   Continuity Adj  Chi-Square      1       3 047       0 081
   Mantel-Haenszel Chi-Square      1       4 194       0 041
   Fisher's Exact Test (Left)                          0 992
                       (Right)                         0 040
                       (2-Tail)                        0 057
   Phi Coefficient                         0 245
   Contingency Coefficient                 0 238
   Cramer's V                              0 245

   Sample Size = 71
```

```
                TABLE OF INF5_2 BY EMP21

      INF5_2          EMP21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     35 |      3 |     38
                      | 31 577 | 6 4225 |
                      |  0 371 | 1 8239 |
                      |  49 30 |   4 23 |  53 52
      ----------------+--------+--------+
                    1 |     24 |      9 |     33
                      | 27 423 | 5 5775 |
                      | 0 4272 | 2 1002 |
                      |  33 80 |  12 68 |  46 48
      ----------------+--------+--------+
      Total               59       12       71
                       83 10    16 90   100 00


           STATISTICS FOR TABLE OF INF5_2 BY EMP21

   Statistic                      DF       Value        Prob
   ---------------------------------------------------------
   Chi-Square                      1       4 722       0 030
   Likelihood Ratio Chi-Square     1       4 850       0 028
   Continuity Adj  Chi-Square      1       3 443       0 064
   Mantel-Haenszel Chi-Square      1       4 656       0 031
   Fisher's Exact Test (Left)                          0 994
                       (Right)                         0 031
                       (2-Tail)                        0 054
   Phi Coefficient                         0 258
   Contingency Coefficient                 0 250
   Cramer's V                              0 258

   Sample Size = 71
```

```
                TABLE OF INF5_5 BY EMP21

      INF5_5          EMP21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     56 |      9 |     65
                      | 54 014 | 10 986 |
                      |  0 073 |  0 359 |
                      |  78 87 |  12 68 |  91 55
      ----------------+--------+--------+
                    1 |      3 |      3 |      6
                      | 4 9859 | 1 0141 |
                      |  0 791 | 3 8891 |
                      |   4 23 |   4 23 |   8 45
      ----------------+--------+--------+
      Total               59       12       71
                       83 10    16 90   100 00


           STATISTICS FOR TABLE OF INF5_5 BY EMP21

   Statistic                      DF       Value        Prob
   ---------------------------------------------------------
   Chi-Square                      1       5 112       0 024
   Likelihood Ratio Chi-Square     1       3 915       0 048
   Continuity Adj  Chi-Square      1       2 862       0 091
   Mantel-Haenszel Chi-Square      1       5 040       0 025
   Fisher's Exact Test (Left)                          0 994
                       (Right)                         0 056
                       (2-Tail)                        0 056
   Phi Coefficient                         0 268
   Contingency Coefficient                 0 259
   Cramer's V                              0 268

   Sample Size = 71
   WARNING   50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_7 BY EMP21

      INF5_7          EMP21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     59 |     11 |     70
                      | 58 169 | 11 831 |
                      | 0 0119 | 0 0584 |
                      |  83 10 |  15 49 |  98 59
      ----------------+--------+--------+
                    1 |      0 |      1 |      1
                      |  0 831 |  0 169 |
                      |  0 831 | 4 0857 |
                      |   0 00 |   1 41 |   1 41
      ----------------+--------+--------+
      Total               59       12       71
                       83 10    16 90   100 00


           STATISTICS FOR TABLE OF INF5_7 BY EMP21

   Statistic                      DF       Value        Prob
   ---------------------------------------------------------
   Chi-Square                      1       4 987       0 026
   Likelihood Ratio Chi-Square     1       3 627       0 057
   Continuity Adj  Chi-Square      1       0 791       0 374
   Mantel-Haenszel Chi-Square      1       4 917       0 027
   Fisher's Exact Test (Left)                          1 000
                       (Right)                         0 169
                       (2-Tail)                        0 169
   Phi Coefficient                         0 265
   Contingency Coefficient                 0 256
   Cramer's V                              0 265

   Sample Size = 71
   WARNING   50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF5_8 BY EMP21

          INF5_8           EMP21

          Frequency       |
          Expected        |
          Cell Chi-Square |
          Percent         |       0|       1|  Total
          ----------------+--------+--------+
                        0 |     59 |     10 |     69
                          | 57 338 | 11 662 |
                          | 0 0482 | 0 2369 |
                          | 83 10  |  14 08 |  97 18
          ----------------+--------+--------+
                        1 |      0 |      2 |      2
                          |  1 662 |  0 338 |
                          |  1 662 | 8 1714 |
                          |   0 00 |   2 82 |   2 82
          ----------------+--------+--------+
          Total               59       12       71
                            83 10    16 90   100 00


            STATISTICS FOR TABLE OF INF5_8 BY EMP21

     Statistic                     DF       Value      Prob
     ------------------------------------------------------
     Chi-Square                     1      10 118     0 001
     Likelihood Ratio Chi-Square    1       7 408     0 006
     Continuity Adj  Chi-Square     1       4 946     0 026
     Mantel-Haenszel Chi-Square     1       9 976     0 002
     Fisher's Exact Test (Left)                       1 000
                         (Right)                      0 027
                         (2-Tail)                     0 027
     Phi Coefficient                        0 378
     Contingency Coefficient                0 353
     Cramer's V                             0 378

     Sample Size = 71
     WARNING   50% of the cells have expected counts less
                   than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF5_9 BY EMP21

          INF5_9           EMP21

          Frequency       |
          Expected        |
          Cell Chi-Square |
          Percent         |       0|       1|  Total
          ----------------+--------+--------+
                        0 |     59 |     11 |     70
                          | 58 169 | 11 831 |
                          | 0 0119 | 0 0584 |
                          |  83 10 |  15 49 |  98 59
          ----------------+--------+--------+
                        1 |      0 |      1 |      1
                          |  0 831 |  0 169 |
                          |  0 831 | 4 0857 |
                          |   0 00 |   1 41 |   1 41
          ----------------+--------+--------+
          Total               59       12       71
                            83 10    16 90   100 00


            STATISTICS FOR TABLE OF INF5_9 BY EMP21

     Statistic                     DF       Value      Prob
     ------------------------------------------------------
     Chi-Square                     1       4 987     0 026
     Likelihood Ratio Chi-Square    1       3 627     0 057
     Continuity Adj  Chi-Square     1       0 791     0 374
     Mantel-Haenszel Chi-Square     1       4 917     0 027
     Fisher's Exact Test (Left)                       1 000
                         (Right)                      0 169
                         (2-Tail)                     0 169
     Phi Coefficient                        0 265
     Contingency Coefficient                0 256
     Cramer's V                             0 265

     Sample Size = 71
     WARNING   50% of the cells have expected counts less
                   than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF RINF10 BY EMP21

          RINF10           EMP21

          Frequency       |
          Expected        |
          Cell Chi-Square |
          Percent         |       0|       1|  Total
          ----------------+--------+--------+
                        1 |     26 |      1 |     27
                          | 23 073 | 3 9273 |
                          | 0 3714 | 2 1819 |
                          |  47 27 |   1 82 |  49 09
          ----------------+--------+--------+
                        2 |     13 |      6 |     19
                          | 16 236 | 2 7636 |
                          | 0 6451 |   3 79 |
                          |  23 64 |  10 91 |  34 55
          ----------------+--------+--------+
                        3 |      8 |      1 |      9
                          | 7 6909 | 1 3091 |
                          | 0 0124 |  0 073 |
                          |  14 55 |   1 82 |  16 36
          ----------------+--------+--------+
          Total               47        8       55
                            85 45    14 55   100 00

          Frequency Missing = 16


            STATISTICS FOR TABLE OF RINF10 BY EMP21

     Statistic                     DF       Value      Prob
     ------------------------------------------------------
     Chi-Square                     2       7 074     0 029
     Likelihood Ratio Chi-Square    2       7 090     0 029
     Mantel-Haenszel Chi-Square     1       1 798     0 180
     Phi Coefficient                        0 359
     Contingency Coefficient                0 338
     Cramer's V                             0 359

     Effective Sample Size = 55
     Frequency Missing = 16
     WARNING   23% of the data are missing
     WARNING   50% of the cells have expected counts less
                   than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF RINF11 BY EMP21

          RINF11           EMP21

          Frequency       |
          Expected        |
          Cell Chi-Square |
          Percent         |       0|       1|  Total
          ----------------+--------+--------+
                        1 |     30 |      1 |     31
                          | 25 833 | 5 1667 |
                          |  0 672 | 3 3602 |
                          |  50 00 |   1 67 |  51 67
          ----------------+--------+--------+
                        2 |     11 |      7 |     18
                          |     15 |      3 |
                          | 1 0667 | 5 3333 |
                          |  18 33 |  11 67 |  30 00
          ----------------+--------+--------+
                        3 |      9 |      2 |     11
                          | 9 1667 | 1 8333 |
                          |  0 003 | 0 0152 |
                          |  15 00 |   3 33 |  18 33
          ----------------+--------+--------+
          Total               50       10       60
                            83 33    16 67   100 00

          Frequency Missing = 11


            STATISTICS FOR TABLE OF RINF11 BY EMP21

     Statistic                     DF       Value      Prob
     ------------------------------------------------------
     Chi-Square                     2      10 450     0 005
     Likelihood Ratio Chi-Square    2      10 744     0 005
     Mantel-Haenszel Chi-Square     1       3 763     0 052
     Phi Coefficient                        0 417
     Contingency Coefficient                0 385
     Cramer's V                             0 417

     Effective Sample Size = 60
     Frequency Missing = 11
     WARNING   15% of the data are missing
     WARNING   33% of the cells have expected counts less
                   than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF13 BY EMP21

      INF13           EMP21

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     19 |      9 |     28
                     | 23 268 | 4 7324 |
                     | 0 7827 | 3 8485 |
                     |  26 76 |  12 68 |  39 44
      ---------------+--------+--------+
                   2 |     40 |      3 |     43
                     | 35 732 | 7 2676 |
                     | 0 5097 |  2 506 |
                     |  56 34 |   4 23 |  60 56
      ---------------+--------+--------+
      Total               59       12       71
                       83 10    16 90   100 00

          STATISTICS FOR TABLE OF INF13 BY EMP21

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       7 647     0 006
Likelihood Ratio Chi-Square    1       7 587     0 006
Continuity Adj  Chi-Square     1       5 960     0 015
Mantel-Haenszel Chi-Square     1       7 539     0 006
Fisher's Exact Test (Left)                    7 66E-03
                    (Right)                      0 999
                    (2-Tail)                  8 86E-03
Phi Coefficient                       -0 328
Contingency Coefficient                0 312
Cramer's V                            -0 328

Sample Size = 71
WARNING  25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF15 BY EMP21

      INF15           EMP21

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   2 |     21 |      1 |     22
                     | 18 388 | 3 6119 |
                     |  0 371 | 1 8888 |
                     |  31 34 |   1 49 |  32 84
      ---------------+--------+--------+
                   3 |     19 |      4 |     23
                     | 19 224 | 3 7761 |
                     | 0 0026 | 0 0133 |
                     |  28 36 |   5 97 |  34 33
      ---------------+--------+--------+
                   4 |      9 |      1 |     10
                     | 8 3582 | 1 6418 |
                     | 0 0493 | 0 2509 |
                     |  13 43 |   1 49 |  14 93
      ---------------+--------+--------+
                   5 |      7 |      5 |     12
                     |  10 03 | 1 9701 |
                     | 0 9153 | 4 6595 |
                     |  10 45 |   7 46 |  17 91
      ---------------+--------+--------+
      Total               56       11       67
                       83 58    16 42   100 00

      Frequency Missing = 4

          STATISTICS FOR TABLE OF INF15 BY EMP21

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3       8 151     0 043
Likelihood Ratio Chi-Square    3       7 644     0 054
Mantel-Haenszel Chi-Square     1       5 946     0 015
Phi Coefficient                        0 349
Contingency Coefficient                0 329
Cramer's V                             0 349

Effective Sample Size = 67
Frequency Missing = 4
WARNING  50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY EMP22

      INF1            EMP22

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   2 |     15 |     11 |     26
                     | 18 676 | 7 3239 |
                     | 0 7236 | 1 8451 |
                     |  21 13 |  15 49 |  36 62
      ---------------+--------+--------+
                   3 |     36 |      9 |     45
                     | 32 324 | 12 676 |
                     | 0 4181 | 1 0661 |
                     |  50 70 |  12 68 |  63 38
      ---------------+--------+--------+
      Total               51       20       71
                       71 83    28 17   100 00

          STATISTICS FOR TABLE OF INF1 BY EMP22

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 053     0 044
Likelihood Ratio Chi-Square    1       3 963     0 047
Continuity Adj  Chi-Square     1       3 025     0 082
Mantel-Haenszel Chi-Square     1       3 996     0 046
Fisher's Exact Test (Left)                       0 042
                    (Right)                      0 988
                    (2-Tail)                     0 058
Phi Coefficient                       -0 239
Contingency Coefficient                0 232
Cramer's V                            -0 239

Sample Size = 71
```

```
                TABLE OF INF5_4 BY EMP22

      INF5_4          EMP22

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     39 |     10 |     49
                     | 35 197 | 13 803 |
                     | 0 4109 | 1 0477 |
                     |  54 93 |  14 08 |  69 01
      ---------------+--------+--------+
                   1 |     12 |     10 |     22
                     | 15 803 | 6 1972 |
                     | 0 9151 | 2 3335 |
                     |  16 90 |  14 08 |  30 99
      ---------------+--------+--------+
      Total               51       20       71
                       71 83    28 17   100 00

          STATISTICS FOR TABLE OF INF5_4 BY EMP22

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 707     0 030
Likelihood Ratio Chi-Square    1       4 520     0 034
Continuity Adj  Chi-Square     1       3 551     0 060
Mantel-Haenszel Chi-Square     1       4 641     0 031
Fisher's Exact Test (Left)                       0 992
                    (Right)                      0 032
                    (2-Tail)                     0 045
Phi Coefficient                        0 257
Contingency Coefficient                0 249
Cramer's V                             0 257

Sample Size = 71
```

```
            TABLE OF RINF6 BY EMP22

RINF6           EMP22

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
ADM              |      3 |      0 |      3
                 | 2 1739 | 0 8261 |
                 | 0 3139 | 0 8261 |
                 |   4 35 |   0 00 |   4 35
-----------------+--------+--------+
DHD              |     27 |     17 |     44
                 | 31 884 | 12 116 |
                 | 0 7481 | 1 9688 |
                 |  39 13 |  24 64 |  63 77
-----------------+--------+--------+
DIET             |      4 |      1 |      5
                 | 3 6232 | 1 3768 |
                 | 0 0392 | 0 1031 |
                 |   5 80 |   1 45 |   7 25
-----------------+--------+--------+
MGR              |     16 |      1 |     17
                 | 12 319 | 4 6812 |
                 |    1 1 | 2 8948 |
                 |  23 19 |   1 45 |  24 64
-----------------+--------+--------+
Total                  50       19       69
                    72 46    27 54   100 00

Frequency Missing = 2

        STATISTICS FOR TABLE OF RINF6 BY EMP22

Statistic                      DF       Value      Prob
-------------------------------------------------------
Chi-Square                      3       7 994     0 046
Likelihood Ratio Chi-Square     3       9 901     0 019
Mantel-Haenszel Chi-Square      1       4 125     0 042
Phi Coefficient                         0 340
Contingency Coefficient                 0 322
Cramer's V                              0 340

Effective Sample Size = 69
Frequency Missing = 2
WARNING  63% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF13 BY EMP22

INF13           EMP22

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     16 |     12 |     28
                 | 20 113 | 7 8873 |
                 |  0 841 | 2 1445 |
                 |  22 54 |  16 90 |  39 44
-----------------+--------+--------+
               2 |     35 |      8 |     43
                 | 30 887 | 12 113 |
                 | 0 5476 | 1 3964 |
                 |  49 30 |  11 27 |  60 56
-----------------+--------+--------+
Total                  51       20       71
                    71 83    28 17   100 00

        STATISTICS FOR TABLE OF INF13 BY EMP22

Statistic                      DF       Value      Prob
-------------------------------------------------------
Chi-Square                      1       4 929     0 026
Likelihood Ratio Chi-Square     1       4 864     0 027
Continuity Adj  Chi-Square      1       3 804     0 051
Mantel-Haenszel Chi-Square      1       4 860     0 027
Fisher's Exact Test (Left)                        0 026
                    (Right)                       0 993
                    (2-Tail)                      0 033
Phi Coefficient                        -0 263
Contingency Coefficient                 0 255
Cramer's V                             -0 263

Sample Size = 71
```

```
            TABLE OF RINF10 BY EMP22

RINF10          EMP22

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     23 |      4 |     27
                 | 18 164 | 8 8364 |
                 | 1 2878 | 2 6471 |
                 |  41 82 |   7 27 |  49 09
-----------------+--------+--------+
               2 |      9 |     10 |     19
                 | 12 782 | 6 2182 |
                 | 1 1189 | 2 3001 |
                 |  16 36 |  18 18 |  34 55
-----------------+--------+--------+
               3 |      5 |      4 |      9
                 | 6 0545 | 2 9455 |
                 | 0 1837 | 0 3776 |
                 |   9 09 |   7 27 |  16 36
-----------------+--------+--------+
Total                  37       18       55
                    67 27    32 73   100 00

Frequency Missing = 16

        STATISTICS FOR TABLE OF RINF10 BY EMP22

Statistic                      DF       Value      Prob
-------------------------------------------------------
Chi-Square                      2       7 915     0 019
Likelihood Ratio Chi-Square     2       8 241     0 016
Mantel-Haenszel Chi-Square      1       5 140     0 023
Phi Coefficient                         0 379
Contingency Coefficient                 0 355
Cramer's V                              0 379

Effective Sample Size = 55
Frequency Missing = 16
WARNING  23% of the data are missing
```

```
            TABLE OF INF14 BY EMP22

INF14           EMP22

Frequency        |
Expected         |
Cell Chi-Square  |
Percent          |       0|       1|  Total
-----------------+--------+--------+
               1 |     21 |      6 |     27
                 | 16 463 | 10 537 |
                 | 1 2501 | 1 9533 |
                 |  51 22 |  14 63 |  65 85
-----------------+--------+--------+
               2 |      1 |      4 |      5
                 | 3 0488 | 1 9512 |
                 | 1 3768 | 2 1512 |
                 |   2 44 |   9 76 |  12 20
-----------------+--------+--------+
               3 |      2 |      3 |      5
                 | 3 0488 | 1 9512 |
                 | 0 3608 | 0 5637 |
                 |   4 88 |   7 32 |  12 20
-----------------+--------+--------+
               4 |      1 |      3 |      4
                 |  2 439 |  1 561 |
                 |  0 849 | 1 3266 |
                 |   2 44 |   7 32 |   9 76
-----------------+--------+--------+
Total                  25       16       41
                    60 98    39 02   100 00

Frequency Missing = 30

        STATISTICS FOR TABLE OF INF14 BY EMP22

Statistic                      DF       Value      Prob
-------------------------------------------------------
Chi-Square                      3       9 831     0 020
Likelihood Ratio Chi-Square     3      10 009     0 018
Mantel-Haenszel Chi-Square      1       6 795     0 009
Phi Coefficient                         0 490
Contingency Coefficient                 0 440
Cramer's V                              0 490

Effective Sample Size = 41
Frequency Missing = 30
WARNING  42% of the data are missing
WARNING  75% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_5 BY EMP23

INF5_5          EMP23

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     41 |     24 |     65
               | 38 451 | 26 549 |
               |  0 169 | 0 2448 |
               |  57 75 |  33 80 |  91 55
---------------+--------+--------+
             1 |      1 |      5 |      6
               | 3 5493 | 2 4507 |
               |  1 831 | 2 6519 |
               |   1 41 |   7 04 |   8 45
---------------+--------+--------+
Total               42       29       71
                 59 15    40 85   100 00


      STATISTICS FOR TABLE OF INF5_5 BY EMP23

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     1      4 897     0 027
Likelihood Ratio Chi-Square    1      5 016     0 025
Continuity Adj  Chi-Square     1      3 164     0 075
Mantel-Haenszel Chi-Square     1      4 828     0 028
Fisher's Exact Test (Left)                      0 997
                    (Right)                     0 038
                    (2-Tail)                    0 038
Phi Coefficient                       0 263
Contingency Coefficient               0 254
Cramer's V                            0 263

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_9 BY EMP24

INF5_9          EMP24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     62 |      8 |     70
               | 61 127 | 8 8732 |
               | 0 0125 | 0 0859 |
               |  87 32 |  11 27 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 8732 | 0 1268 |
               | 0 8732 | 6 0156 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total               62        9       71
                 87 32    12 68   100 00


      STATISTICS FOR TABLE OF INF5_9 BY EMP24

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     1      6 987     0 008
Likelihood Ratio Chi-Square    1      4 232     0 040
Continuity Adj  Chi-Square     1      1 276     0 259
Mantel-Haenszel Chi-Square     1      6 889     0 009
Fisher's Exact Test (Left)                      1 000
                    (Right)                     0 127
                    (2-Tail)                    0 127
Phi Coefficient                       0 314
Contingency Coefficient               0 299
Cramer's V                            0 314

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY EMP25

INF8            EMP25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     50 |     11 |     61
               | 46 394 | 14 606 |
               | 0 2802 | 0 8901 |
               |  70 42 |  15 49 |  85 92
---------------+--------+--------+
             2 |      4 |      6 |     10
               | 7 6056 | 2 3944 |
               | 1 7093 | 5 4297 |
               |   5 63 |   8 45 |  14 08
---------------+--------+--------+
Total               54       17       71
                 76 06    23 94   100 00


      STATISTICS FOR TABLE OF INF8 BY EMP25

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     1      8 309     0 004
Likelihood Ratio Chi-Square    1      7 130     0 008
Continuity Adj  Chi-Square     1      6 165     0 013
Mantel-Haenszel Chi-Square     1      8 192     0 004
Fisher's Exact Test (Left)                      0 999
                    (Right)                  9 60E-03
                    (2-Tail)                 9 60E-03
Phi Coefficient                       0 342
Contingency Coefficient               0 324
Cramer's V                            0 342

Sample Size = 71
WARNING  25% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_7 BY EMP25

INF9_7          EMP25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     52 |     14 |     66
               | 50 197 | 15 803 |
               | 0 0647 | 0 2057 |
               |  73 24 |  19 72 |  92 96
---------------+--------+--------+
             1 |      2 |      3 |      5
               | 3 8028 | 1 1972 |
               | 0 8547 | 2 7148 |
               |   2 82 |   4 23 |   7 04
---------------+--------+--------+
Total               54       17       71
                 76 06    23 94   100 00


      STATISTICS FOR TABLE OF INF9_7 BY EMP25

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     1      3 840     0 050
Likelihood Ratio Chi-Square    1      3 219     0 073
Continuity Adj  Chi-Square     1      2 005     0 157
Mantel-Haenszel Chi-Square     1      3 786     0 052
Fisher's Exact Test (Left)                      0 990
                    (Right)                     0 085
                    (2-Tail)                    0 085
Phi Coefficient                       0 233
Contingency Coefficient               0 227
Cramer's V                            0 233

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
           TABLE OF RINF10 BY EMP25

RINF10          EMP25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               | 19 636 | 7 3636 |
               | 1 4651 | 3 9068 |
               |  45 45 |   3 64 |  49 09
---------------+--------+--------+
             2 |     11 |      8 |     19
               | 13 818 | 5 1818 |
               | 0 5748 | 1 5327 |
               |  20 00 |  14 55 |  34 55
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 5455 | 2 4545 |
               | 0 9899 | 2 6397 |
               |   7 27 |   9 09 |  16 36
---------------+--------+--------+
Total               40       15       55
                 72 73    27 27   100 00

Frequency Missing = 16


       STATISTICS FOR TABLE OF RINF10 BY EMP25

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     2     11 109     0 004
Likelihood Ratio Chi-Square    2     11 967     0 003
Mantel-Haenszel Chi-Square     1     10 284     0 001
Phi Coefficient                       0 449
Contingency Coefficient               0 410
Cramer's V                            0 449

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
           TABLE OF RINF11 BY EMP25

RINF11          EMP25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     27 |      4 |     31
               |  23 25 |   7 75 |
               | 0 6048 | 1 8145 |
               |  45 00 |   6 67 |  51 67
---------------+--------+--------+
             2 |     14 |      4 |     18
               |   13 5 |    4 5 |
               | 0 0185 | 0 0556 |
               |  23 33 |   6 67 |  30 00
---------------+--------+--------+
             3 |      4 |      7 |     11
               |   8 25 |   2 75 |
               | 2 1894 | 6 5682 |
               |   6 67 |  11 67 |  18 33
---------------+--------+--------+
Total               45       15       60
                 75 00    25 00   100 00

Frequency Missing = 11


       STATISTICS FOR TABLE OF RINF11 BY EMP25

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     2     11 251     0 004
Likelihood Ratio Chi-Square    2     10 149     0 006
Mantel-Haenszel Chi-Square     1      9 499     0 002
Phi Coefficient                       0 433
Contingency Coefficient               0 397
Cramer's V                            0 433

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
           TABLE OF RINF12 BY EMP25

RINF12          EMP25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     42 |      7 |     49
               | 37 268 | 11 732 |
               | 0 6009 | 1 9089 |
               |  59 15 |   9 86 |  69 01
---------------+--------+--------+
             2 |      8 |      5 |     13
               | 9 8873 | 3 1127 |
               | 0 3603 | 1 1444 |
               |  11 27 |   7 04 |  18 31
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 8451 | 2 1549 |
               | 1 1825 | 3 7562 |
               |   5 63 |   7 04 |  12 68
---------------+--------+--------+
Total               54       17       71
                 76 06    23 94   100 00


       STATISTICS FOR TABLE OF RINF12 BY EMP25

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     2      8 953     0 011
Likelihood Ratio Chi-Square    2      8 281     0 016
Mantel-Haenszel Chi-Square     1      8 765     0 003
Phi Coefficient                       0 355
Contingency Coefficient               0 335
Cramer's V                            0 355

Sample Size = 71
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
           TABLE OF INF13 BY EMP25

INF13           EMP25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     16 |     12 |     28
               | 21 296 | 6 7042 |
               | 1 3169 | 4 1832 |
               |  22 54 |  16 90 |  39 44
---------------+--------+--------+
             2 |     38 |      5 |     43
               | 32 704 | 10 296 |
               | 0 8575 |  2 724 |
               |  53 52 |   7 04 |  60 56
---------------+--------+--------+
Total               54       17       71
                 76 06    23 94   100 00

       STATISTICS FOR TABLE OF INF13 BY EMP25

Statistic                     DF      Value        Prob
--------------------------------------------------------
Chi-Square                     1      9 082       0 003
Likelihood Ratio Chi-Square    1      9 006       0 003
Continuity Adj  Chi-Square     1      7 448       0 006
Mantel-Haenszel Chi-Square     1      8 954       0 003
Fisher's Exact Test (Left)                     3 32E-03
                    (Right)                       1 000
                    (2-Tail)                   4 08E-03
Phi Coefficient                      -0 358
Contingency Coefficient               0 337
Cramer's V                           -0 358

Sample Size = 71
```

```
                TABLE OF INF14 BY EMP25

INF14           EMP25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     24 |      3 |     27
               | 19 098 | 7 9024 |
               | 1 2585 | 3 0413 |
               |  58 54 |   7 32 |  65 85
---------------+--------+--------+
             2 |      0 |      5 |      5
               | 3 5366 | 1 4634 |
               | 3 5366 | 8 5467 |
               |   0 00 |  12 20 |  12 20
---------------+--------+--------+
             3 |      2 |      3 |      5
               | 3 5366 | 1 4634 |
               | 0 6676 | 1 6134 |
               |   4 88 |   7 32 |  12 20
---------------+--------+--------+
             4 |      3 |      1 |      4
               | 2 8293 | 1 1707 |
               | 0 0103 | 0 0249 |
               |   7 32 |   2 44 |   9 76
---------------+--------+--------+
Total                29       12       41
                  70 73    29 27   100 00

Frequency Missing = 30


        STATISTICS FOR TABLE OF INF14 BY EMP25

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      18 699     0 000
Likelihood Ratio Chi-Square    3      19 506     0 000
Mantel-Haenszel Chi-Square     1       4 054     0 044
Phi Coefficient                        0 675
Contingency Coefficient                0 560
Cramer's V                             0 675

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY EMP26

INF8            EMP26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     61 |      0 |     61
               | 60 141 | 0 8592 |
               | 0 0123 | 0 8592 |
               |  85 92 |   0 00 |  85 92
---------------+--------+--------+
             2 |      9 |      1 |     10
               | 9 8592 | 0 1408 |
               | 0 0749 | 5 2408 |
               |  12 68 |   1 41 |  14 08
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00

        STATISTICS FOR TABLE OF INF8 BY EMP26

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 187     0 013
Likelihood Ratio Chi-Square    1       4 010     0 045
Continuity Adj  Chi-Square     1       1 081     0 298
Mantel-Haenszel Chi-Square     1       6 100     0 014
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 141
                    (2-Tail)                     0 141
Phi Coefficient                        0 295
Contingency Coefficient                0 283
Cramer's V                             0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_7 BY EMP26

INF5_7          EMP26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     70 |      0 |     70
               | 69 014 | 0 9859 |
               | 0 0141 | 0 9859 |
               |  98 59 |   0 00 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9859 | 0 0141 |
               | 0 9859 | 69 014 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00

        STATISTICS FOR TABLE OF INF5_7 BY EMP26

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      71 000     0 000
Likelihood Ratio Chi-Square    1      10 511     0 001
Continuity Adj  Chi-Square     1      17 246     0 000
Mantel-Haenszel Chi-Square     1      70 000     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 014
                    (2-Tail)                     0 014
Phi Coefficient                        1 000
Contingency Coefficient                0 707
Cramer's V                             1 000

Sample Size = 71
WARNING   75% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_7 BY EMP27

INF5_7          EMP27

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     70 |      0 |     70
               | 69 014 | 0 9859 |
               | 0 0141 | 0 9859 |
               |  98 59 |   0 00 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9859 | 0 0141 |
               | 0 9859 | 69 014 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total                70        1       71
                  98 59     1 41   100 00

        STATISTICS FOR TABLE OF INF5_7 BY EMP27

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      71 000     0 000
Likelihood Ratio Chi-Square    1      10 511     0 001
Continuity Adj  Chi-Square     1      17 246     0 000
Mantel-Haenszel Chi-Square     1      70 000     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 014
                    (2-Tail)                     0 014
Phi Coefficient                        1 000
Contingency Coefficient                0 707
Cramer's V                             1 000

Sample Size = 71
WARNING   75% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY EMP27

      INF8           EMP27

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     61 |      0 |     61
                     | 60 141 | 0 8592 |
                     | 0 0123 | 0 8592 |
                     |  85 92 |   0 00 |  85 92
      ---------------+--------+--------+
                   2 |      9 |      1 |     10
                     | 9 8592 | 0 1408 |
                     | 0 0749 | 5 2408 |
                     |  12 68 |   1 41 |  14 08
      ---------------+--------+--------+
      Total               70        1      71
                       98 59     1 41  100 00


         STATISTICS FOR TABLE OF INF8 BY EMP27

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 187     0 013
Likelihood Ratio Chi-Square    1       4 010     0 045
Continuity Adj  Chi-Square     1       1 081     0 298
Mantel-Haenszel Chi-Square     1       6 100     0 014
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 141
                    (2-Tail)                     0 141
Phi Coefficient                        0 295
Contingency Coefficient                0 283
Cramer's V                             0 295

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF14 BY EMP28

      INF14          EMP28

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     27 |      0 |     27
                     | 26 341 | 0 6585 |
                     | 0 0165 | 0 6585 |
                     |  65 85 |   0 00 |  65 85
      ---------------+--------+--------+
                   2 |      5 |      0 |      5
                     |  4 878 |  0 122 |
                     |  0 003 |  0 122 |
                     |  12 20 |   0 00 |  12 20
      ---------------+--------+--------+
                   3 |      5 |      0 |      5
                     |  4 878 |  0 122 |
                     |  0 003 |  0 122 |
                     |  12 20 |   0 00 |  12 20
      ---------------+--------+--------+
                   4 |      3 |      1 |      4
                     | 3 9024 | 0 0976 |
                     | 0 2087 | 8 3476 |
                     |   7 32 |   2 44 |   9 76
      ---------------+--------+--------+
      Total               40        1      41
                       97 56     2 44  100 00

      Frequency Missing = 30

         STATISTICS FOR TABLE OF INF14 BY EMP28

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3       9 481     0 024
Likelihood Ratio Chi-Square    3       4 904     0 179
Mantel-Haenszel Chi-Square     1       5 201     0 023
Phi Coefficient                        0 481
Contingency Coefficient                0 433
Cramer's V                             0 481

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_5 BY EMP28

      INF9_5         EMP28

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     58 |      0 |     58
                     | 57 183 | 0 8169 |
                     | 0 0117 | 0 8169 |
                     |  81 69 |   0 00 |  81 69
      ---------------+--------+--------+
                   1 |     12 |      1 |     13
                     | 12 817 | 0 1831 |
                     | 0 0521 | 3 6446 |
                     |  16 90 |   1 41 |  18 31
      ---------------+--------+--------+
      Total               70        1      71
                       98 59     1 41  100 00


         STATISTICS FOR TABLE OF INF9_5 BY EMP28

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 525     0 033
Likelihood Ratio Chi-Square    1       3 460     0 063
Continuity Adj  Chi-Square     1       0 681     0 409
Mantel-Haenszel Chi-Square     1       4 462     0 035
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 183
                    (2-Tail)                     0 183
Phi Coefficient                        0 252
Contingency Coefficient                0 245
Cramer's V                             0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_8 BY EMP30

      INF9_8         EMP30

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     68 |      0 |     68
                     | 67 042 | 0 9577 |
                     | 0 0137 | 0 9577 |
                     |  95 77 |   0 00 |  95 77
      ---------------+--------+--------+
                   1 |      2 |      1 |      3
                     | 2 9577 | 0 0423 |
                     | 0 3101 | 21 709 |
                     |   2 82 |   1 41 |   4 23
      ---------------+--------+--------+
      Total               70        1      71
                       98 59     1 41  100 00


         STATISTICS FOR TABLE OF INF9_8 BY EMP30

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      22 990     0 000
Likelihood Ratio Chi-Square    1       6 692     0 010
Continuity Adj  Chi-Square     1       5 252     0 022
Mantel-Haenszel Chi-Square     1      22 667     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 042
                    (2-Tail)                     0 042
Phi Coefficient                        0 569
Contingency Coefficient                0 495
Cramer's V                             0 569

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF5_1 BY COM1

         INF5_1          COM1

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
                      0 |     15 |     22 |     37
                        | 9 9014 | 27 099 |
                        | 2 6254 | 0 9593 |
                        |  21 13 |  30 99 |  52 11
         ---------------+--------+--------+
                      1 |      4 |     30 |     34
                        | 9 0986 | 24 901 |
                        | 2 8571 | 1 0439 |
                        |   5 63 |  42 25 |  47 89
         ---------------+--------+--------+
         Total               19       52       71
                          26 76    73 24   100 00

           STATISTICS FOR TABLE OF INF5_1 BY COM1

 Statistic                        DF       Value      Prob
 ------------------------------------------------------
 Chi-Square                        1       7 486     0 006
 Likelihood Ratio Chi-Square       1       7 892     0 005
 Continuity Adj  Chi-Square        1       6 090     0 014
 Mantel-Haenszel Chi-Square        1       7 380     0 007
 Fisher's Exact Test (Left)                          0 999
                     (Right)                      6 01E-03
                     (2-Tail)                     7 64E-03
 Phi Coefficient                           0 325
 Contingency Coefficient                   0 309
 Cramer's V                                0 325

 Sample Size = 71
```

```
                  TABLE OF INF5_2 BY COM1

         INF5_2          COM1

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
                      0 |     15 |     23 |     38
                        | 10 169 | 27 831 |
                        | 2 2951 | 0 8386 |
                        |  21 13 |  32 39 |  53 52
         ---------------+--------+--------+
                      1 |      4 |     29 |     33
                        |  8 831 | 24 169 |
                        | 2 6428 | 0 9656 |
                        |   5 63 |  40 85 |  46 48
         ---------------+--------+--------+
         Total               19       52       71
                          26 76    73 24   100 00

           STATISTICS FOR TABLE OF INF5_2 BY COM1

 Statistic                        DF       Value      Prob
 ------------------------------------------------------
 Chi-Square                        1       6 742     0 009
 Likelihood Ratio Chi-Square       1       7 124     0 008
 Continuity Adj  Chi-Square        1       5 419     0 020
 Mantel-Haenszel Chi-Square        1       6 647     0 010
 Fisher's Exact Test (Left)                          0 998
                     (Right)                      8 89E-03
                     (2-Tail)                        0 015
 Phi Coefficient                           0 308
 Contingency Coefficient                   0 294
 Cramer's V                                0 308

 Sample Size = 71
```

```
                  TABLE OF RINF6 BY COM1

         RINF6           COM1

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
         ADM            |      2 |      1 |      3
                        | 0 7826 | 2 2174 |
                        | 1 8937 | 0 6684 |
                        |   2 90 |   1 45 |   4 35
         ---------------+--------+--------+
         DHD            |      7 |     37 |     44
                        | 11 478 | 32 522 |
                        | 1 7472 | 0 6167 |
                        |  10 14 |  53 62 |  63 77
         ---------------+--------+--------+
         DIET           |      1 |      4 |      5
                        | 1 3043 | 3 6957 |
                        |  0 071 | 0 0251 |
                        |   1 45 |   5 80 |   7 25
         ---------------+--------+--------+
         MGR            |      8 |      9 |     17
                        | 4 4348 | 12 565 |
                        | 2 8662 | 1 0116 |
                        |  11 59 |  13 04 |  24 64
         ---------------+--------+--------+
         Total               18       51       69
                          26 09    73 91   100 00

         Frequency Missing = 2

           STATISTICS FOR TABLE OF RINF6 BY COM1

 Statistic                        DF       Value      Prob
 ------------------------------------------------------
 Chi-Square                        3       8 900     0 031
 Likelihood Ratio Chi-Square       3       8 318     0 040
 Mantel-Haenszel Chi-Square        1       2 810     0 094
 Phi Coefficient                           0 359
 Contingency Coefficient                   0 338
 Cramer's V                                0 359

 Effective Sample Size = 69
 Frequency Missing = 2
 WARNING   63% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF9_3 BY COM1

         INF9_3          COM1

         Frequency      |
         Expected       |
         Cell Chi-Square|
         Percent        |       0|       1|  Total
         ---------------+--------+--------+
                      0 |     15 |     50 |     65
                        | 17 394 | 47 606 |
                        | 0 3296 | 0 1204 |
                        |  21 13 |  70 42 |  91 55
         ---------------+--------+--------+
                      1 |      4 |      2 |      6
                        | 1 6056 | 4 3944 |
                        | 3 5705 | 1 3046 |
                        |   5 63 |   2 82 |   8 45
         ---------------+--------+--------+
         Total               19       52       71
                          26 76    73 24   100 00

           STATISTICS FOR TABLE OF INF9_3 BY COM1

 Statistic                        DF       Value      Prob
 ------------------------------------------------------
 Chi-Square                        1       5 325     0 021
 Likelihood Ratio Chi-Square       1       4 618     0 032
 Continuity Adj  Chi-Square        1       3 333     0 068
 Mantel-Haenszel Chi-Square        1       5 250     0 022
 Fisher's Exact Test (Left)                          0 040
                     (Right)                         0 996
                     (2-Tail)                        0 040
 Phi Coefficient                          -0 274
 Contingency Coefficient                   0 264
 Cramer's V                               -0 274

 Sample Size = 71
 WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF10 BY COM1

RINF10           COM1

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     12 |     15 |     27
                | 6 3818 | 20 618 |
                | 4 9459 | 1 5309 |
                |  21 82 |  27 27 |  49 09
----------------+--------+--------+
              2 |      0 |     19 |     19
                | 4 4909 | 14 509 |
                | 4 4909 |   1 39 |
                |   0 00 |  34 55 |  34 55
----------------+--------+--------+
              3 |      1 |      8 |      9
                | 2 1273 | 6 8727 |
                | 0 5974 | 0 1849 |
                |   1 82 |  14 55 |  16 36
----------------+--------+--------+
Total                 13       42       55
                   23 64    76 36   100 00

Frequency Missing = 16


          STATISTICS FOR TABLE OF RINF10 BY COM1

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     2      13 140      0 001
Likelihood Ratio Chi-Square    2      16 779      0 000
Mantel-Haenszel Chi-Square     1       8 220      0 004
Phi Coefficient                        0 489
Contingency Coefficient                0 439
Cramer's V                             0 489

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF11 BY COM1

RINF11           COM1

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     13 |     18 |     31
                | 8 2667 | 22 733 |
                | 2 7102 | 0 9855 |
                |  21 67 |  30 00 |  51 67
----------------+--------+--------+
              2 |      3 |     15 |     18
                |    4 8 |   13 2 |
                |  0 675 | 0 2455 |
                |   5 00 |  25 00 |  30 00
----------------+--------+--------+
              3 |      0 |     11 |     11
                | 2 9333 | 8 0667 |
                | 2 9333 | 1 0667 |
                |   0 00 |  18 33 |  18 33
----------------+--------+--------+
Total                 16       44       60
                   26 67    73 33   100 00

Frequency Missing = 11


          STATISTICS FOR TABLE OF RINF11 BY COM1

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     2       8 616      0 013
Likelihood Ratio Chi-Square    2      11 204      0 004
Mantel-Haenszel Chi-Square     1       8 365      0 004
Phi Coefficient                        0 379
Contingency Coefficient                0 354
Cramer's V                             0 379

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF4 BY COM2

INF4             COM2

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |      8 |      0 |      8
                |    4 8 |    3 2 |
                | 2 1333 |    3 2 |
                |  11 43 |   0 00 |  11 43
----------------+--------+--------+
              3 |     13 |      3 |     16
                |    9 6 |    6 4 |
                | 1 2042 | 1 8062 |
                |  18 57 |   4 29 |  22 86
----------------+--------+--------+
              4 |     21 |     25 |     46
                |   27 6 |   18 4 |
                | 1 5783 | 2 3674 |
                |  30 00 |  35 71 |  65 71
----------------+--------+--------+
Total                 42       28       70
                   60 00    40 00   100 00

Frequency Missing = 1


          STATISTICS FOR TABLE OF INF4 BY COM2

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     2      12 289      0 002
Likelihood Ratio Chi-Square    2      15 358      0 000
Mantel-Haenszel Chi-Square     1      10 655      0 001
Phi Coefficient                        0 419
Contingency Coefficient                0 386
Cramer's V                             0 419

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_1 BY COM2

INF5_1           COM2

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     30 |      7 |     37
                | 22 408 | 14 592 |
                | 2 5719 | 3 9497 |
                |  42 25 |   9 86 |  52 11
----------------+--------+--------+
              1 |     13 |     21 |     34
                | 20 592 | 13 408 |
                | 2 7988 | 4 2982 |
                |  18 31 |  29 58 |  47 89
----------------+--------+--------+
Total                 43       28       71
                   60 56    39 44   100 00


          STATISTICS FOR TABLE OF INF5_1 BY COM2

Statistic                     DF       Value       Prob
------------------------------------------------------
Chi-Square                     1      13 618      0 000
Likelihood Ratio Chi-Square    1      14 107      0 000
Continuity Adj  Chi-Square     1      11 884      0 001
Mantel-Haenszel Chi-Square     1      13 427      0 000
Fisher's Exact Test (Left)                        1 000
                    (Right)                   2 37E-04
                    (2-Tail)                  2 78E-04
Phi Coefficient                        0 438
Contingency Coefficient                0 401
Cramer's V                             0 438

Sample Size = 71
```

```
               TABLE OF INF5_2 BY COM2

     INF5_2           COM2

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   0 |     30 |      8 |     38
                     | 23 014 | 14 986 |
                     | 2 1206 | 3 2566 |
                     |  42 25 |  11 27 |  53 52
     ----------------+--------+--------+
                   1 |     13 |     20 |     33
                     | 19 986 | 13 014 |
                     | 2 4419 |   3 75 |
                     |  18 31 |  28 17 |  46 48
     ----------------+--------+--------+
     Total               43       28       71
                      60 56    39 44   100 00


          STATISTICS FOR TABLE OF INF5_2 BY COM2

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1      11 569       0 001
Likelihood Ratio Chi-Square    1      11 869       0 001
Continuity Adj  Chi-Square     1       9 972       0 002
Mantel-Haenszel Chi-Square     1      11 406       0 001
Fisher's Exact Test (Left)                         1 000
                    (Right)                     7 17E-04
                    (2-Tail)                    1 34E-03
Phi Coefficient                        0 404
Contingency Coefficient                0 374
Cramer's V                             0 404

Sample Size = 71
```

```
               TABLE OF INF5_4 BY COM2

     INF5_4           COM2

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   0 |     34 |     15 |     49
                     | 29 676 | 19 324 |
                     |   0 63 | 0 9675 |
                     |  47 89 |  21 13 |  69 01
     ----------------+--------+--------+
                   1 |      9 |     13 |     22
                     | 13 324 | 8 6761 |
                     | 1 4032 |  2 155 |
                     |  12 68 |  18 31 |  30 99
     ----------------+--------+--------+
     Total               43       28       71
                      60 56    39 44   100 00

                    The SAS System

          STATISTICS FOR TABLE OF INF5_4 BY COM2

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       5 156       0 023
Likelihood Ratio Chi-Square    1       5 102       0 024
Continuity Adj  Chi-Square     1       4 032       0 045
Mantel-Haenszel Chi-Square     1       5 083       0 024
Fisher's Exact Test (Left)                         0 994
                    (Right)                        0 023
                    (2-Tail)                       0 035
Phi Coefficient                        0 269
Contingency Coefficient                0 260
Cramer's V                             0 269

Sample Size = 71
```

```
               TABLE OF RINF6 BY COM2

     RINF6            COM2

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
     ADM             |      3 |      0 |      3
                     | 1 7826 | 1 2174 |
                     | 0 8314 | 1 2174 |
                     |   4 35 |   0 00 |   4 35
     ----------------+--------+--------+
     DHD             |     22 |     22 |     44
                     | 26 145 | 17 855 |
                     | 0 6571 | 0 9622 |
                     |  31 88 |  31 88 |  63 77
     ----------------+--------+--------+
     DIET            |      2 |      3 |      5
                     |  2 971 |  2 029 |
                     | 0 3174 | 0 4647 |
                     |   2 90 |   4 35 |   7 25
     ----------------+--------+--------+
     MGR             |     14 |      3 |     17
                     | 10 101 | 6 8986 |
                     | 1 5046 | 2 2032 |
                     |  20 29 |   4 35 |  24 64
     ----------------+--------+--------+
     Total               41       28       69
                      59 42    40 58   100 00

     Frequency Missing = 2

          STATISTICS FOR TABLE OF RINF6 BY COM2

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     3       8 158       0 043
Likelihood Ratio Chi-Square    3       9 619       0 022
Mantel-Haenszel Chi-Square     1       2 247       0 134
Phi Coefficient                        0 344
Contingency Coefficient                0 325
Cramer's V                             0 344

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF10 BY COM2

     RINF10           COM2

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   1 |     22 |      5 |     27
                     |   16 2 |   10 8 |
                     | 2 0765 | 3 1148 |
                     |  40 00 |   9 09 |  49 09
     ----------------+--------+--------+
                   2 |      8 |     11 |     19
                     |   11 4 |    7 6 |
                     |  1 014 | 1 5211 |
                     |  14 55 |  20 00 |  34 55
     ----------------+--------+--------+
                   3 |      3 |      6 |      9
                     |    5 4 |    3 6 |
                     | 1 0667 |    1 6 |
                     |   5 45 |  10 91 |  16 36
     ----------------+--------+--------+
     Total               33       22       55
                      60 00    40 00   100 00

     Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY COM2

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     2      10 393       0 006
Likelihood Ratio Chi-Square    2      10 835       0 004
Mantel-Haenszel Chi-Square     1       9 136       0 003
Phi Coefficient                        0 435
Contingency Coefficient                0 399
Cramer's V                             0 435

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                 TABLE OF INF14 BY COM2

     INF14          COM2

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |     20 |      7 |     27
                    | 15 146 | 11 854 |
                    | 1 5554 | 1 9874 |
                    |  48 78 |  17 07 |  65 85
     ---------------+--------+--------+
                  2 |      2 |      3 |      5
                    | 2 8049 | 2 1951 |
                    |  0 231 | 0 2951 |
                    |   4 88 |   7 32 |  12 20
     ---------------+--------+--------+
                  3 |      0 |      5 |      5
                    | 2 8049 | 2 1951 |
                    | 2 8049 |  3 584 |
                    |   0 00 |  12 20 |  12 20
     ---------------+--------+--------+
                  4 |      1 |      3 |      4
                    | 2 2439 | 1 7561 |
                    | 0 6896 | 0 8811 |
                    |   2 44 |   7 32 |   9 76
     ---------------+--------+--------+
     Total               23       18       41
                      56 10    43 90   100 00

     Frequency Missing = 30

          STATISTICS FOR TABLE OF INF14 BY COM2

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     3      12 028      0 007
Likelihood Ratio Chi-Square    3      14 095      0 003
Mantel-Haenszel Chi-Square     1       9 436      0 002
Phi Coefficient                        0 542
Contingency Coefficient                0 476
Cramer's V                             0 542

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_5 BY COM3

     INF5_5         COM3

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     61 |      4 |     65
                    | 59 507 |  5 493 |
                    | 0 0375 | 0 4058 |
                    |  85 92 |   5 63 |  91 55
     ---------------+--------+--------+
                  1 |      4 |      2 |      6
                    |  5 493 |  0 507 |
                    | 0 4058 | 4 3959 |
                    |   5 63 |   2 82 |   8 45
     ---------------+--------+--------+
     Total               65        6       71
                      91 55     8 45   100 00

          STATISTICS FOR TABLE OF INF5_5 BY COM3

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1       5 245      0 022
Likelihood Ratio Chi-Square    1       3 438      0 064
Continuity Adj  Chi-Square     1       2 320      0 128
Mantel-Haenszel Chi-Square     1       5 171      0 023
Fisher's Exact Test (Left)                        0 994
                    (Right)                       0 077
                    (2-Tail)                      0 077
Phi Coefficient                        0 272
Contingency Coefficient                0 262
Cramer's V                             0 272

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_8 BY COM3

     INF5_8         COM3

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     64 |      5 |     69
                    | 63 169 |  5 831 |
                    | 0 0109 | 0 1184 |
                    |  90 14 |   7 04 |  97 18
     ---------------+--------+--------+
                  1 |      1 |      1 |      2
                    |  1 831 |  0 169 |
                    | 0 3771 | 4 0857 |
                    |   1 41 |   1 41 |   2 82
     ---------------+--------+--------+
     Total               65        6       71
                      91 55     8 45   100 00

          STATISTICS FOR TABLE OF INF5_8 BY COM3

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1       4 592      0 032
Likelihood Ratio Chi-Square    1       2 481      0 115
Continuity Adj  Chi-Square     1       0 729      0 393
Mantel-Haenszel Chi-Square     1       4 527      0 033
Fisher's Exact Test (Left)                        0 994
                    (Right)                       0 163
                    (2-Tail)                      0 163
Phi Coefficient                        0 254
Contingency Coefficient                0 246
Cramer's V                             0 254

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF9_5 BY COM3

     INF9_5         COM3

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |     55 |      3 |     58
                    | 53 099 | 4 9014 |
                    | 0 0681 | 0 7376 |
                    |  77 46 |   4 23 |  81 69
     ---------------+--------+--------+
                  1 |     10 |      3 |     13
                    | 11 901 | 1 0986 |
                    | 0 3038 | 3 2909 |
                    |  14 08 |   4 23 |  18 31
     ---------------+--------+--------+
     Total               65        6       71
                      91 55     8 45   100 00

          STATISTICS FOR TABLE OF INF9_5 BY COM3

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1       4 400      0 036
Likelihood Ratio Chi-Square    1       3 471      0 062
Continuity Adj  Chi-Square     1       2 390      0 122
Mantel-Haenszel Chi-Square     1       4 338      0 037
Fisher's Exact Test (Left)                        0 991
                    (Right)                       0 070
                    (2-Tail)                      0 070
Phi Coefficient                        0 249
Contingency Coefficient                0 242
Cramer's V                             0 249

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF14 BY COM3

       INF14          COM3

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                    1 |     27 |      0 |     27
                      | 24 366 | 2 6341 |
                      | 0 2848 | 2 6341 |
                      |  65 85 |   0 00 |  65 85
       ---------------+--------+--------+
                    2 |      3 |      2 |      5
                      | 4 5122 | 0 4878 |
                      | 0 5068 | 4 6878 |
                      |   7 32 |   4 88 |  12 20
       ---------------+--------+--------+
                    3 |      4 |      1 |      5
                      | 4 5122 | 0 4878 |
                      | 0 0581 | 0 5378 |
                      |   9 76 |   2 44 |  12 20
       ---------------+--------+--------+
                    4 |      3 |      1 |      4
                      | 3 6098 | 0 3902 |
                      |  0 103 | 0 9527 |
                      |   7 32 |   2 44 |   9 76
       ---------------+--------+--------+
       Total                37        4       41
                         90 24     9 76   100 00

       Frequency Missing = 30

           STATISTICS FOR TABLE OF INF14 BY COM3

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        3       9 765      0 021
Likelihood Ratio Chi-Square       3       9 982      0 019
Mantel-Haenszel Chi-Square        1       4 887      0 027
Phi Coefficient                           0 488
Contingency Coefficient                   0 439
Cramer's V                                0 488

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF5_4 BY COM4

       INF5_4         COM4

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                    0 |     41 |      8 |     49
                      | 37 268 | 11 732 |
                      | 0 3738 | 1 1874 |
                      |  57 75 |  11 27 |  69 01
       ---------------+--------+--------+
                    1 |     13 |      9 |     22
                      | 16 732 | 5 2676 |
                      | 0 8326 | 2 6446 |
                      |  18 31 |  12 68 |  30 99
       ---------------+--------+--------+
       Total                54       17       71
                         76 06    23 94   100 00

           STATISTICS FOR TABLE OF INF5_4 BY COM4

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        1       5 038      0 025
Likelihood Ratio Chi-Square       1       4 779      0 029
Continuity Adj  Chi-Square        1       3 779      0 052
Mantel-Haenszel Chi-Square        1       4 967      0 026
Fisher's Exact Test (Left)                           0 994
                    (Right)                          0 028
                    (2-Tail)                         0 036
Phi Coefficient                           0 266
Contingency Coefficient                   0 257
Cramer's V                                0 266

Sample Size = 71
```

```
                    TABLE OF RINF10 BY COM4

       RINF10         COM4

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                    1 |     25 |      2 |     27
                      | 21 109 | 5 8909 |
                      | 0 7172 | 2 5699 |
                      |  45 45 |   3 64 |  49 09
       ---------------+--------+--------+
                    2 |     12 |      7 |     19
                      | 14 855 | 4 1455 |
                      | 0 5485 | 1 9656 |
                      |  21 82 |  12 73 |  34 55
       ---------------+--------+--------+
                    3 |      6 |      3 |      9
                      | 7 0364 | 1 9636 |
                      | 0 1526 |  0 547 |
                      |  10 91 |   5 45 |  16 36
       ---------------+--------+--------+
       Total                43       12       55
                         78 18    21 82   100 00

       Frequency Missing = 16

           STATISTICS FOR TABLE OF RINF10 BY COM4

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        2       6 501      0 039
Likelihood Ratio Chi-Square       2       6 981      0 030
Mantel-Haenszel Chi-Square        1       4 641      0 031
Phi Coefficient                           0 344
Contingency Coefficient                   0 325
Cramer's V                                0 344

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF RINF11 BY COM4

       RINF11         COM4

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                    1 |     27 |      4 |     31
                      | 22 733 | 8 2667 |
                      | 0 8008 | 2 2022 |
                      |  45 00 |   6 67 |  51 67
       ---------------+--------+--------+
                    2 |     10 |      8 |     18
                      |   13 2 |    4 8 |
                      | 0 7758 | 2 1333 |
                      |  16 67 |  13 33 |  30 00
       ---------------+--------+--------+
                    3 |      7 |      4 |     11
                      | 8 0667 | 2 9333 |
                      |  0 141 | 0 3879 |
                      |  11 67 |   6 67 |  18 33
       ---------------+--------+--------+
       Total                44       16       60
                         73 33    26 67   100 00

       Frequency Missing = 11

           STATISTICS FOR TABLE OF RINF11 BY COM4

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        2       6 441      0 040
Likelihood Ratio Chi-Square       2       6 597      0 037
Mantel-Haenszel Chi-Square        1       4 048      0 044
Phi Coefficient                           0 328
Contingency Coefficient                   0 311
Cramer's V                                0 328

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_4 BY COM6

     INF5_4           COM6

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   0 |     24 |     25 |     49
                     | 19 324 | 29 676 |
                     | 1 1315 | 0 7368 |
                     |  33 80 |  35 21 |  69 01
     ----------------+--------+--------+
                   1 |      4 |     18 |     22
                     | 8 6761 | 13 324 |
                     | 2 5202 | 1 6411 |
                     |   5 63 |  25 35 |  30 99
     ----------------+--------+--------+
     Total                 28       43       71
                        39 44    60 56   100 00

        STATISTICS FOR TABLE OF INF5_4 BY COM6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 030     0 014
Likelihood Ratio Chi-Square    1       6 464     0 011
Continuity Adj  Chi-Square     1       4 809     0 028
Mantel-Haenszel Chi-Square     1       5 945     0 015
Fisher's Exact Test (Left)                       0 998
                    (Right)                      0 012
                    (2-Tail)                     0 018
Phi Coefficient                        0 291
Contingency Coefficient                0 280
Cramer's V                             0 291

Sample Size = 71
```

```
              TABLE OF INF5_6 BY COM6

     INF5_6           COM6

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   0 |     12 |     34 |     46
                     | 18 141 | 27 859 |
                     | 2 0787 | 1 3536 |
                     |  16 90 |  47 89 |  64 79
     ----------------+--------+--------+
                   1 |     16 |      9 |     25
                     | 9 8592 | 15 141 |
                     | 3 8249 | 2 4906 |
                     |  22 54 |  12 68 |  35 21
     ----------------+--------+--------+
     Total                 28       43       71
                        39 44    60 56   100 00

        STATISTICS FOR TABLE OF INF5_6 BY COM6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       9 748     0 002
Likelihood Ratio Chi-Square    1       9 758     0 002
Continuity Adj  Chi-Square     1       8 225     0 004
Mantel-Haenszel Chi-Square     1       9 611     0 002
Fisher's Exact Test (Left)                    2 08E-03
                    (Right)                      1 000
                    (2-Tail)                  2 47E-03
Phi Coefficient                       -0 371
Contingency Coefficient                0 347
Cramer's V                            -0 371

Sample Size = 71
```

```
              TABLE OF RINF6 BY COM6

     RINF6            COM6

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
     ADM             |      1 |      2 |      3
                     | 1 1739 | 1 8261 |
                     | 0 0258 | 0 0166 |
                     |   1 45 |   2 90 |   4 35
     ----------------+--------+--------+
     DHD             |     12 |     32 |     44
                     | 17 217 | 26 783 |
                     |  1 581 | 1 0164 |
                     |  17 39 |  46 38 |  63 77
     ----------------+--------+--------+
     DIET            |      3 |      2 |      5
                     | 1 9565 | 3 0435 |
                     | 0 5565 | 0 3578 |
                     |   4 35 |   2 90 |   7 25
     ----------------+--------+--------+
     MGR             |     11 |      6 |     17
                     | 6 6522 | 10 348 |
                     | 2 8417 | 1 8268 |
                     |  15 94 |   8 70 |  24 64
     ----------------+--------+--------+
     Total                 27       42       69
                        39 13    60 87   100 00

     Frequency Missing = 2

        STATISTICS FOR TABLE OF RINF6 BY COM6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3       8 223     0 042
Likelihood Ratio Chi-Square    3       8 180     0 042
Mantel-Haenszel Chi-Square     1       7 106     0 008
Phi Coefficient                        0 345
Contingency Coefficient                0 326
Cramer's V                             0 345

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF7 BY COM6

     INF7             COM6

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   1 |     25 |     43 |     68
                     | 26 817 | 41 183 |
                     | 0 1231 | 0 0802 |
                     |  35 21 |  60 56 |  95 77
     ----------------+--------+--------+
                   2 |      3 |      0 |      3
                     | 1 1831 | 1 8169 |
                     | 2 7902 | 1 8169 |
                     |   4 23 |   0 00 |   4 23
     ----------------+--------+--------+
     Total                 28       43       71
                        39 44    60 56   100 00

        STATISTICS FOR TABLE OF INF7 BY COM6

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 810     0 028
Likelihood Ratio Chi-Square    1       5 788     0 016
Continuity Adj  Chi-Square     1       2 527     0 112
Mantel-Haenszel Chi-Square     1       4 743     0 029
Fisher's Exact Test (Left)                       0 057
                    (Right)                      1 000
                    (2-Tail)                     0 057
Phi Coefficient                       -0 260
Contingency Coefficient                0 252
Cramer's V                            -0 260

     e Size = 71
     NG    50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_4 BY COM6

      INF9_4          COM6

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     22 |     42 |     64
                     | 25 239 | 38 761 |
                     | 0 4158 | 0 2707 |
                     |  30 99 |  59 15 |  90 14
      ---------------+--------+--------+
                   1 |      6 |      1 |      7
                     | 2 7606 | 4 2394 |
                     | 3 8014 | 2 4753 |
                     |   8 45 |   1 41 |   9 86
      ---------------+--------+--------+
      Total               28       43       71
                       39 44    60 56   100 00


           STATISTICS FOR TABLE OF INF9_4 BY COM6

Statistic                        DF      Value        Prob
----------------------------------------------------------
Chi-Square                        1      6 963       0 008
Likelihood Ratio Chi-Square       1      7 125       0 008
Continuity Adj  Chi-Square        1      4 980       0 026
Mantel-Haenszel Chi-Square        1      6 865       0 009
Fisher's Exact Test (Left)                           0 013
                    (Right)                          0 999
                    (2-Tail)                         0 013
Phi Coefficient                         -0 313
Contingency Coefficient                  0 299
Cramer's V                              -0 313

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY COM6

      RINF10          COM6

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     18 |      9 |     27
                     |   10 8 |   16 2 |
                     |    4 8 |    3 2 |
                     |  32 73 |  16 36 |  49 09
      ---------------+--------+--------+
                   2 |      3 |     16 |     19
                     |    7 6 |   11 4 |
                     | 2 7842 | 1 8561 |
                     |   5 45 |  29 09 |  34 55
      ---------------+--------+--------+
                   3 |      1 |      8 |      9
                     |    3 6 |    5 4 |
                     | 1 8778 | 1 2519 |
                     |   1 82 |  14 55 |  16 36
      ---------------+--------+--------+
      Total               22       33       55
                       40 00    60 00   100 00

      Frequency Missing = 16


           STATISTICS FOR TABLE OF RINF10 BY COM6

Statistic                        DF      Value        Prob
----------------------------------------------------------
Chi-Square                        2     15 770       0 000
Likelihood Ratio Chi-Square       2     16 806       0 000
Mantel-Haenszel Chi-Square        1     13 049       0 000
Phi Coefficient                          0 535
Contingency Coefficient                  0 472
Cramer's V                               0 535

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF RINF11 BY COM6

      RINF11          COM6

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     19 |     12 |     31
                     | 12 917 | 18 083 |
                     | 2 8651 | 2 0465 |
                     |  31 67 |  20 00 |  51 67
      ---------------+--------+--------+
                   2 |      6 |     12 |     18
                     |    7 5 |   10 5 |
                     |    0 3 | 0 2143 |
                     |  10 00 |  20 00 |  30 00
      ---------------+--------+--------+
                   3 |      0 |     11 |     11
                     | 4 5833 | 6 4167 |
                     | 4 5833 | 3 2738 |
                     |   0 00 |  18 33 |  18 33
      ---------------+--------+--------+
      Total               25       35       60
                       41 67    58 33   100 00

      Frequency Missing = 11

           STATISTICS FOR TABLE OF RINF11 BY COM6

Statistic                        DF      Value        Prob
----------------------------------------------------------
Chi-Square                        2     13 283       0 001
Likelihood Ratio Chi-Square       2     17 208       0 000
Mantel-Haenszel Chi-Square        1     13 028       0 000
Phi Coefficient                          0 471
Contingency Coefficient                  0 426
Cramer's V                               0 471

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
                TABLE OF INF13 BY COM6

      INF13           COM6

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |      6 |     22 |     28
                     | 11 042 | 16 958 |
                     | 2 3025 | 1 4993 |
                     |   8 45 |  30 99 |  39 44
      ---------------+--------+--------+
                   2 |     22 |     21 |     43
                     | 16 958 | 26 042 |
                     | 1 4993 | 0 9763 |
                     |  30 99 |  29 58 |  60 56
      ---------------+--------+--------+
      Total               28       43       71
                       39 44    60 56   100 00

           STATISTICS FOR TABLE OF INF13 BY COM6

Statistic                        DF      Value        Prob
----------------------------------------------------------
Chi-Square                        1      6 277       0 012
Likelihood Ratio Chi-Square       1      6 550       0 010
Continuity Adj  Chi-Square        1      5 094       0 024
Mantel-Haenszel Chi-Square        1      6 189       0 013
Fisher's Exact Test (Left)                           0 011
                    (Right)                          0 998
                    (2-Tail)                         0 014
Phi Coefficient                         -0 297
Contingency Coefficient                  0 285
Cramer's V                              -0 297

Sample Size = 71
```

```
              TABLE OF INF5_4 BY COM7

INF5_4          COM7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     40 |      9 |     49
               | 36 577 | 12 423 |
               | 0 3202 | 0 9429 |
               |  56 34 |  12 68 |  69 01
---------------+--------+--------+
             1 |     13 |      9 |     22
               | 16 423 | 5 5775 |
               | 0 7133 | 2 1002 |
               |  18 31 |  12 68 |  30 99
---------------+--------+--------+
Total                53       18      71
                  74 65    25 35  100 00


       STATISTICS FOR TABLE OF INF5_4 BY COM7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 077     0 043
Likelihood Ratio Chi-Square    1       3 891     0 049
Continuity Adj  Chi-Square     1       2 973     0 085
Mantel-Haenszel Chi-Square     1       4 019     0 045
Fisher's Exact Test (Left)                       0 988
                    (Right)                      0 045
                    (2-Tail)                     0 074
Phi Coefficient                        0 240
Contingency Coefficient                0 233
Cramer's V                             0 240

Sample Size = 71
```

```
              TABLE OF RINF10 BY COM7

RINF10          COM7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     26 |      1 |     27
               | 19 145 | 7 8545 |
               | 2 4541 | 5 9819 |
               |  47 27 |   1 82 |  49 09
---------------+--------+--------+
             2 |     10 |      9 |     19
               | 13 473 | 5 5273 |
               | 0 8951 | 2 1819 |
               |  18 18 |  16 36 |  34 55
---------------+--------+--------+
             3 |      3 |      6 |      9
               | 6 3818 | 2 6182 |
               | 1 7921 | 4 3682 |
               |   5 45 |  10 91 |  16 36
---------------+--------+--------+
Total                39       16      55
                  70 91    29 09  100 00

Frequency Missing = 16


       STATISTICS FOR TABLE OF RINF10 BY COM7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      17 673     0 000
Likelihood Ratio Chi-Square    2      20 028     0 000
Mantel-Haenszel Chi-Square     1      16 564     0 000
Phi Coefficient                        0 567
Contingency Coefficient                0 493
Cramer's V                             0 567

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
              TABLE OF RINF11 BY COM7

RINF11          COM7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     28 |      3 |     31
               | 22 733 | 8 2667 |
               | 1 2201 | 3 3554 |
               |  46 67 |   5 00 |  51 67
---------------+--------+--------+
             2 |     14 |      4 |     18
               |   13 2 |    4 8 |
               | 0 0485 | 0 1333 |
               |  23 33 |   6 67 |  30 00
---------------+--------+--------+
             3 |      2 |      9 |     11
               | 8 0667 | 2 9333 |
               | 4 5625 | 12 547 |
               |   3 33 |  15 00 |  18 33
---------------+--------+--------+
Total                44       16      60
                  73 33    26 67  100 00

Frequency Missing = 11


       STATISTICS FOR TABLE OF RINF11 BY COM7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      21 867     0 000
Likelihood Ratio Chi-Square    2      20 377     0 000
Mantel-Haenszel Chi-Square     1      18 279     0 000
Phi Coefficient                        0 604
Contingency Coefficient                0 517
Cramer's V                             0 604

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF12 BY COM7

RINF12          COM7

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     41 |      8 |     49
               | 36 577 | 12 423 |
               | 0 5347 | 1 5745 |
               |  57 75 |  11 27 |  69 01
---------------+--------+--------+
             2 |      8 |      5 |     13
               | 9 7042 | 3 2958 |
               | 0 2993 | 0 8812 |
               |  11 27 |   7 04 |  18 31
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 7183 | 2 2817 |
               | 1 0999 | 3 2385 |
               |   5 63 |   7 04 |  12 68
---------------+--------+--------+
Total                53       18      71
                  74 65    25 35  100 00


       STATISTICS FOR TABLE OF RINF12 BY COM7

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       7 628     0 022
Likelihood Ratio Chi-Square    2       7 093     0 029
Mantel-Haenszel Chi-Square     1       7 490     0 006
Phi Coefficient                        0 328
Contingency Coefficient                0 311
Cramer's V                             0 328

Sample Size = 71
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF13 BY COM7

     INF13          COM7

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |     15 |     13 |     28
                    | 20 901 | 7 0986 |
                    | 1 6662 | 4 9061 |
                    |  21 13 |  18 31 |  39 44
     ---------------+--------+--------+
                  2 |     38 |      5 |     43
                    | 32 099 | 10 901 |
                    |  1 085 | 3 1947 |
                    |  53 52 |   7 04 |  60 56
     ---------------+--------+--------+
     Total               53       18       71
                      74 65    25 35   100 00

          STATISTICS FOR TABLE OF INF13 BY COM7

Statistic                        DF       Value        Prob
------------------------------------------------------------
Chi-Square                        1      10 852       0 001
Likelihood Ratio Chi-Square       1      10 811       0 001
Continuity Adj  Chi-Square        1       9 091       0 003
Mantel-Haenszel Chi-Square        1      10 699       0 001
Fisher's Exact Test (Left)                         1 33E-03
                    (Right)                           1 000
                    (2-Tail)                       1 73E-03
Phi Coefficient                          -0 391
Contingency Coefficient                   0 364
Cramer's V                               -0 391

Sample Size = 71
```

```
                 TABLE OF INF8 BY COM8

     INF8           COM8

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |     60 |      1 |     61
                    | 58 423 | 2 5775 |
                    | 0 0426 | 0 9654 |
                    |  84 51 |   1 41 |  85 92
     ---------------+--------+--------+
                  2 |      8 |      2 |     10
                    | 9 5775 | 0 4225 |
                    | 0 2598 | 5 8892 |
                    |  11 27 |   2 82 |  14 08
     ---------------+--------+--------+
     Total               68        3       71
                      95 77     4 23   100 00

          STATISTICS FOR TABLE OF INF8 BY COM8

Statistic                        DF       Value        Prob
------------------------------------------------------------
Chi-Square                        1       7 157       0 007
Likelihood Ratio Chi-Square       1       4 643       0 031
Continuity Adj  Chi-Square        1       3 339       0 068
Mantel-Haenszel Chi-Square        1       7 056       0 008
Fisher's Exact Test (Left)                            0 998
                    (Right)                           0 050
                    (2-Tail)                          0 050
Phi Coefficient                           0 317
Contingency Coefficient                   0 303
Cramer's V                                0 317

Sample Size = 71
WARNING    50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF10 BY COM8

     RINF10         COM8

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |     27 |      0 |     27
                    | 25 527 | 1 4727 |
                    |  0 085 | 1 4727 |
                    |  49 09 |   0 00 |  49 09
     ---------------+--------+--------+
                  2 |     19 |      0 |     19
                    | 17 964 | 1 0364 |
                    | 0 0598 | 1 0364 |
                    |  34 55 |   0 00 |  34 55
     ---------------+--------+--------+
                  3 |      6 |      3 |      9
                    | 8 5091 | 0 4909 |
                    | 0 7399 | 12 824 |
                    |  10 91 |   5 45 |  16 36
     ---------------+--------+--------+
     Total               52        3       55
                      94 55     5 45   100 00

     Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY COM8

Statistic                        DF       Value        Prob
------------------------------------------------------------
Chi-Square                        2      16 218       0 000
Likelihood Ratio Chi-Square       2      11 828       0 003
Mantel-Haenszel Chi-Square        1      10 025       0 002
Phi Coefficient                           0 543
Contingency Coefficient                   0 477
Cramer's V                                0 543

Effective Sample Size = 55
Frequency Missing = 16
WARNING    23% of the data are missing
WARNING    50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF11 BY COM8

     RINF11         COM8

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  1 |     31 |      0 |     31
                    |  29 45 |   1 55 |
                    | 0 0816 |   1 55 |
                    |  51 67 |   0 00 |  51 67
     ---------------+--------+--------+
                  2 |     18 |      0 |     18
                    |   17 1 |    0 9 |
                    | 0 0474 |    0 9 |
                    |  30 00 |   0 00 |  30 00
     ---------------+--------+--------+
                  3 |      8 |      3 |     11
                    |  10 45 |   0 55 |
                    | 0 5744 | 10 914 |
                    |  13 33 |   5 00 |  18 33
     ---------------+--------+--------+
     Total               57        3       60
                      95 00     5 00   100 00

     Frequency Missing = 11

          STATISTICS FOR TABLE OF RINF11 BY COM8

Statistic                        DF       Value        Prob
------------------------------------------------------------
Chi-Square                        2      14 067       0 001
Likelihood Ratio Chi-Square       2      10 931       0 004
Mantel-Haenszel Chi-Square        1       9 374       0 002
Phi Coefficient                           0 484
Contingency Coefficient                   0 436
Cramer's V                                0 484

Effective Sample Size = 60
Frequency Missing = 11
WARNING    15% of the data are missing
WARNING    50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF12 BY COM8

RINF12           COM8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     49 |      0 |     49
               |  46 93 | 2 0704 |
               | 0 0913 | 2 0704 |
               |  69 01 |   0 00 |  69 01
---------------+--------+--------+
             2 |     12 |      1 |     13
               | 12 451 | 0 5493 |
               | 0 0163 | 0 3698 |
               |  16 90 |   1 41 |  18 31
---------------+--------+--------+
             3 |      7 |      2 |      9
               | 8 6197 | 0 3803 |
               | 0 3044 | 6 8988 |
               |   9 86 |   2 82 |  12 68
---------------+--------+--------+
Total                68        3      71
                  95 77     4 23  100 00

          STATISTICS FOR TABLE OF RINF12 BY COM8

Statistic                       DF      Value       Prob
--------------------------------------------------------
Chi-Square                       2      9 751      0 008
Likelihood Ratio Chi-Square      2      8 270      0 016
Mantel-Haenszel Chi-Square       1      9 354      0 002
Phi Coefficient                         0 371
Contingency Coefficient                 0 347
Cramer's V                              0 371

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF9_2 BY COM9

INF9_2           COM9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     54 |      6 |     60
               | 51 549 | 8 4507 |
               | 0 1165 | 0 7107 |
               |  76 06 |   8 45 |  84 51
---------------+--------+--------+
             1 |      7 |      4 |     11
               | 9 4507 | 1 5493 |
               | 0 6355 | 3 8766 |
               |   9 86 |   5 63 |  15 49
---------------+--------+--------+
Total                61       10      71
                  85 92    14 08  100 00

          STATISTICS FOR TABLE OF INF9_2 BY COM9

Statistic                       DF      Value       Prob
--------------------------------------------------------
Chi-Square                       1      5 339      0 021
Likelihood Ratio Chi-Square      1      4 292      0 038
Continuity Adj  Chi-Square       1      3 383      0 066
Mantel-Haenszel Chi-Square       1      5 264      0 022
Fisher's Exact Test (Left)                         0 994
                    (Right)                        0 042
                    (2-Tail)                       0 042
Phi Coefficient                         0 274
Contingency Coefficient                 0 264
Cramer's V                              0 274

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_5 BY COM9

INF5_5           COM9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     58 |      7 |     65
               | 55 845 | 9 1549 |
               | 0 0832 | 0 5072 |
               |  81 69 |   9 86 |  91 55
---------------+--------+--------+
             1 |      3 |      3 |      6
               | 5 1549 | 0 8451 |
               | 0 9008 | 5 4951 |
               |   4 23 |   4 23 |   8 45
---------------+--------+--------+
Total                61       10      71
                  85 92    14 08  100 00

          STATISTICS FOR TABLE OF INF5_5 BY COM9

Statistic                       DF      Value       Prob
--------------------------------------------------------
Chi-Square                       1      6 986      0 008
Likelihood Ratio Chi-Square      1      4 988      0 026
Continuity Adj  Chi-Square       1      4 120      0 042
Mantel-Haenszel Chi-Square       1      6 888      0 009
Fisher's Exact Test (Left)                         0 997
                    (Right)                        0 033
                    (2-Tail)                       0 033
Phi Coefficient                         0 314
Contingency Coefficient                 0 299
Cramer's V                              0 314

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF10 BY COM9

RINF10           COM9

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     27 |      0 |     27
               | 23 073 | 3 9273 |
               | 0 6685 | 3 9273 |
               |  49 09 |   0 00 |  49 09
---------------+--------+--------+
             2 |     12 |      7 |     19
               | 16 236 | 2 7636 |
               | 1 1053 | 6 4939 |
               |  21 82 |  12 73 |  34 55
---------------+--------+--------+
             3 |      8 |      1 |      9
               | 7 6909 | 1 3091 |
               | 0 0124 |  0 073 |
               |  14 55 |   1 82 |  16 36
---------------+--------+--------+
Total                47        8      55
                  85 45    14 55  100 00

Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY COM9

Statistic                       DF      Value       Prob
--------------------------------------------------------
Chi-Square                       2     12 280      0 002
Likelihood Ratio Chi-Square      2     14 335      0 001
Mantel-Haenszel Chi-Square       1      3 434      0 064
Phi Coefficient                         0 473
Contingency Coefficient                 0 427
Cramer's V                              0 473

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF11 BY COM9

RINF11          COM9

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       0|       1|  Total
--------------+--------+--------+
            1 |     30 |      1 |     31
              | 26 867 | 4 1333 |
              | 0 3654 | 2 3753 |
              |  50 00 |   1 67 |  51 67
--------------+--------+--------+
            2 |     12 |      6 |     18
              |   15 6 |    2 4 |
              | 0 8308 |    5 4 |
              |  20 00 |  10 00 |  30 00
--------------+--------+--------+
            3 |     10 |      1 |     11
              | 9 5333 | 1 4667 |
              | 0 0228 | 0 1485 |
              |  16 67 |   1 67 |  18 33
--------------+--------+--------+
Total               52        8      60
                 86 67    13 33  100 00

Frequency Missing = 11


       STATISTICS FOR TABLE OF RINF11 BY COM9

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     2       9 143      0 010
Likelihood Ratio Chi-Square    2       8 669      0 013
Mantel-Haenszel Chi-Square     1       1 713      0 191
Phi Coefficient                        0 390
Contingency Coefficient                0 364
Cramer's V                             0 390

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF13 BY COM9

INF13           COM9

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       0|       1|  Total
--------------+--------+--------+
            1 |     21 |      7 |     28
              | 24 056 | 3 9437 |
              | 0 3883 | 2 3687 |
              |  29 58 |   9 86 |  39 44
--------------+--------+--------+
            2 |     40 |      3 |     43
              | 36 944 | 6 0563 |
              | 0 2528 | 1 5424 |
              |  56 34 |   4 23 |  60 56
--------------+--------+--------+
Total               61       10      71
                 85 92    14 08  100 00

                  The SAS System

       STATISTICS FOR TABLE OF INF13 BY COM9

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     1       4 552      0 033
Likelihood Ratio Chi-Square    1       4 470      0 034
Continuity Adj  Chi-Square     1       3 185      0 074
Mantel-Haenszel Chi-Square     1       4 488      0 034
Fisher's Exact Test (Left)                        0 038
                    (Right)                       0 993
                    (2-Tail)                      0 043
Phi Coefficient                       -0 253
Contingency Coefficient                0 245
Cramer's V                            -0 253

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF14 BY COM9

INF14           COM9

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       0|       1|  Total
--------------+--------+--------+
            1 |     25 |      2 |     27
              |  22 39 | 4 6098 |
              | 0 3042 | 1 4775 |
              |  60 98 |   4 88 |  65 85
--------------+--------+--------+
            2 |      4 |      1 |      5
              | 4 1463 | 0 8537 |
              | 0 0052 | 0 0251 |
              |   9 76 |   2 44 |  12 20
--------------+--------+--------+
            3 |      2 |      3 |      5
              | 4 1463 | 0 8537 |
              |  1 111 | 5 3965 |
              |   4 88 |   7 32 |  12 20
--------------+--------+--------+
            4 |      3 |      1 |      4
              | 3 3171 | 0 6829 |
              | 0 0303 | 0 1472 |
              |   7 32 |   2 44 |   9 76
--------------+--------+--------+
Total               34        7      41
                 82 93    17 07  100 00

Frequency Missing = 30

       STATISTICS FOR TABLE OF INF14 BY COM9

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     3       8 497      0 037
Likelihood Ratio Chi-Square    3       6 986      0 072
Mantel-Haenszel Chi-Square     1       4 632      0 031
Phi Coefficient                        0 455
Contingency Coefficient                0 414
Cramer's V                             0 455

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF14 BY COM9

INF14           COM9

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       0|       1|  Total
--------------+--------+--------+
            1 |     25 |      2 |     27
              |  22 39 | 4 6098 |
              | 0 3042 | 1 4775 |
              |  60 98 |   4 88 |  65 85
--------------+--------+--------+
            2 |      4 |      1 |      5
              | 4 1463 | 0 8537 |
              | 0 0052 | 0 0251 |
              |   9 76 |   2 44 |  12 20
--------------+--------+--------+
            3 |      2 |      3 |      5
              | 4 1463 | 0 8537 |
              |  1 111 | 5 3965 |
              |   4 88 |   7 32 |  12 20
--------------+--------+--------+
            4 |      3 |      1 |      4
              | 3 3171 | 0 6829 |
              | 0 0303 | 0 1472 |
              |   7 32 |   2 44 |   9 76
--------------+--------+--------+
Total               34        7      41
                 82 93    17 07  100 00

Frequency Missing = 30

       STATISTICS FOR TABLE OF INF14 BY COM9

Statistic                     DF       Value       Prob
-------------------------------------------------------
Chi-Square                     3       8 497      0 037
Likelihood Ratio Chi-Square    3       6 986      0 072
Mantel-Haenszel Chi-Square     1       4 632      0 031
Phi Coefficient                        0 455
Contingency Coefficient                0 414
Cramer's V                             0 455

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_4 BY COM10

     INF5_4         COM10

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |      48|       1|     49
                    |  46 239| 2 7606 |
                    |  0 067 | 1 1228 |
                    |  67 61 |   1 41 |  69 01
     ---------------+--------+--------+
                  1 |      19|       3|     22
                    |  20 761| 1 2394 |
                    |  0 1493| 2 5008 |
                    |  26 76 |   4 23 |  30 99
     ---------------+--------+--------+
     Total               67        4      71
                      94 37     5 63  100 00

        STATISTICS FOR TABLE OF INF5_4 BY COM10

Statistic                        DF     Value        Prob
---------------------------------------------------------
Chi-Square                        1     3 840       0 050
Likelihood Ratio Chi-Square       1     3 493       0 062
Continuity Adj  Chi-Square        1     1 969       0 161
Mantel-Haenszel Chi-Square        1     3 786       0 052
Fisher's Exact Test (Left)                          0 992
                    (Right)                         0 085
                    (2-Tail)                        0 085
Phi Coefficient                         0 233
Contingency Coefficient                 0 227
Cramer's V                              0 233

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_8 BY COM10

     INF5_8         COM10

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |      66|       3|     69
                    |  65 113| 3 8873 |
                    |  0 0121| 0 2025 |
                    |  92 96 |   4 23 |  97 18
     ---------------+--------+--------+
                  1 |       1|       1|      2
                    |  1 8873| 0 1127 |
                    |  0 4172| 6 9877 |
                    |   1 41 |   1 41 |   2 82
     ---------------+--------+--------+
     Total               67        4      71
                      94 37     5 63  100 00

        STATISTICS FOR TABLE OF INF5_8 BY COM10

Statistic                        DF     Value        Prob
---------------------------------------------------------
Chi-Square                        1     7 619       0 006
Likelihood Ratio Chi-Square       1     3 328       0 068
Continuity Adj  Chi-Square        1     1 452       0 228
Mantel-Haenszel Chi-Square        1     7 512       0 006
Fisher's Exact Test (Left)                          0 998
                    (Right)                         0 110
                    (2-Tail)                        0 110
Phi Coefficient                         0 328
Contingency Coefficient                 0 311
Cramer's V                              0 328

Sample Size = 71
WARNING   75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF3 BY COM12

     INF3           COM12

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  3 |      17|       3|     20
                    |  19 155| 0 8451 |
                    |  0 2424| 5 4951 |
                    |  23 94 |   4 23 |  28 17
     ---------------+--------+--------+
                  5 |      28|       0|     28
                    |  26 817| 1 1831 |
                    |  0 0522| 1 1831 |
                    |  39 44 |   0 00 |  39 44
     ---------------+--------+--------+
                  7 |      19|       0|     19
                    |  18 197| 0 8028 |
                    |  0 0354| 0 8028 |
                    |  26 76 |   0 00 |  26 76
     ---------------+--------+--------+
                  8 |       4|       0|      4
                    |   3 831|  0 169 |
                    |  0 0075|  0 169 |
                    |   5 63 |   0 00 |   5 63
     ---------------+--------+--------+
     Total               68        3      71
                      95 77     4 23  100 00

        STATISTICS FOR TABLE OF INF3 BY COM12

Statistic                        DF     Value        Prob
---------------------------------------------------------
Chi-Square                        3     7 987       0 046
Likelihood Ratio Chi-Square       3     7 947       0 047
Mantel-Haenszel Chi-Square        1     5 273       0 022
Phi Coefficient                         0 335
Contingency Coefficient                 0 318
Cramer's V                              0 335

Sample Size = 71
WARNING   63% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF9_5 BY COM12

     INF9_5         COM12

     Frequency      |
     Expected       |
     Cell Chi-Square|
     Percent        |       0|       1|  Total
     ---------------+--------+--------+
                  0 |      57|       1|     58
                    |  55 549| 2 4507 |
                    |  0 0379| 0 8588 |
                    |  80 28 |   1 41 |  81 69
     ---------------+--------+--------+
                  1 |      11|       2|     13
                    |  12 451| 0 5493 |
                    |   0 169| 3 8313 |
                    |  15 49 |   2 82 |  18 31
     ---------------+--------+--------+
     Total               68        3      71
                      95 77     4 23  100 00

        STATISTICS FOR TABLE OF INF9_5 BY COM12

Statistic                        DF     Value        Prob
---------------------------------------------------------
Chi-Square                        1     4 897       0 027
Likelihood Ratio Chi-Square       1     3 590       0 058
Continuity Adj  Chi-Square        1     2 103       0 147
Mantel-Haenszel Chi-Square        1     4 828       0 028
Fisher's Exact Test (Left)                          0 995
                    (Right)                         0 084
                    (2-Tail)                        0 084
Phi Coefficient                         0 263
Contingency Coefficient                 0 254
Cramer's V                              0 263

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY COM13

INF1            COM13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     13 |     13 |     26
               | 17 211 | 8 7887 |
               | 1 0304 | 2 0179 |
               |  18 31 |  18 31 |  36 62
---------------+--------+--------+
             3 |     34 |     11 |     45
               | 29 789 | 15 211 |
               | 0 5954 | 1 1659 |
               |  47 89 |  15 49 |  63 38
---------------+--------+--------+
Total                47       24       71
                  66 20    33 80   100 00

          STATISTICS FOR TABLE OF INF1 BY COM13

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 810     0 028
Likelihood Ratio Chi-Square    1       4 743     0 029
Continuity Adj  Chi-Square     1       3 735     0 053
Mantel-Haenszel Chi-Square     1       4 742     0 029
Fisher's Exact Test (Left)                       0 027
                    (Right)                      0 993
                    (2-Tail)                     0 038
Phi Coefficient                       -0 260
Contingency Coefficient                0 252
Cramer's V                            -0 260

Sample Size = 71
```

```
                TABLE OF INF5_8 BY COM13

INF5_8          COM13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     47 |     22 |     69
               | 45 676 | 23 324 |
               | 0 0384 | 0 0752 |
               |  66 20 |  30 99 |  97 18
---------------+--------+--------+
             1 |      0 |      2 |      2
               | 1 3239 | 0 6761 |
               | 1 3239 | 2 5927 |
               |   0 00 |   2 82 |   2 82
---------------+--------+--------+
Total                47       24       71
                  66 20    33 80   100 00

          STATISTICS FOR TABLE OF INF5_8 BY COM13

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       4 030     0 045
Likelihood Ratio Chi-Square    1       4 453     0 035
Continuity Adj  Chi-Square     1       1 561     0 212
Mantel-Haenszel Chi-Square     1       3 973     0 046
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 111
                    (2-Tail)                     0 111
Phi Coefficient                        0 238
Contingency Coefficient                0 232
Cramer's V                             0 238

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF9_1 BY COM13

INF9_1          COM13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     21 |      5 |     26
               | 17 211 | 8 7887 |
               |  0 834 | 1 6333 |
               |  29 58 |   7 04 |  36 62
---------------+--------+--------+
             1 |     26 |     19 |     45
               | 29 789 | 15 211 |
               | 0 4819 | 0 9437 |
               |  36 62 |  26 76 |  63 38
---------------+--------+--------+
Total                47       24       71
                  66 20    33 80   100 00

          STATISTICS FOR TABLE OF INF9_1 BY COM13

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       3 893     0 048
Likelihood Ratio Chi-Square    1       4 093     0 043
Continuity Adj  Chi-Square     1       2 933     0 087
Mantel-Haenszel Chi-Square     1       3 838     0 050
Fisher's Exact Test (Left)                       0 989
                    (Right)                      0 041
                    (2-Tail)                     0 069
Phi Coefficient                        0 234
Contingency Coefficient                0 228
Cramer's V                             0 234

Sample Size = 71
```

```
                TABLE OF RINF10 BY COM13

RINF10          COM13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     23 |      4 |     27
               | 18 164 | 8 8364 |
               | 1 2878 | 2 6471 |
               |  41 82 |   7 27 |  49 09
---------------+--------+--------+
             2 |      9 |     10 |     19
               | 12 782 | 6 2182 |
               | 1 1189 | 2 3001 |
               |  16 36 |  18 18 |  34 55
---------------+--------+--------+
             3 |      5 |      4 |      9
               | 6 0545 | 2 9455 |
               | 0 1837 | 0 3776 |
               |   9 09 |   7 27 |  16 36
---------------+--------+--------+
Total                37       18       55
                  67 27    32 73   100 00

Frequency Missing = 16


          STATISTICS FOR TABLE OF RINF10 BY COM13

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       7 915     0 019
Likelihood Ratio Chi-Square    2       8 241     0 016
Mantel-Haenszel Chi-Square     1       5 140     0 023
Phi Coefficient                        0 379
Contingency Coefficient                0 355
Cramer's V                             0 379

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF INF14 BY COM13

INF14           COM13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     19 |      8 |     27
               | 16 463 | 10 537 |
               | 0 3908 | 0 6107 |
               |  46 34 |  19 51 |  65 85
---------------+--------+--------+
             2 |      3 |      2 |      5
               | 3 0488 | 1 9512 |
               | 0 0008 | 0 0012 |
               |   7 32 |   4 88 |  12 20
---------------+--------+--------+
             3 |      0 |      5 |      5
               | 3 0488 | 1 9512 |
               | 3 0488 | 4 7637 |
               |   0 00 |  12 20 |  12 20
---------------+--------+--------+
             4 |      3 |      1 |      4
               |  2 439 |  1 561 |
               |  0 129 | 0 2016 |
               |   7 32 |   2 44 |   9 76
---------------+--------+--------+
Total                 25       16       41
                   60 98    39 02   100 00

Frequency Missing = 30

          STATISTICS FOR TABLE OF INF14 BY COM13

Statistic                        DF      Value         Prob
-------------------------------------------------------------
Chi-Square                        3      9 147        0 027
Likelihood Ratio Chi-Square       3     10 802        0 013
Mantel-Haenszel Chi-Square        1      1 890        0 169
Phi Coefficient                          0 472
Contingency Coefficient                  0 427
Cramer's V                               0 472

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_3 BY COM14

INF5_3          COM14

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     64 |      6 |     70
               | 63 099 | 6 9014 |
               | 0 0129 | 0 1177 |
               |  90 14 |   8 45 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9014 | 0 0986 |
               | 0 9014 | 8 2414 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total                 64        7       71
                   90 14     9 86   100 00

          STATISTICS FOR TABLE OF INF5_3 BY COM14

Statistic                        DF      Value         Prob
-------------------------------------------------------------
Chi-Square                        1      9 273        0 002
Likelihood Ratio Chi-Square       1      4 770        0 029
Continuity Adj  Chi-Square        1      1 839        0 175
Mantel-Haenszel Chi-Square        1      9 143        0 002
Fisher's Exact Test (Left)                            1 000
                    (Right)                           0 099
                    (2-Tail)                          0 099
Phi Coefficient                          0 361
Contingency Coefficient                  0 340
Cramer's V                               0 361

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_7 BY COM14

INF5_7          COM14

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     64 |      6 |     70
               | 63 099 | 6 9014 |
               | 0 0129 | 0 1177 |
               |  90 14 |   8 45 |  98 59
---------------+--------+--------+
             1 |      0 |      1 |      1
               | 0 9014 | 0 0986 |
               | 0 9014 | 8 2414 |
               |   0 00 |   1 41 |   1 41
---------------+--------+--------+
Total                 64        7       71
                   90 14     9 86   100 00

          STATISTICS FOR TABLE OF INF5_7 BY COM14

Statistic                        DF      Value         Prob
-------------------------------------------------------------
Chi-Square                        1      9 273        0 002
Likelihood Ratio Chi-Square       1      4 770        0 029
Continuity Adj  Chi-Square        1      1 839        0 175
Mantel-Haenszel Chi-Square        1      9 143        0 002
Fisher's Exact Test (Left)                            1 000
                    (Right)                           0 099
                    (2-Tail)                          0 099
Phi Coefficient                          0 361
Contingency Coefficient                  0 340
Cramer's V                               0 361

Sample Size = 71
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY COM15

INF1            COM15

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     13 |     13 |     26
               | 19 042 | 6 9577 |
               | 1 9173 | 5 2472 |
               |  18 31 |  18 31 |  36 62
---------------+--------+--------+
             3 |     39 |      6 |     45
               | 32 958 | 12 042 |
               | 1 1077 | 3 0317 |
               |  54 93 |   8 45 |  63 38
---------------+--------+--------+
Total                 52       19       71
                   73 24    26 76   100 00

          STATISTICS FOR TABLE OF INF1 BY COM15

Statistic                        DF      Value         Prob
-------------------------------------------------------------
Chi-Square                        1     11 304        0 001
Likelihood Ratio Chi-Square       1     11 098        0 001
Continuity Adj  Chi-Square        1      9 511        0 002
Mantel-Haenszel Chi-Square        1     11 145        0 001
Fisher's Exact Test (Left)                         1 13E-03
                    (Right)                           1 000
                    (2-Tail)                       1 67E-03
Phi Coefficient                         -0 399
Contingency Coefficient                  0 371
Cramer's V                              -0 399

Sample Size = 71
```

```
                TABLE OF INF2 BY COM15

      INF2          COM15

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     1 |     44 |     11 |     55
                       | 40 282 | 14 718 |
                       | 0 3432 | 0 9394 |
                       |  61 97 |  15 49 |  77 46
      -----------------+--------+--------+
                     2 |      8 |      8 |     16
                       | 11 718 | 4 2817 |
                       | 1 1798 | 3 2291 |
                       |  11 27 |  11 27 |  22 54
      -----------------+--------+--------+
      Total                52       19       71
                        73 24    26 76   100 00

           STATISTICS FOR TABLE OF INF2 BY COM15

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      1       5 691      0 017
Likelihood Ratio Chi-Square     1       5 258      0 022
Continuity Adj  Chi-Square      1       4 264      0 039
Mantel-Haenszel Chi-Square      1       5 611      0 018
Fisher's Exact Test (Left)                         0 995
                    (Right)                        0 022
                    (2-Tail)                       0 026
Phi Coefficient                         0 283
Contingency Coefficient                 0 272
Cramer's V                              0 283

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF4 BY COM15

      INF4          COM15

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     1 |      7 |      1 |      8
                       | 5 8286 | 2 1714 |
                       | 0 2354 |  0 632 |
                       |  10 00 |   1 43 |  11 43
      -----------------+--------+--------+
                     3 |     15 |      1 |     16
                       | 11 657 | 4 3429 |
                       | 0 9586 | 2 5731 |
                       |  21 43 |   1 43 |  22 86
      -----------------+--------+--------+
                     4 |     29 |     17 |     46
                       | 33 514 | 12 486 |
                       | 0 6081 | 1 6322 |
                       |  41 43 |  24 29 |  65 71
      -----------------+--------+--------+
      Total                51       19       70
                        72 86    27 14   100 00

      Frequency Missing = 1

           STATISTICS FOR TABLE OF INF4 BY COM15

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      2       6 639      0 036
Likelihood Ratio Chi-Square     2       7 742      0 021
Mantel-Haenszel Chi-Square      1       3 598      0 058
Phi Coefficient                         0 308
Contingency Coefficient                 0 294
Cramer's V                              0 308

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_4 BY COM15

      INF5_4        COM15

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     0 |     40 |      9 |     49
                       | 35 887 | 13 113 |
                       | 0 4713 | 1 2899 |
                       |  56 34 |  12 68 |  69 01
      -----------------+--------+--------+
                     1 |     12 |     10 |     22
                       | 16 113 | 5 8873 |
                       | 1 0497 |  2 873 |
                       |  16 90 |  14 08 |  30 99
      -----------------+--------+--------+
      Total                52       19       71
                        73 24    26 76   100 00

           STATISTICS FOR TABLE OF INF5_4 BY COM15

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      1       5 684      0 017
Likelihood Ratio Chi-Square     1       5 428      0 020
Continuity Adj  Chi-Square      1       4 386      0 036
Mantel-Haenszel Chi-Square      1       5 604      0 018
Fisher's Exact Test (Left)                         0 996
                    (Right)                        0 020
                    (2-Tail)                       0 023
Phi Coefficient                         0 283
Contingency Coefficient                 0 272
Cramer's V                              0 283

Sample Size = 71
```

```
                TABLE OF INF8 BY COM15

      INF8          COM15

      Frequency        |
      Expected         |
      Cell Chi-Square  |
      Percent          |       0|       1|  Total
      -----------------+--------+--------+
                     1 |     49 |     12 |     61
                       | 44 676 | 16 324 |
                       | 0 4185 | 1 1453 |
                       |  69 01 |  16 90 |  85 92
      -----------------+--------+--------+
                     2 |      3 |      7 |     10
                       | 7 3239 | 2 6761 |
                       | 2 5528 | 6 9866 |
                       |   4 23 |   9 86 |  14 08
      -----------------+--------+--------+
      Total                52       19       71
                        73 24    26 76   100 00

           STATISTICS FOR TABLE OF INF8 BY COM15

Statistic                      DF       Value       Prob
--------------------------------------------------------
Chi-Square                      1      11 103      0 001
Likelihood Ratio Chi-Square     1       9 775      0 002
Continuity Adj  Chi-Square      1       8 684      0 003
Mantel-Haenszel Chi-Square      1      10 947      0 001
Fisher's Exact Test (Left)                         1 000
                    (Right)                     2 64E-03
                    (2-Tail)                    2 64E-03
Phi Coefficient                         0 395
Contingency Coefficient                 0 368
Cramer's V                              0 395

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY COM15

     RINF10          COM15

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   1 |     25 |      2 |     27
                     | 19 636 | 7 3636 |
                     | 1 4651 | 3 9068 |
                     |  45 45 |   3 64 |  49 09
     ----------------+--------+--------+
                   2 |     10 |      9 |     19
                     | 13 818 | 5 1818 |
                     |  1 055 | 2 8134 |
                     |  18 18 |  16 36 |  34 55
     ----------------+--------+--------+
                   3 |      5 |      4 |      9
                     | 6 5455 | 2 4545 |
                     | 0 3649 | 0 9731 |
                     |   9 09 |   7 27 |  16 36
     ----------------+--------+--------+
     Total                 40       15       55
                        72 73    27 27   100 00

     Frequency Missing = 16


        STATISTICS FOR TABLE OF RINF10 BY COM15

Statistic                       DF      Value        Prob
---------------------------------------------------------
Chi-Square                       2     10 578       0 005
Likelihood Ratio Chi-Square      2     11 544       0 003
Mantel-Haenszel Chi-Square       1      7 848       0 005
Phi Coefficient                         0 439
Contingency Coefficient                 0 402
Cramer's V                              0 439

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
              TABLE OF INF13 BY COM15

     INF13           COM15

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   1 |     12 |     16 |     28
                     | 20 507 |  7 493 |
                     |  3 529 | 9 6584 |
                     |  16 90 |  22 54 |  39 44
     ----------------+--------+--------+
                   2 |     40 |      3 |     43
                     | 31 493 | 11 507 |
                     |  2 298 | 6 2892 |
                     |  56 34 |   4 23 |  60 56
     ----------------+--------+--------+
     Total                 52       19       71
                        73 24    26 76   100 00


        STATISTICS FOR TABLE OF INF13 BY COM15

Statistic                       DF      Value        Prob
---------------------------------------------------------
Chi-Square                       1     21 775       0 000
Likelihood Ratio Chi-Square      1     22 478       0 000
Continuity Adj  Chi-Square       1     19 290       0 000
Mantel-Haenszel Chi-Square       1     21 468       0 000
Fisher's Exact Test (Left)                       4 56E-06
                    (Right)                         1 000
                    (2-Tail)                     4 56E-06
Phi Coefficient                        -0 554
Contingency Coefficient                 0 484
Cramer's V                             -0 554

Sample Size = 71
```

```
              TABLE OF RINF11 BY COM15

     RINF11          COM15

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   1 |     28 |      3 |     31
                     | 22 733 | 8 2667 |
                     | 1 2201 | 3 3554 |
                     |  46 67 |   5 00 |  51 67
     ----------------+--------+--------+
                   2 |      9 |      9 |     18
                     |   13 2 |    4 8 |
                     | 1 3364 |  3 675 |
                     |  15 00 |  15 00 |  30 00
     ----------------+--------+--------+
                   3 |      7 |      4 |     11
                     | 8 0667 | 2 9333 |
                     |  0 141 | 0 3879 |
                     |  11 67 |   6 67 |  18 33
     ----------------+--------+--------+
     Total                 44       16       60
                        73 33    26 67   100 00

     Frequency Missing = 11


        STATISTICS FOR TABLE OF RINF11 BY COM15

Statistic                       DF      Value        Prob
---------------------------------------------------------
Chi-Square                       2     10 116       0 006
Likelihood Ratio Chi-Square      2     10 504       0 005
Mantel-Haenszel Chi-Square       1      5 708       0 017
Phi Coefficient                         0 411
Contingency Coefficient                 0 380
Cramer's V                              0 411

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF14 BY COM15

     INF14           COM15

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   1 |     20 |      7 |     27
                     | 15 146 | 11 854 |
                     | 1 5554 | 1 9874 |
                     |  48 78 |  17 07 |  65 85
     ----------------+--------+--------+
                   2 |      1 |      4 |      5
                     | 2 8049 | 2 1951 |
                     | 1 1614 |  1 484 |
                     |   2 44 |   9 76 |  12 20
     ----------------+--------+--------+
                   3 |      0 |      5 |      5
                     | 2 8049 | 2 1951 |
                     | 2 8049 |  3 584 |
                     |   0 00 |  12 20 |  12 20
     ----------------+--------+--------+
                   4 |      2 |      2 |      4
                     | 2 2439 | 1 7561 |
                     | 0 0265 | 0 0339 |
                     |   4 88 |   4 88 |   9 76
     ----------------+--------+--------+
     Total                 23       18       41
                        56 10    43 90   100 00

     Frequency Missing = 30


        STATISTICS FOR TABLE OF INF14 BY COM15

Statistic                       DF      Value        Prob
---------------------------------------------------------
Chi-Square                       3     12 637       0 005
Likelihood Ratio Chi-Square      3     14 774       0 002
Mantel-Haenszel Chi-Square       1      6 083       0 014
Phi Coefficient                         0 555
Contingency Coefficient                 0 485
Cramer's V                              0 555

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF4 BY COM16

INF4            COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |      8 |      0 |      8
                | 5 7143 | 2 2857 |
                | 0 9143 | 2 2857 |
                |  11 43 |   0 00 |  11 43
----------------+--------+--------+
              3 |     16 |      0 |     16
                | 11 429 | 4 5714 |
                | 1 8286 | 4 5714 |
                |  22 86 |   0 00 |  22 86
----------------+--------+--------+
              4 |     26 |     20 |     46
                | 32 857 | 13 143 |
                | 1 4311 | 3 5776 |
                |  37 14 |  28 57 |  65 71
----------------+--------+--------+
Total                 50       20      70
                   71 43    28 57  100 00

Frequency Missing = 1


         STATISTICS FOR TABLE OF INF4 BY COM16

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     2     14 609     0 001
Likelihood Ratio Chi-Square    2     20 773     0 000
Mantel-Haenszel Chi-Square     1      9 684     0 002
Phi Coefficient                       0 457
Contingency Coefficient               0 416
Cramer's V                            0 457

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_1 BY COM16

INF5_1          COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     33 |      4 |     37
                | 26 577 | 10 423 |
                |  1 552 | 3 9577 |
                |  46 48 |   5 63 |  52 11
----------------+--------+--------+
              1 |     18 |     16 |     34
                | 24 423 | 9 5775 |
                |  1 689 | 4 3069 |
                |  25 35 |  22 54 |  47 89
----------------+--------+--------+
Total                 51       20      71
                   71 83    28 17  100 00


         STATISTICS FOR TABLE OF INF5_1 BY COM16

Statistic                     DF      Value         Prob
---------------------------------------------------------
Chi-Square                     1     11 506        0 001
Likelihood Ratio Chi-Square    1     12 061        0 001
Continuity Adj  Chi-Square     1      9 784        0 002
Mantel-Haenszel Chi-Square     1     11 343        0 001
Fisher's Exact Test (Left)                         1 000
                    (Right)                     7 33E-04
                    (2-Tail)                    1 20E-03
Phi Coefficient                       0 403
Contingency Coefficient               0 373
Cramer's V                            0 403

Sample Size = 71
```

```
                TABLE OF INF5_2 BY COM16

INF5_2          COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     34 |      4 |     38
                | 27 296 | 10 704 |
                | 1 6467 |  4 199 |
                |  47 89 |   5 63 |  53 52
----------------+--------+--------+
              1 |     17 |     16 |     33
                | 23 704 | 9 2958 |
                | 1 8961 | 4 8352 |
                |  23 94 |  22 54 |  46 48
----------------+--------+--------+
Total                 51       20      71
                   71 83    28 17  100 00


         STATISTICS FOR TABLE OF INF5_2 BY COM16

Statistic                     DF      Value      Prob
------------------------------------------------------
Chi-Square                     1     12 577     0 000
Likelihood Ratio Chi-Square    1     13 134     0 000
Continuity Adj  Chi-Square     1     10 771     0 001
Mantel-Haenszel Chi-Square     1     12 400     0 000
Fisher's Exact Test (Left)                      1 000
                    (Right)                  4 29E-04
                    (2-Tail)                 5 13E-04
Phi Coefficient                       0 421
Contingency Coefficient               0 388
Cramer's V                            0 421

Sample Size = 71
```

```
                TABLE OF INF5_4 BY COM16

INF5_4          COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     41 |      8 |     49
                | 35 197 | 13 803 |
                | 0 9567 | 2 4396 |
                |  57 75 |  11 27 |  69 01
----------------+--------+--------+
              1 |     10 |     12 |     22
                | 15 803 | 6 1972 |
                | 2 1308 | 5 4335 |
                |  14 08 |  16 90 |  30 99
----------------+--------+--------+
Total                 51       20      71
                   71 83    28 17  100 00


         STATISTICS FOR TABLE OF INF5_4 BY COM16

Statistic                     DF      Value         Prob
---------------------------------------------------------
Chi-Square                     1     10 961        0 001
Likelihood Ratio Chi-Square    1     10 494        0 001
Continuity Adj  Chi-Square     1      9 153        0 002
Mantel-Haenszel Chi-Square     1     10 806        0 001
Fisher's Exact Test (Left)                         1 000
                    (Right)                     1 50E-03
                    (2-Tail)                    1 63E-03
Phi Coefficient                       0 393
Contingency Coefficient               0 366
Cramer's V                            0 393

Sample Size = 71
```

```
               TABLE OF INF5_6 BY COM16

   INF5_6         COM16

   Frequency      |
   Expected       |
   Cell Chi-Square|
   Percent        |       0|       1|  Total
   ---------------+--------+--------+
                0 |     28 |     18 |     46
                  | 33 042 | 12 958 |
                  | 0 7694 | 1 9621 |
                  |  39 44 |  25 35 |  64 79
   ---------------+--------+--------+
                1 |     23 |      2 |     25
                  | 17 958 | 7 0423 |
                  | 1 4158 | 3 6103 |
                  |  32 39 |   2 82 |  35 21
   ---------------+--------+--------+
   Total               51       20       71
                    71 83    28 17   100 00


        STATISTICS FOR TABLE OF INF5_6 BY COM16

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       7 758       0 005
Likelihood Ratio Chi-Square    1       8 908       0 003
Continuity Adj  Chi-Square     1       6 295       0 012
Mantel-Haenszel Chi-Square     1       7 648       0 006
Fisher's Exact Test (Left)                      4 24E-03
                    (Right)                        1 000
                    (2-Tail)                    5 68E-03
Phi Coefficient                       -0 331
Contingency Coefficient                0 314
Cramer's V                            -0 331

Sample Size = 71
```

```
               TABLE OF INF5_8 BY COM16

   INF5_8         COM16

   Frequency      |
   Expected       |
   Cell Chi-Square|
   Percent        |       0|       1|  Total
   ---------------+--------+--------+
                0 |     51 |     18 |     69
                  | 49 563 | 19 437 |
                  | 0 0416 | 0 1062 |
                  |  71 83 |  25 35 |  97 18
   ---------------+--------+--------+
                1 |      0 |      2 |      2
                  | 1 4366 | 0 5634 |
                  | 1 4366 | 3 6634 |
                  |   0 00 |   2 82 |   2 82
   ---------------+--------+--------+
   Total               51       20       71
                    71 83    28 17   100 00


        STATISTICS FOR TABLE OF INF5_8 BY COM16

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     1       5 248       0 022
Likelihood Ratio Chi-Square    1       5 218       0 022
Continuity Adj  Chi-Square     1       2 231       0 135
Mantel-Haenszel Chi-Square     1       5 174       0 023
Fisher's Exact Test (Left)                         1 000
                    (Right)                        0 076
                    (2-Tail)                       0 076
Phi Coefficient                        0 272
Contingency Coefficient                0 262
Cramer's V                             0 272

Sample Size = 71
WARNING  50% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF6 BY COM16

   RINF6          COM16

   Frequency      |
   Expected       |
   Cell Chi-Square|
   Percent        |       0|       1|  Total
   ---------------+--------+--------+
   ADM            |      3 |      0 |      3
                  | 2 1304 | 0 8696 |
                  | 0 3549 | 0 8696 |
                  |   4 35 |   0 00 |   4 35
   ---------------+--------+--------+
   DHD            |     26 |     18 |     44
                  | 31 246 | 12 754 |
                  | 0 8809 | 2 1582 |
                  |  37 68 |  26 09 |  63 77
   ---------------+--------+--------+
   DIET           |      3 |      2 |      5
                  | 3 5507 | 1 4493 |
                  | 0 0854 | 0 2093 |
                  |   4 35 |   2 90 |   7 25
   ---------------+--------+--------+
   MGR            |     17 |      0 |     17
                  | 12 072 | 4 9275 |
                  | 2 0112 | 4 9275 |
                  |  24 64 |   0 00 |  24 64
   ---------------+--------+--------+
   Total               49       20       69
                    71 01    28 99   100 00

   Frequency Missing = 2

        STATISTICS FOR TABLE OF RINF6 BY COM16

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     3      11 497       0 009
Likelihood Ratio Chi-Square    3      16 815       0 001
Mantel-Haenszel Chi-Square     1       5 953       0 015
Phi Coefficient                        0 408
Contingency Coefficient                0 378
Cramer's V                             0 408

Effective Sample Size = 69
Frequency Missing = 2
WARNING  63% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF10 BY COM16

   RINF10         COM16

   Frequency      |
   Expected       |
   Cell Chi-Square|
   Percent        |       0|       1|  Total
   ---------------+--------+--------+
                1 |     26 |      1 |     27
                  | 20 127 | 6 8727 |
                  | 1 7135 | 5 0182 |
                  |  47 27 |   1 82 |  49 09
   ---------------+--------+--------+
                2 |     10 |      9 |     19
                  | 14 164 | 4 8364 |
                  |  1 224 | 3 5845 |
                  |  18 18 |  16 36 |  34 55
   ---------------+--------+--------+
                3 |      5 |      4 |      9
                  | 6 7091 | 2 2909 |
                  | 0 4354 |  1 275 |
                  |   9 09 |   7 27 |  16 36
   ---------------+--------+--------+
   Total               41       14       55
                    74 55    25 45   100 00

   Frequency Missing = 16

        STATISTICS FOR TABLE OF RINF10 BY COM16

Statistic                     DF       Value        Prob
--------------------------------------------------------
Chi-Square                     2      13 251       0 001
Likelihood Ratio Chi-Square    2      15 194       0 001
Mantel-Haenszel Chi-Square     1       9 879       0 002
Phi Coefficient                        0 491
Contingency Coefficient                0 441
Cramer's V                             0 491

Effective Sample Size = 55
Frequency Missing = 16
WARNING  23% of the data are missing
WARNING  33% of the cells have expected counts less
         than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF11 BY COM16

RINF11          COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     29 |      2 |     31
                | 22 733 | 8 2667 |
                | 1 7275 | 4 7505 |
                |  48 33 |   3 33 |  51 67
----------------+--------+--------+
              2 |     10 |      8 |     18
                |   13 2 |    4 8 |
                | 0 7758 | 2 1333 |
                |  16 67 |  13 33 |  30 00
----------------+--------+--------+
              3 |      5 |      6 |     11
                | 8 0667 | 2 9333 |
                | 1 1658 | 3 2061 |
                |   8 33 |  10 00 |  18 33
----------------+--------+--------+
Total                 44       16       60
                   73 33    26 67   100 00

Frequency Missing = 11


        STATISTICS FOR TABLE OF RINF11 BY COM16

Statistic                     DF      Value        Prob
-------------------------------------------------------
Chi-Square                     2     13 759       0 001
Likelihood Ratio Chi-Square    2     14 870       0 001
Mantel-Haenszel Chi-Square     1     12 397       0 000
Phi Coefficient                       0 479
Contingency Coefficient               0 432
Cramer's V                            0 479

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF14 BY COM16

INF14           COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     21 |      6 |     27
                | 17 122 |  9 878 |
                | 0 8784 | 1 5225 |
                |  51 22 |  14 63 |  65 85
----------------+--------+--------+
              2 |      1 |      4 |      5
                | 3 1707 | 1 8293 |
                | 1 4861 | 2 5759 |
                |   2 44 |   9 76 |  12 20
----------------+--------+--------+
              3 |      2 |      3 |      5
                | 3 1707 | 1 8293 |
                | 0 4323 | 0 7493 |
                |   4 88 |   7 32 |  12 20
----------------+--------+--------+
              4 |      2 |      2 |      4
                | 2 5366 | 1 4634 |
                | 0 1135 | 0 1967 |
                |   4 88 |   4 88 |   9 76
----------------+--------+--------+
Total                 26       15       41
                   63 41    36 59   100 00

Frequency Missing = 30


        STATISTICS FOR TABLE OF INF14 BY COM16

Statistic                     DF      Value        Prob
-------------------------------------------------------
Chi-Square                     3      7 955       0 047
Likelihood Ratio Chi-Square    3      7 967       0 047
Mantel-Haenszel Chi-Square     1      3 647       0 056
Phi Coefficient                       0 440
Contingency Coefficient               0 403
Cramer's V                            0 440

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF13 BY COM16

INF13           COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     14 |     14 |     28
                | 20 113 | 7 8873 |
                | 1 8578 | 4 7373 |
                |  19 72 |  19 72 |  39 44
----------------+--------+--------+
              2 |     37 |      6 |     43
                | 30 887 | 12 113 |
                | 1 2097 | 3 0848 |
                |  52 11 |   8 45 |  60 56
----------------+--------+--------+
Total                 51       20       71
                   71 83    28 17   100 00


        STATISTICS FOR TABLE OF INF13 BY COM16

Statistic                     DF      Value        Prob
-------------------------------------------------------
Chi-Square                     1     10 890       0 001
Likelihood Ratio Chi-Square    1     10 855       0 001
Continuity Adj  Chi-Square     1      9 181       0 002
Mantel-Haenszel Chi-Square     1     10 736       0 001
Fisher's Exact Test (Left)                     1 26E-03
                    (Right)                       1 000
                    (2-Tail)                   2 39E-03
Phi Coefficient                      -0 392
Contingency Coefficient               0 365
Cramer's V                           -0 392

Sample Size = 71
```

```
              TABLE OF INF15 BY COM16

INF15           COM16

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              2 |     21 |      1 |     22
                | 15 433 | 6 5672 |
                | 2 0083 | 4 7194 |
                |  31 34 |   1 49 |  32 84
----------------+--------+--------+
              3 |     12 |     11 |     23
                | 16 134 | 6 8657 |
                | 1 0594 | 2 4896 |
                |  17 91 |  16 42 |  34 33
----------------+--------+--------+
              4 |      7 |      3 |     10
                | 7 0149 | 2 9851 |
                | 318E-7 | 0 0001 |
                |  10 45 |   4 48 |  14 93
----------------+--------+--------+
              5 |      7 |      5 |     12
                | 8 4179 | 3 5821 |
                | 0 2388 | 0 5613 |
                |  10 45 |   7 46 |  17 91
----------------+--------+--------+
Total                 47       20       67
                   70 15    29 85   100 00

Frequency Missing = 4


        STATISTICS FOR TABLE OF INF15 BY COM16

Statistic                     DF      Value        Prob
-------------------------------------------------------
Chi-Square                     3     11 077       0 011
Likelihood Ratio Chi-Square    3     13 191       0 004
Mantel-Haenszel Chi-Square     1      4 282       0 039
Phi Coefficient                       0 407
Contingency Coefficient               0 377
Cramer's V                            0 407

Effective Sample Size = 67
Frequency Missing = 4
WARNING   25% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF4 BY COM17

     INF4            COM17

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   1 |      7 |      1 |      8
                     | 5 0286 | 2 9714 |
                     | 0 7729 |  1 308 |
                     |  10 00 |   1 43 |  11 43
     ----------------+--------+--------+
                   3 |     13 |      3 |     16
                     | 10 057 | 5 9429 |
                     | 0 8611 | 1 4573 |
                     |  18 57 |   4 29 |  22 86
     ----------------+--------+--------+
                   4 |     24 |     22 |     46
                     | 28 914 | 17 086 |
                     | 0 8352 | 1 4135 |
                     |  34 29 |  31 43 |  65 71
     ----------------+--------+--------+
     Total                 44       26       70
                        62 86    37 14   100 00

     Frequency Missing = 1


       STATISTICS FOR TABLE OF INF4 BY COM17

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        2       6 648       0 036
Likelihood Ratio Chi-Square       2       7 206       0 027
Mantel-Haenszel Chi-Square        1       5 084       0 024
Phi Coefficient                           0 308
Contingency Coefficient                   0 295
Cramer's V                                0 308

Effective Sample Size = 70
Frequency Missing = 1
```

```
                TABLE OF INF5_1 BY COM17

     INF5_1          COM17

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   0 |     30 |      7 |     37
                     | 23 451 | 13 549 |
                     | 1 8291 | 3 1657 |
                     |  42 25 |   9 86 |  52 11
     ----------------+--------+--------+
                   1 |     15 |     19 |     34
                     | 21 549 | 12 451 |
                     | 1 9905 |  3 445 |
                     |  21 13 |  26 76 |  47 89
     ----------------+--------+--------+
     Total                 45       26       71
                        63 38    36 62   100 00

       STATISTICS FOR TABLE OF INF5_1 BY COM17

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        1      10 430       0 001
Likelihood Ratio Chi-Square       1      10 724       0 001
Continuity Adj  Chi-Square        1       8 899       0 003
Mantel-Haenszel Chi-Square        1      10 283       0 001
Fisher's Exact Test (Left)                            1 000
                    (Right)                        1 29E-03
                    (2-Tail)                       1 52E-03
Phi Coefficient                           0 383
Contingency Coefficient                   0 358
Cramer's V                                0 383

Sample Size = 71
```

```
                TABLE OF INF5_2 BY COM17

     INF5_2          COM17

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   0 |     31 |      7 |     38
                     | 24 085 | 13 915 |
                     | 1 9857 | 3 4367 |
                     |  43 66 |   9 86 |  53 52
     ----------------+--------+--------+
                   1 |     14 |     19 |     33
                     | 20 915 | 12 085 |
                     | 2 2865 | 3 9575 |
                     |  19 72 |  26 76 |  46 48
     ----------------+--------+--------+
     Total                 45       26       71
                        63 38    36 62   100 00

       STATISTICS FOR TABLE OF INF5_2 BY COM17

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        1      11 666       0 001
Likelihood Ratio Chi-Square       1      11 986       0 001
Continuity Adj  Chi-Square        1      10 040       0 002
Mantel-Haenszel Chi-Square        1      11 502       0 001
Fisher's Exact Test (Left)                            1 000
                    (Right)                        6 87E-04
                    (2-Tail)                       1 13E-03
Phi Coefficient                           0 405
Contingency Coefficient                   0 376
Cramer's V                                0 405

Sample Size = 71
```

```
                TABLE OF INF5_4 BY COM17

     INF5_4          COM17

     Frequency       |
     Expected        |
     Cell Chi-Square |
     Percent         |       0|       1|  Total
     ----------------+--------+--------+
                   0 |     36 |     13 |     49
                     | 31 056 | 17 944 |
                     |  0 787 |  1 362 |
                     |  50 70 |  18 31 |  69 01
     ----------------+--------+--------+
                   1 |      9 |     13 |     22
                     | 13 944 | 8 0563 |
                     | 1 7528 | 3 0336 |
                     |  12 68 |  18 31 |  30 99
     ----------------+--------+--------+
     Total                 45       26       71
                        63 38    36 62   100 00

       STATISTICS FOR TABLE OF INF5_4 BY COM17

Statistic                        DF       Value        Prob
-----------------------------------------------------------
Chi-Square                        1       6 935       0 008
Likelihood Ratio Chi-Square       1       6 816       0 009
Continuity Adj  Chi-Square        1       5 603       0 018
Mantel-Haenszel Chi-Square        1       6 838       0 009
Fisher's Exact Test (Left)                            0 998
                    (Right)                        9 40E-03
                    (2-Tail)                          0 015
Phi Coefficient                           0 313
Contingency Coefficient                   0 298
Cramer's V                                0 313

Sample Size = 71
```

```
           TABLE OF RINF10 BY COM17

RINF10          COM17

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     22 |      5 |     27
               | 17 182 | 9 8182 |
               | 1 3511 | 2 3645 |
               |  40 00 |   9 09 |  49 09
---------------+--------+--------+
             2 |      9 |     10 |     19
               | 12 091 | 6 9091 |
               | 0 7902 | 1 3828 |
               |  16 36 |  18 18 |  34 55
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 5 7273 | 3 2727 |
               | 0 5209 | 0 9116 |
               |   7 27 |   9 09 |  16 36
---------------+--------+--------+
Total                35       20       55
                  63 64    36 36   100 00

Frequency Missing = 16


       STATISTICS FOR TABLE OF RINF10 BY COM17

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       7 321     0 026
Likelihood Ratio Chi-Square    2       7 576     0 023
Mantel-Haenszel Chi-Square     1       6 037     0 014
Phi Coefficient                        0 365
Contingency Coefficient                0 343
Cramer's V                             0 365

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
           TABLE OF RINF11 BY COM17

RINF11          COM17

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     24 |      7 |     31
               | 19 117 | 11 883 |
               | 1 2474 | 2 0068 |
               |  40 00 |  11 67 |  51 67
---------------+--------+--------+
             2 |      8 |     10 |     18
               |   11 1 |    6 9 |
               | 0 8658 | 1 3928 |
               |  13 33 |  16 67 |  30 00
---------------+--------+--------+
             3 |      5 |      6 |     11
               | 6 7833 | 4 2167 |
               | 0 4688 | 0 7542 |
               |   8 33 |  10 00 |  18 33
---------------+--------+--------+
Total                37       23       60
                  61 67    38 33   100 00

Frequency Missing = 11


       STATISTICS FOR TABLE OF RINF11 BY COM17

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       6 736     0 034
Likelihood Ratio Chi-Square    2       6 874     0 032
Mantel-Haenszel Chi-Square     1       5 232     0 022
Phi Coefficient                        0 335
Contingency Coefficient                0 318
Cramer's V                             0 335

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
           TABLE OF INF5_1 BY COM18

INF5_1          COM18

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     33 |      4 |     37
               | 28 662 |  8 338 |
               | 0 6566 | 2 2569 |
               |  46 48 |   5 63 |  52 11
---------------+--------+--------+
             1 |     22 |     12 |     34
               | 26 338 |  7 662 |
               | 0 7145 | 2 4561 |
               |  30 99 |  16 90 |  47 89
---------------+--------+--------+
Total                55       16       71
                  77 46    22 54   100 00


       STATISTICS FOR TABLE OF INF5_1 BY COM18

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 084     0 014
Likelihood Ratio Chi-Square    1       6 274     0 012
Continuity Adj  Chi-Square     1       4 762     0 029
Mantel-Haenszel Chi-Square     1       5 998     0 014
Fisher's Exact Test (Left)                       0 997
                    (Right)                      0 014
                    (2-Tail)                     0 022
Phi Coefficient                        0 293
Contingency Coefficient                0 281
Cramer's V                             0 293

Sample Size = 71
```

```
           TABLE OF INF5_2 BY COM18

INF5_2          COM18

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     34 |      4 |     38
               | 29 437 | 8 5634 |
               | 0 7074 | 2 4318 |
               |  47 89 |   5 63 |  53 52
---------------+--------+--------+
             1 |     21 |     12 |     33
               | 25 563 | 7 4366 |
               | 0 8146 | 2 8003 |
               |  29 58 |  16 90 |  46 48
---------------+--------+--------+
Total                55       16       71
                  77 46    22 54   100 00


       STATISTICS FOR TABLE OF INF5_2 BY COM18

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       6 754     0 009
Likelihood Ratio Chi-Square    1       6 936     0 008
Continuity Adj  Chi-Square     1       5 355     0 021
Mantel-Haenszel Chi-Square     1       6 659     0 010
Fisher's Exact Test (Left)                       0 998
                    (Right)                   9 88E-03
                    (2-Tail)                     0 012
Phi Coefficient                        0 308
Contingency Coefficient                0 295
Cramer's V                             0 308

Sample Size = 71
```

```
               TABLE OF INF5_4 BY COM18

INF5_4          COM18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     42 |      7 |     49
                | 37 958 | 11 042 |
                | 0 4305 | 1 4798 |
                |  59 15 |   9 86 |  69 01
----------------+--------+--------+
              1 |     13 |      9 |     22
                | 17 042 | 4 9577 |
                | 0 9588 | 3 2958 |
                |  18 31 |  12 68 |  30 99
----------------+--------+--------+
Total                 55       16       71
                   77 46    22 54   100 00
```

```
       STATISTICS FOR TABLE OF INF5_4 BY COM18

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     1     6 165      0 013
Likelihood Ratio Chi-Square    1     5 813      0 016
Continuity Adj  Chi-Square     1     4 734      0 030
Mantel-Haenszel Chi-Square     1     6 078      0 014
Fisher's Exact Test (Left)                      0 997
                    (Right)                     0 017
                    (2-Tail)                    0 029
Phi Coefficient                      0 295
Contingency Coefficient              0 283
Cramer's V                           0 295

Sample Size = 71
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF15 BY COM18

INF15           COM18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              2 |     21 |      1 |     22
                | 16 746 | 5 2537 |
                | 1 0805 | 3 4441 |
                |  31 34 |   1 49 |  32 84
----------------+--------+--------+
              3 |     17 |      6 |     23
                | 17 507 | 5 4925 |
                | 0 0147 | 0 0469 |
                |  25 37 |   8 96 |  34 33
----------------+--------+--------+
              4 |      7 |      3 |     10
                | 7 6119 | 2 3881 |
                | 0 0492 | 0 1568 |
                |  10 45 |   4 48 |  14 93
----------------+--------+--------+
              5 |      6 |      6 |     12
                | 9 1343 | 2 8657 |
                | 1 0755 | 3 4282 |
                |   8 96 |   8 96 |  17 91
----------------+--------+--------+
Total                 51       16       67
                   76 12    23 88   100 00

Frequency Missing = 4
```

```
       STATISTICS FOR TABLE OF INF15 BY COM18

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     3     9 296      0 026
Likelihood Ratio Chi-Square    3    10 269      0 016
Mantel-Haenszel Chi-Square     1     8 630      0 003
Phi Coefficient                      0 372
Contingency Coefficient              0 349
Cramer's V                           0 372

Effective Sample Size = 67
Frequency Missing = 4
WARNING   25% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF5_8 BY COM18

INF5_8          COM18

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     55 |     14 |     69
                | 53 451 | 15 549 |
                | 0 0449 | 0 1544 |
                |  77 46 |  19 72 |  97 18
----------------+--------+--------+
              1 |      0 |      2 |      2
                | 1 5493 | 0 4507 |
                | 1 5493 | 5 3257 |
                |   0 00 |   2 82 |   2 82
----------------+--------+--------+
Total                 55       16       71
                   77 46    22 54   100 00
```

```
       STATISTICS FOR TABLE OF INF5_8 BY COM18

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     1     7 074      0 008
Likelihood Ratio Chi-Square    1     6 165      0 013
Continuity Adj  Chi-Square     1     3 245      0 072
Mantel-Haenszel Chi-Square     1     6 975      0 008
Fisher's Exact Test (Left)                      1 000
                    (Right)                     0 048
                    (2-Tail)                    0 048
Phi Coefficient                      0 316
Contingency Coefficient              0 301
Cramer's V                           0 316

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF9_2 BY COM19

INF9_2          COM19

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              0 |     58 |      2 |     60
                | 55 775 | 4 2254 |
                | 0 0888 |  1 172 |
                |  81 69 |   2 82 |  84 51
----------------+--------+--------+
              1 |      8 |      3 |     11
                | 10 225 | 0 7746 |
                | 0 4843 | 6 3928 |
                |  11 27 |   4 23 |  15 49
----------------+--------+--------+
Total                 66        5       71
                   92 96     7 04   100 00
```

```
       STATISTICS FOR TABLE OF INF9_2 BY COM19

Statistic                     DF     Value       Prob
------------------------------------------------------
Chi-Square                     1     8 138      0 004
Likelihood Ratio Chi-Square    1     5 743      0 017
Continuity Adj  Chi-Square     1     4 892      0 027
Mantel-Haenszel Chi-Square     1     8 023      0 005
Fisher's Exact Test (Left)                      0 998
                    (Right)                     0 024
                    (2-Tail)                    0 024
Phi Coefficient                      0 339
Contingency Coefficient              0 321
Cramer's V                           0 339

Sample Size = 71
WARNING   50% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY COM20

RINF10          COM20

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     27 |      0 |     27
                | 22 582 | 4 4182 |
                | 0 8644 | 4 4182 |
                |  49 09 |   0 00 |  49 09
----------------+--------+--------+
              2 |     12 |      7 |     19
                | 15 891 | 3 1091 |
                | 0 9527 | 4 8693 |
                |  21 82 |  12 73 |  34 55
----------------+--------+--------+
              3 |      7 |      2 |      9
                | 7 5273 | 1 4727 |
                | 0 0369 | 0 1888 |
                |  12 73 |   3 64 |  16 36
----------------+--------+--------+
Total                 46        9       55
                   83 64    16 36   100 00

Frequency Missing = 16


          STATISTICS FOR TABLE OF RINF10 BY COM20

Statistic                        DF      Value       Prob
---------------------------------------------------------
Chi-Square                        2     11 330      0 003
Likelihood Ratio Chi-Square       2     14 479      0 001
Mantel-Haenszel Chi-Square        1      5 827      0 016
Phi Coefficient                          0 454
Contingency Coefficient                  0 413
Cramer's V                               0 454

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF1 BY COM21

INF1            COM21

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              2 |     13 |     13 |     26
                | 17 577 | 8 4225 |
                |  1 192 | 2 4878 |
                |  18 31 |  18 31 |  36 62
----------------+--------+--------+
              3 |     35 |     10 |     45
                | 30 423 | 14 577 |
                | 0 6887 | 1 4374 |
                |  49 30 |  14 08 |  63 38
----------------+--------+--------+
Total                 48       23       71
                   67 61    32 39   100 00


          STATISTICS FOR TABLE OF INF1 BY COM21

Statistic                        DF      Value       Prob
---------------------------------------------------------
Chi-Square                        1      5 806      0 016
Likelihood Ratio Chi-Square       1      5 715      0 017
Continuity Adj  Chi-Square        1      4 607      0 032
Mantel-Haenszel Chi-Square        1      5 724      0 017
Fisher's Exact Test (Left)                          0 016
                    (Right)                         0 996
                    (2-Tail)                        0 020
Phi Coefficient                         -0 286
Contingency Coefficient                  0 275
Cramer's V                              -0 286

Sample Size = 71
```

```
              TABLE OF INF14 BY COM20

INF14           COM20

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |     25 |      2 |     27
                |  22 39 | 4 6098 |
                | 0 3042 | 1 4775 |
                |  60 98 |   4 88 |  65 85
----------------+--------+--------+
              2 |      2 |      3 |      5
                | 4 1463 | 0 8537 |
                |  1 111 | 5 3965 |
                |   4 88 |   7 32 |  12 20
----------------+--------+--------+
              3 |      3 |      2 |      5
                | 4 1463 | 0 8537 |
                | 0 3169 | 1 5394 |
                |   7 32 |   4 88 |  12 20
----------------+--------+--------+
              4 |      4 |      0 |      4
                | 3 3171 | 0 6829 |
                | 0 1406 | 0 6829 |
                |   9 76 |   0 00 |   9 76
----------------+--------+--------+
Total                 34        7       41
                   82 93    17 07   100 00

Frequency Missing = 30

          STATISTICS FOR TABLE OF INF14 BY COM20

Statistic                        DF      Value       Prob
---------------------------------------------------------
Chi-Square                        3     10 969      0 012
Likelihood Ratio Chi-Square       3      9 759      0 021
Mantel-Haenszel Chi-Square        1      0 911      0 340
Phi Coefficient                          0 517
Contingency Coefficient                  0 459
Cramer's V                               0 517

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF4 BY COM21

INF4            COM21

Frequency       |
Expected        |
Cell Chi-Square |
Percent         |       0|       1|  Total
----------------+--------+--------+
              1 |      8 |      0 |      8
                | 5 3714 | 2 6286 |
                | 1 2863 | 2 6286 |
                |  11 43 |   0 00 |  11 43
----------------+--------+--------+
              3 |     13 |      3 |     16
                | 10 743 | 5 2571 |
                | 0 4742 | 0 9691 |
                |  18 57 |   4 29 |  22 86
----------------+--------+--------+
              4 |     26 |     20 |     46
                | 30 886 | 15 114 |
                | 0 7729 | 1 5793 |
                |  37 14 |  28 57 |  65 71
----------------+--------+--------+
Total                 47       23       70
                   67 14    32 86   100 00

Frequency Missing = 1


          STATISTICS FOR TABLE OF INF4 BY COM21

Statistic                        DF      Value       Prob
---------------------------------------------------------
Chi-Square                        2      7 710      0 021
Likelihood Ratio Chi-Square       2     10 216      0 006
Mantel-Haenszel Chi-Square        1      7 056      0 008
Phi Coefficient                          0 332
Contingency Coefficient                  0 315
Cramer's V                               0 332

Effective Sample Size = 70
Frequency Missing = 1
```

```
                TABLE OF INF5_1 BY COM21

      INF5_1          COM21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     30 |      7 |     37
                      | 25 014 | 11 986 |
                      | 0 9938 | 2 074  |
                      |  42 25 |  9 86  |  52 11
      ----------------+--------+--------+
                    1 |     18 |     16 |     34
                      | 22 986 | 11 014 |
                      | 1 0815 | 2 2571 |
                      |  25 35 |  22 54 |  47 89
      ----------------+--------+--------+
      Total               48       23       71
                       67 61    32 39   100 00


        STATISTICS FOR TABLE OF INF5_1 BY COM21

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      6 406      0 011
Likelihood Ratio Chi-Square     1      6 523      0 011
Continuity Adj  Chi-Square      1      5 186      0 023
Mantel-Haenszel Chi-Square      1      6 316      0 012
Fisher's Exact Test (Left)                        0 998
                    (Right)                       0 011
                    (2-Tail)                      0 021
Phi Coefficient                        0 300
Contingency Coefficient                0 288
Cramer's V                             0 300

Sample Size = 71
```

```
                TABLE OF INF5_2 BY COM21

      INF5_2          COM21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     31 |      7 |     38
                      |  25 69 |  12 31 |
                      | 1 0975 | 2 2904 |
                      |  43 66 |   9 86 |  53 52
      ----------------+--------+--------+
                    1 |     17 |     16 |     33
                      |  22 31 |  10 69 |
                      | 1 2638 | 2 6374 |
                      |  23 94 |  22 54 |  46 48
      ----------------+--------+--------+
      Total               48       23       71
                       67 61    32 39   100 00


        STATISTICS FOR TABLE OF INF5_2 BY COM21

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      7 289      0 007
Likelihood Ratio Chi-Square     1      7 409      0 006
Continuity Adj  Chi-Square      1      5 981      0 014
Mantel-Haenszel Chi-Square      1      7 186      0 007
Fisher's Exact Test (Left)                        0 999
                    (Right)                    6 99E-03
                    (2-Tail)                      0 011
Phi Coefficient                        0 320
Contingency Coefficient                0 305
Cramer's V                             0 320

Sample Size = 71
```

```
                TABLE OF INF5_4 BY COM21

      INF5_4          COM21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
                    0 |     38 |     11 |     49
                      | 33 127 | 15 873 |
                      | 0 7169 | 1 4961 |
                      |  53 52 |  15 49 |  69 01
      ----------------+--------+--------+
                    1 |     10 |     12 |     22
                      | 14 873 | 7 1268 |
                      | 1 5967 | 3 3323 |
                      |  14 08 |  16 90 |  30 99
      ----------------+--------+--------+
      Total               48       23       71
                       67 61    32 39   100 00


        STATISTICS FOR TABLE OF INF5_4 BY COM21

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      7 142      0 008
Likelihood Ratio Chi-Square     1      6 928      0 008
Continuity Adj  Chi-Square      1      5 752      0 016
Mantel-Haenszel Chi-Square      1      7 041      0 008
Fisher's Exact Test (Left)                        0 998
                    (Right)                    8 93E-03
                    (2-Tail)                      0 013
Phi Coefficient                        0 317
Contingency Coefficient                0 302
Cramer's V                             0 317

Sample Size = 71
```

```
                TABLE OF RINF6 BY COM21

      RINF6           COM21

      Frequency       |
      Expected        |
      Cell Chi-Square |
      Percent         |       0|       1|  Total
      ----------------+--------+--------+
      ADM             |      3 |      0 |      3
                      |      2 |      1 |
                      |    0 5 |      1 |
                      |   4 35 |   0 00 |   4 35
      ----------------+--------+--------+
      DHD             |     25 |     19 |     44
                      | 29 333 | 14 667 |
                      | 0 6402 | 1 2803 |
                      |  36 23 |  27 54 |  63 77
      ----------------+--------+--------+
      DIET            |      2 |      3 |      5
                      | 3 3333 | 1 6667 |
                      | 0 5333 | 1 0667 |
                      |   2 90 |   4 35 |   7 25
      ----------------+--------+--------+
      MGR             |     16 |      1 |     17
                      | 11 333 | 5 6667 |
                      | 1 9216 | 3 8431 |
                      |  23 19 |   1 45 |  24 64
      ----------------+--------+--------+
      Total               46       23       69
                       66 67    33 33   100 00

      Frequency Missing = 2


        STATISTICS FOR TABLE OF RINF6 BY COM21

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      3     10 785      0 013
Likelihood Ratio Chi-Square     3     13 326      0 004
Mantel-Haenszel Chi-Square      1      3 798      0 051
Phi Coefficient                        0 395
Contingency Coefficient                0 368
Cramer's V                             0 395

Effective Sample Size = 69
Frequency Missing = 2
WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
          TABLE OF RINF10 BY COM21

RINF10          COM21

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               | 18 164 | 8 8364 |
               |  2 573 |  5 289 |
               |  45 45 |   3 64 |  49 09
---------------+--------+--------+
             2 |      9 |     10 |     19
               | 12 782 | 6 2182 |
               | 1 1189 | 2 3001 |
               |  16 36 |  18 18 |  34 55
---------------+--------+--------+
             3 |      3 |      6 |      9
               | 6 0545 | 2 9455 |
               |  1 541 | 3 1677 |
               |   5 45 |  10 91 |  16 36
---------------+--------+--------+
Total               37       18       55
                 67 27    32 73   100 00

Frequency Missing = 16

      STATISTICS FOR TABLE OF RINF10 BY COM21

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     2    15 990     0 000
Likelihood Ratio Chi-Square    2    17 542     0 000
Mantel-Haenszel Chi-Square     1    14 490     0 000
Phi Coefficient                      0 539
Contingency Coefficient              0 475
Cramer's V                           0 539

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
          TABLE OF RINF11 BY COM21

RINF11          COM21

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     28 |      3 |     31
               |   21 7 |    9 3 |
               |  1 829 | 4 2677 |
               |  46 67 |   5 00 |  51 67
---------------+--------+--------+
             2 |     10 |      8 |     18
               |   12 6 |    5 4 |
               | 0 5365 | 1 2519 |
               |  16 67 |  13 33 |  30 00
---------------+--------+--------+
             3 |      4 |      7 |     11
               |    7 7 |    3 3 |
               | 1 7779 | 4 1485 |
               |   6 67 |  11 67 |  18 33
---------------+--------+--------+
Total               42       18       60
                 70 00    30 00   100 00

Frequency Missing = 11

      STATISTICS FOR TABLE OF RINF11 BY COM21

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     2    13 812     0 001
Likelihood Ratio Chi-Square    2    14 440     0 001
Mantel-Haenszel Chi-Square     1    13 252     0 000
Phi Coefficient                      0 480
Contingency Coefficient              0 433
Cramer's V                           0 480

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
          TABLE OF RINF12 BY COM21

RINF12          COM21

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     39 |     10 |     49
               | 33 127 | 15 873 |
               | 1 0413 | 2 1732 |
               |  54 93 |  14 08 |  69 01
---------------+--------+--------+
             2 |      5 |      8 |     13
               | 8 7887 | 4 2113 |
               | 1 6333 | 3 4086 |
               |   7 04 |  11 27 |  18 31
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 0845 | 2 9155 |
               | 0 7141 | 1 4904 |
               |   5 63 |   7 04 |  12 68
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00

      STATISTICS FOR TABLE OF RINF12 BY COM21

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     2    10 461     0 005
Likelihood Ratio Chi-Square    2    10 155     0 006
Mantel-Haenszel Chi-Square     1     8 038     0 005
Phi Coefficient                      0 384
Contingency Coefficient              0 358
Cramer's V                           0 384

Sample Size = 71
WARNING   33% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
          TABLE OF INF13 BY COM21

INF13           COM21

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     12 |     16 |     28
               |  18 93 | 9 0704 |
               | 2 5367 |  5 294 |
               |  16 90 |  22 54 |  39 44
---------------+--------+--------+
             2 |     36 |      7 |     43
               |  29 07 |  13 93 |
               | 1 6518 | 3 4473 |
               |  50 70 |   9 86 |  60 56
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00

      STATISTICS FOR TABLE OF INF13 BY COM21

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1    12 930     0 000
Likelihood Ratio Chi-Square    1    12 983     0 000
Continuity Adj  Chi-Square     1    11 131     0 001
Mantel-Haenszel Chi-Square     1    12 748     0 000
Fisher's Exact Test (Left)                  4 24E-04
                    (Right)                    1 000
                    (2-Tail)                5 86E-04
Phi Coefficient                     -0 427
Contingency Coefficient              0 392
Cramer's V                          -0 427

Sample Size = 71
```

```
              TABLE OF INF14 BY COM21

INF14           COM21

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     20 |      7 |     27
               | 15 805 | 11 195 |
               | 1 1135 | 1 572  |
               |  48 78 |  17 07 |  65 85
---------------+--------+--------+
             2 |      2 |      3 |      5
               | 2 9268 | 2 0732 |
               | 0 2935 | 0 4143 |
               |   4 88 |   7 32 |  12 20
---------------+--------+--------+
             3 |      1 |      4 |      5
               | 2 9268 | 2 0732 |
               | 1 2685 | 1 7908 |
               |   2 44 |   9 76 |  12 20
---------------+--------+--------+
             4 |      1 |      3 |      4
               | 2 3415 | 1 6585 |
               | 0 7685 |  1 085 |
               |   2 44 |   7 32 |   9 76
---------------+--------+--------+
Total               24       17       41
                 58 54    41 46   100 00

Frequency Missing = 30


        STATISTICS FOR TABLE OF INF14 BY COM21

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3       8 306     0 040
Likelihood Ratio Chi-Square    3       8 501     0 037
Mantel-Haenszel Chi-Square     1       7 210     0 007
Phi Coefficient                        0 450
Contingency Coefficient                0 410
Cramer's V                             0 450

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY COM22

RINF10          COM22

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     24 |      3 |     27
               | 19 636 | 7 3636 |
               | 0 9697 | 2 5859 |
               |  43 64 |   5 45 |  49 09
---------------+--------+--------+
             2 |     12 |      7 |     19
               | 13 818 | 5 1818 |
               | 0 2392 |  0 638 |
               |  21 82 |  12 73 |  34 55
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 6 5455 | 2 4545 |
               | 0 9899 | 2 6397 |
               |   7 27 |   9 09 |  16 36
---------------+--------+--------+
Total               40       15       55
                 72 73    27 27   100 00

Frequency Missing = 16


        STATISTICS FOR TABLE OF RINF10 BY COM22

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       8 062     0 018
Likelihood Ratio Chi-Square    2       8 244     0 016
Mantel-Haenszel Chi-Square     1       7 848     0 005
Phi Coefficient                        0 383
Contingency Coefficient                0 358
Cramer's V                             0 383

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
              TABLE OF INF5_4 BY COM22

INF5_4          COM22

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     43 |      6 |     49
               | 37 268 | 11 732 |
               | 0 8817 | 2 8008 |
               |  60 56 |   8 45 |  69 01
---------------+--------+--------+
             1 |     11 |     11 |     22
               | 16 732 | 5 2676 |
               | 1 9639 | 6 2382 |
               |  15 49 |  15 49 |  30 99
---------------+--------+--------+
Total               54       17       71
                 76 06    23 94   100 00

        STATISTICS FOR TABLE OF INF5_4 BY COM22

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      11 885     0 001
Likelihood Ratio Chi-Square    1      11 228     0 001
Continuity Adj  Chi-Square     1       9 902     0 002
Mantel-Haenszel Chi-Square     1      11 717     0 001
Fisher's Exact Test (Left)                       1 000
                    (Right)                   1 08E-03
                    (2-Tail)                  1 71E-03
Phi Coefficient                        0 409
Contingency Coefficient                0 379
Cramer's V                             0 409

Sample Size = 71
```

```
              TABLE OF INF14 BY COM22

INF14           COM22

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     25 |      2 |     27
               | 19 756 | 7 2439 |
               | 1 3919 | 3 7961 |
               |  60 98 |   4 88 |  65 85
---------------+--------+--------+
             2 |      2 |      3 |      5
               | 3 6585 | 1 3415 |
               | 0 7519 | 2 0506 |
               |   4 88 |   7 32 |  12 20
---------------+--------+--------+
             3 |      2 |      3 |      5
               | 3 6585 | 1 3415 |
               | 0 7519 | 2 0506 |
               |   4 88 |   7 32 |  12 20
---------------+--------+--------+
             4 |      1 |      3 |      4
               | 2 9268 | 1 0732 |
               | 1 2685 | 3 4595 |
               |   2 44 |   7 32 |   9 76
---------------+--------+--------+
Total               30       11       41
                 73 17    26 83   100 00

Frequency Missing = 30

        STATISTICS FOR TABLE OF INF14 BY COM22

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      15 521     0 001
Likelihood Ratio Chi-Square    3      15 470     0 001
Mantel-Haenszel Chi-Square     1      13 303     0 000
Phi Coefficient                        0 615
Contingency Coefficient                0 524
Cramer's V                             0 615

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF15 BY COM22

    INF15          COM22

    Frequency         |
    Expected          |
    Cell Chi-Square   |
    Percent           |       0|       1|  Total
    ------------------+--------+--------+
                    2 |     21 |      1 |     22
                      | 16 418 | 5 5821 |
                      | 1 2788 | 3 7612 |
                      |  31 34 |   1 49 |  32 84
    ------------------+--------+--------+
                    3 |     15 |      8 |     23
                      | 17 164 | 5 8358 |
                      | 0 2729 | 0 8026 |
                      |  22 39 |  11 94 |  34 33
    ------------------+--------+--------+
                    4 |      7 |      3 |     10
                      | 7 4627 | 2 5373 |
                      | 0 0287 | 0 0844 |
                      |  10 45 |   4 48 |  14 93
    ------------------+--------+--------+
                    5 |      7 |      5 |     12
                      | 8 9552 | 3 0448 |
                      | 0 4269 | 1 2556 |
                      |  10 45 |   7 46 |  17 91
    ------------------+--------+--------+
    Total                  50       17       67
                        74 63    25 37   100 00

    Frequency Missing = 4


        STATISTICS FOR TABLE OF INF15 BY COM22

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        3       7 911      0 048
Likelihood Ratio Chi-Square       3       9 523      0 023
Mantel-Haenszel Chi-Square        1       5 359      0 021
Phi Coefficient                           0 344
Contingency Coefficient                   0 325
Cramer's V                                0 344

Effective Sample Size = 67
Frequency Missing = 4
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF8 BY COM23

    INF8           COM23

    Frequency         |
    Expected          |
    Cell Chi-Square   |
    Percent           |       0|       1|  Total
    ------------------+--------+--------+
                    1 |     45 |     16 |     61
                      | 42 099 | 18 901 |
                      |    0 2 | 0 4454 |
                      |  63 38 |  22 54 |  85 92
    ------------------+--------+--------+
                    2 |      4 |      6 |     10
                      | 6 9014 | 3 0986 |
                      | 1 2198 | 2 7168 |
                      |   5 63 |   8 45 |  14 08
    ------------------+--------+--------+
    Total                  49       22       71
                        69 01    30 99   100 00

        STATISTICS FOR TABLE OF INF8 BY COM23

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        1       4 582      0 032
Likelihood Ratio Chi-Square       1       4 232      0 040
Continuity Adj  Chi-Square        1       3 139      0 076
Mantel-Haenszel Chi-Square        1       4 517      0 034
Fisher's Exact Test (Left)                           0 992
                    (Right)                          0 042
                    (2-Tail)                         0 060
Phi Coefficient                           0 254
Contingency Coefficient                   0 246
Cramer's V                                0 254

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY COM23

    INF1           COM23

    Frequency         |
    Expected          |
    Cell Chi-Square   |
    Percent           |       0|       1|  Total
    ------------------+--------+--------+
                    2 |     14 |     12 |     26
                      | 17 944 | 8 0563 |
                      | 0 8667 | 1 9305 |
                      |  19 72 |  16 90 |  36 62
    ------------------+--------+--------+
                    3 |     35 |     10 |     45
                      | 31 056 | 13 944 |
                      | 0 5008 | 1 1154 |
                      |  49 30 |  14 08 |  63 38
    ------------------+--------+--------+
    Total                  49       22       71
                        69 01    30 99   100 00


        STATISTICS FOR TABLE OF INF1 BY COM23

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        1       4 413      0 036
Likelihood Ratio Chi-Square       1       4 333      0 037
Continuity Adj  Chi-Square        1       3 365      0 067
Mantel-Haenszel Chi-Square        1       4 351      0 037
Fisher's Exact Test (Left)                           0 034
                    (Right)                          0 991
                    (2-Tail)                         0 061
Phi Coefficient                          -0 249
Contingency Coefficient                   0 242
Cramer's V                               -0 249

Sample Size = 71
```

```
                TABLE OF INF9_6 BY COM23

    INF9_6         COM23

    Frequency         |
    Expected          |
    Cell Chi-Square   |
    Percent           |       0|       1|  Total
    ------------------+--------+--------+
                    0 |     48 |     19 |     67
                      | 46 239 | 20 761 |
                      |  0 067 | 0 1493 |
                      |  67 61 |  26 76 |  94 37
    ------------------+--------+--------+
                    1 |      1 |      3 |      4
                      | 2 7606 | 1 2394 |
                      | 1 1228 | 2 5008 |
                      |   1 41 |   4 23 |   5 63
    ------------------+--------+--------+
    Total                  49       22       71
                        69 01    30 99   100 00

        STATISTICS FOR TABLE OF INF9_6 BY COM23

Statistic                        DF       Value       Prob
----------------------------------------------------------
Chi-Square                        1       3 840      0 050
Likelihood Ratio Chi-Square       1       3 493      0 062
Continuity Adj  Chi-Square        1       1 969      0 161
Mantel-Haenszel Chi-Square        1       3 786      0 052
Fisher's Exact Test (Left)                           0 992
                    (Right)                          0 085
                    (2-Tail)                         0 085
Phi Coefficient                           0 233
Contingency Coefficient                   0 227
Cramer's V                                0 233

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY COM23

        RINF10          COM23

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     1 |     23 |      4 |     27
                       | 17 673 | 9 3273 |
                       | 1 6059 | 3 0427 |
                       |  41 82 |   7 27 |  49 09
        ---------------+--------+--------+
                     2 |     11 |      8 |     19
                       | 12 436 | 6 5636 |
                       | 0 1659 | 0 3143 |
                       |  20 00 |  14 55 |  34 55
        ---------------+--------+--------+
                     3 |      2 |      7 |      9
                       | 5 8909 | 3 1091 |
                       | 2 5699 | 4 8693 |
                       |   3 64 |  12 73 |  16 36
        ---------------+--------+--------+
        Total               36       19       55
                         65 45    34 55   100 00

        Frequency Missing = 16

          STATISTICS FOR TABLE OF RINF10 BY COM23

Statistic                          DF       Value        Prob
------------------------------------------------------------
Chi-Square                          2      12 568       0 002
Likelihood Ratio Chi-Square         2      12 854       0 002
Mantel-Haenszel Chi-Square          1      12 254       0 000
Phi Coefficient                             0 478
Contingency Coefficient                     0 431
Cramer's V                                  0 478

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                TABLE OF RINF11 BY COM23

        RINF11          COM23

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     1 |     25 |      6 |     31
                       |  20 15 |  10 85 |
                       | 1 1674 |  2 168 |
                       |  41 67 |  10 00 |  51 67
        ---------------+--------+--------+
                     2 |     10 |      8 |     18
                       |   11 7 |    6 3 |
                       |  0 247 | 0 4587 |
                       |  16 67 |  13 33 |  30 00
        ---------------+--------+--------+
                     3 |      4 |      7 |     11
                       |   7 15 |   3 85 |
                       | 1 3878 | 2 5773 |
                       |   6 67 |  11 67 |  18 33
        ---------------+--------+--------+
        Total               39       21       60
                         65 00    35 00   100 00

        Frequency Missing = 11

          STATISTICS FOR TABLE OF RINF11 BY COM23

Statistic                          DF       Value        Prob
------------------------------------------------------------
Chi-Square                          2       8 006       0 018
Likelihood Ratio Chi-Square         2       8 080       0 018
Mantel-Haenszel Chi-Square          1       7 829       0 005
Phi Coefficient                             0 365
Contingency Coefficient                     0 343
Cramer's V                                  0 365

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
                TABLE OF INF13 BY COM23

        INF13           COM23

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     1 |     15 |     13 |     28
                       | 19 324 | 8 6761 |
                       | 0 9675 |  2 155 |
                       |  21 13 |  18 31 |  39 44
        ---------------+--------+--------+
                     2 |     34 |      9 |     43
                       | 29 676 | 13 324 |
                       |   0 63 | 1 4032 |
                       |  47 89 |  12 68 |  60 56
        ---------------+--------+--------+
        Total               49       22       71
                         69 01    30 99   100 00

          STATISTICS FOR TABLE OF INF13 BY COM23

Statistic                          DF       Value        Prob
------------------------------------------------------------
Chi-Square                          1       5 156       0 023
Likelihood Ratio Chi-Square         1       5 102       0 024
Continuity Adj  Chi-Square          1       4 032       0 045
Mantel-Haenszel Chi-Square          1       5 083       0 024
Fisher's Exact Test (Left)                              0 023
                    (Right)                             0 994
                    (2-Tail)                            0 035
Phi Coefficient                            -0 269
Contingency Coefficient                     0 260
Cramer's V                                 -0 269

Sample Size = 71
```

```
                TABLE OF INF14 BY COM23

        INF14           COM23

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     1 |     18 |      9 |     27
                       | 15 805 | 11 195 |
                       | 0 3049 | 0 4304 |
                       |  43 90 |  21 95 |  65 85
        ---------------+--------+--------+
                     2 |      1 |      4 |      5
                       | 2 9268 | 2 0732 |
                       | 1 2685 | 1 7908 |
                       |   2 44 |   9 76 |  12 20
        ---------------+--------+--------+
                     3 |      1 |      4 |      5
                       | 2 9268 | 2 0732 |
                       | 1 2685 | 1 7908 |
                       |   2 44 |   9 76 |  12 20
        ---------------+--------+--------+
                     4 |      4 |      0 |      4
                       | 2 3415 | 1 6585 |
                       | 1 1748 | 1 6585 |
                       |   9 76 |   0 00 |   9 76
        ---------------+--------+--------+
        Total               24       17       41
                         58 54    41 46   100 00

        Frequency Missing = 30

          STATISTICS FOR TABLE OF INF14 BY COM23

Statistic                          DF       Value        Prob
------------------------------------------------------------
Chi-Square                          3       9 687       0 021
Likelihood Ratio Chi-Square         3      11 257       0 010
Mantel-Haenszel Chi-Square          1       0 060       0 806
Phi Coefficient                             0 486
Contingency Coefficient                     0 437
Cramer's V                                  0 486

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY COM24

INF1            COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     11 |     15 |     26
               |  18 31 | 7 6901 |
               | 2 9183 | 6 9484 |
               |  15 49 |  21 13 |  36 62
---------------+--------+--------+
             3 |     39 |      6 |     45
               |  31 69 |  13 31 |
               | 1 6861 | 4 0146 |
               |  54 93 |   8 45 |  63 38
---------------+--------+--------+
Total                50       21       71
                  70 42    29 58   100 00

        STATISTICS FOR TABLE OF INF1 BY COM24

Statistic                     DF     Value      Prob
-----------------------------------------------------
Chi-Square                     1    15 567     0 000
Likelihood Ratio Chi-Square    1    15 462     0 000
Continuity Adj  Chi-Square     1    13 511     0 000
Mantel-Haenszel Chi-Square     1    15 348     0 000
Fisher's Exact Test (Left)                  1 28E-04
                    (Right)                    1 000
                    (2-Tail)                1 35E-04
Phi Coefficient                     -0 468
Contingency Coefficient              0 424
Cramer's V                          -0 468

Sample Size = 71
```

```
                TABLE OF INF4 BY COM24

INF4            COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      7 |      1 |      8
               |    5 6 |    2 4 |
               |   0 35 | 0 8167 |
               |  10 00 |   1 43 |  11 43
---------------+--------+--------+
             3 |     15 |      1 |     16
               |   11 2 |    4 8 |
               | 1 2893 | 3 0083 |
               |  21 43 |   1 43 |  22 86
---------------+--------+--------+
             4 |     27 |     19 |     46
               |   32 2 |   13 8 |
               | 0 8398 | 1 9594 |
               |  38 57 |  27 14 |  65 71
---------------+--------+--------+
Total                49       21       70
                  70 00    30 00   100 00

Frequency Missing = 1

        STATISTICS FOR TABLE OF INF4 BY COM24

Statistic                     DF     Value      Prob
-----------------------------------------------------
Chi-Square                     2     8 263     0 016
Likelihood Ratio Chi-Square    2     9 640     0 008
Mantel-Haenszel Chi-Square     1     4 612     0 032
Phi Coefficient                      0 344
Contingency Coefficient              0 325
Cramer's V                           0 344

Effective Sample Size = 70
Frequency Missing = 1
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF5_1 BY COM24

INF5_1          COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     32 |      5 |     37
               | 26 056 | 10 944 |
               | 1 3558 | 3 2281 |
               |  45 07 |   7 04 |  52 11
---------------+--------+--------+
             1 |     18 |     16 |     34
               | 23 944 | 10 056 |
               | 1 4754 | 3 5129 |
               |  25 35 |  22 54 |  47 89
---------------+--------+--------+
Total                50       21       71
                  70 42    29 58   100 00

        STATISTICS FOR TABLE OF INF5_1 BY COM24

Statistic                     DF     Value      Prob
-----------------------------------------------------
Chi-Square                     1     9 572     0 002
Likelihood Ratio Chi-Square    1     9 906     0 002
Continuity Adj  Chi-Square     1     8 029     0 005
Mantel-Haenszel Chi-Square     1     9 437     0 002
Fisher's Exact Test (Left)                     1 000
                    (Right)                 2 07E-03
                    (2-Tail)                3 63E-03
Phi Coefficient                      0 367
Contingency Coefficient              0 345
Cramer's V                           0 367

Sample Size = 71
```

```
                TABLE OF INF5_2 BY COM24

INF5_2          COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     32 |      6 |     38
               | 26 761 | 11 239 |
               | 1 0258 | 2 4424 |
               |  45 07 |   8 45 |  53 52
---------------+--------+--------+
             1 |     18 |     15 |     33
               | 23 239 | 9 7606 |
               | 1 1813 | 2 8125 |
               |  25 35 |  21 13 |  46 48
---------------+--------+--------+
Total                50       21       71
                  70 42    29 58   100 00

        STATISTICS FOR TABLE OF INF5_2 BY COM24

Statistic                     DF     Value      Prob
-----------------------------------------------------
Chi-Square                     1     7 462     0 006
Likelihood Ratio Chi-Square    1     7 605     0 006
Continuity Adj  Chi-Square     1     6 106     0 013
Mantel-Haenszel Chi-Square     1     7 357     0 007
Fisher's Exact Test (Left)                     0 999
                    (Right)                 6 48E-03
                    (2-Tail)                9 00E-03
Phi Coefficient                      0 324
Contingency Coefficient              0 308
Cramer's V                           0 324

Sample Size = 71
```

```
                 TABLE OF RINF10 BY COM24

RINF10           COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     23 |      4 |     27
               | 19 636 | 7 3636 |
               | 0 5762 | 1 5365 |
               |  41 82 |   7 27 |  49 09
---------------+--------+--------+
             2 |     14 |      5 |     19
               | 13 818 | 5 1818 |
               | 0 0024 | 0 0064 |
               |  25 45 |   9 09 |  34 55
---------------+--------+--------+
             3 |      3 |      6 |      9
               | 6 5455 | 2 4545 |
               | 1 9205 | 5 1212 |
               |   5 45 |  10 91 |  16 36
---------------+--------+--------+
Total               40       15       55
                 72 73    27 27   100 00

Frequency Missing = 16
```

```
         STATISTICS FOR TABLE OF RINF10 BY COM24

Statistic                       DF      Value      Prob
-------------------------------------------------------
Chi-Square                       2      9 163     0 010
Likelihood Ratio Chi-Square      2      8 445     0 015
Mantel-Haenszel Chi-Square       1      7 848     0 005
Phi Coefficient                         0 408
Contingency Coefficient                 0 378
Cramer's V                              0 408

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
```

```
                 TABLE OF INF13 BY COM24

INF13            COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     14 |     14 |     28
               | 19 718 | 8 2817 |
               | 1 6583 | 3 9484 |
               |  19 72 |  19 72 |  39 44
---------------+--------+--------+
             2 |     36 |      7 |     43
               | 30 282 | 12 718 |
               | 1 0798 |  2 571 |
               |  50 70 |   9 86 |  60 56
---------------+--------+--------+
Total               50       21       71
                 70 42    29 58   100 00
```

```
         STATISTICS FOR TABLE OF INF13 BY COM24

Statistic                       DF      Value      Prob
-------------------------------------------------------
Chi-Square                       1      9 258     0 002
Likelihood Ratio Chi-Square      1      9 205     0 002
Continuity Adj  Chi-Square       1      7 709     0 005
Mantel-Haenszel Chi-Square       1      9 127     0 003
Fisher's Exact Test (Left)                     2 84E-03
                    (Right)                       1 000
                    (2-Tail)                   3 44E-03
Phi Coefficient                        -0 361
Contingency Coefficient                 0 340
Cramer's V                             -0 361

Sample Size = 71
```

```
                 TABLE OF RINF11 BY COM24

RINF11           COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     26 |      5 |     31
               |   21 7 |    9 3 |
               | 0 8521 | 1 9882 |
               |  43 33 |   8 33 |  51 67
---------------+--------+--------+
             2 |     11 |      7 |     18
               |   12 6 |    5 4 |
               | 0 2032 | 0 4741 |
               |  18 33 |  11 67 |  30 00
---------------+--------+--------+
             3 |      5 |      6 |     11
               |    7 7 |    3 3 |
               | 0 9468 | 2 2091 |
               |   8 33 |  10 00 |  18 33
---------------+--------+--------+
Total               42       18       60
                 70 00    30 00   100 00

Frequency Missing = 11
```

```
         STATISTICS FOR TABLE OF RINF11 BY COM24

Statistic                       DF      Value      Prob
-------------------------------------------------------
Chi-Square                       2      6 673     0 036
Likelihood Ratio Chi-Square      2      6 697     0 035
Mantel-Haenszel Chi-Square       1      6 494     0 011
Phi Coefficient                         0 334
Contingency Coefficient                 0 316
Cramer's V                              0 334

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
```

```
                 TABLE OF INF14 BY COM24

INF14            COM24

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     19 |      8 |     27
               | 15 805 | 11 195 |
               | 0 6459 | 0 9119 |
               |  46 34 |  19 51 |  65 85
---------------+--------+--------+
             2 |      3 |      2 |      5
               | 2 9268 | 2 0732 |
               | 0 0018 | 0 0026 |
               |   7 32 |   4 88 |  12 20
---------------+--------+--------+
             3 |      0 |      5 |      5
               | 2 9268 | 2 0732 |
               | 2 9268 |  4 132 |
               |   0 00 |  12 20 |  12 20
---------------+--------+--------+
             4 |      2 |      2 |      4
               | 2 3415 | 1 6585 |
               | 0 0498 | 0 0703 |
               |   4 88 |   4 88 |   9 76
---------------+--------+--------+
Total               24       17       41
                 58 54    41 46   100 00

Frequency Missing = 30
```

```
         STATISTICS FOR TABLE OF INF14 BY COM24

Statistic                       DF      Value      Prob
-------------------------------------------------------
Chi-Square                       3      8 741     0 033
Likelihood Ratio Chi-Square      3     10 546     0 014
Mantel-Haenszel Chi-Square       1      4 307     0 038
Phi Coefficient                         0 462
Contingency Coefficient                 0 419
Cramer's V                              0 462

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   75% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF1 BY COM16

INF1              COM16

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             2 |     14 |     12 |     26
               | 18 676 | 7 3239 |
               | 1 1708 | 2 9855 |
               |  19 72 |  16 90 |  36 62
---------------+--------+--------+
             3 |     37 |      8 |     45
               | 32 324 | 12 676 |
               | 0 6764 | 1 7249 |
               |  52 11 |  11 27 |  63 38
---------------+--------+--------+
Total                51       20       71
                  71 83    28 17   100 00

        STATISTICS FOR TABLE OF INF1 BY COM16

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1     6 558     0 010
Likelihood Ratio Chi-Square    1     6 415     0 011
Continuity Adj  Chi-Square     1     5 230     0 022
Mantel-Haenszel Chi-Square     1     6 465     0 011
Fisher’s Exact Test (Left)                     0 012
                    (Right)                    0 998
                    (2-Tail)                   0 014
Phi Coefficient                     -0 304
Contingency Coefficient              0 291
Cramer’s V                          -0 304

Sample Size = 71
```

```
                TABLE OF INF5_5 BY COM25

INF5_5            COM25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     59 |      6 |     65
               | 56 761 | 8 2394 |
               | 0 0884 | 0 6087 |
               |  83 10 |   8 45 |  91 55
---------------+--------+--------+
             1 |      3 |      3 |      6
               | 5 2394 | 0 7606 |
               | 0 9572 | 6 5939 |
               |   4 23 |   4 23 |   8 45
---------------+--------+--------+
Total                62        9       71
                  87 32    12 68   100 00

        STATISTICS FOR TABLE OF INF5_5 BY COM25

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     1     8 248     0 004
Likelihood Ratio Chi-Square    1     5 648     0 017
Continuity Adj  Chi-Square     1     4 976     0 026
Mantel-Haenszel Chi-Square     1     8 132     0 004
Fisher’s Exact Test (Left)                     0 998
                    (Right)                    0 024
                    (2-Tail)                   0 024
Phi Coefficient                      0 341
Contingency Coefficient              0 323
Cramer’s V                           0 341

Sample Size = 71
WARNING   25% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF10 BY COM25

RINF10            COM25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     27 |      0 |     27
               | 23 564 | 3 4364 |
               | 0 5011 | 3 4364 |
               |  49 09 |   0 00 |  49 09
---------------+--------+--------+
             2 |     15 |      4 |     19
               | 16 582 | 2 4182 |
               | 0 1509 | 1 0347 |
               |  27 27 |   7 27 |  34 55
---------------+--------+--------+
             3 |      6 |      3 |      9
               | 7 8545 | 1 1455 |
               | 0 4379 | 3 0026 |
               |  10 91 |   5 45 |  16 36
---------------+--------+--------+
Total                48        7       55
                  87 27    12 73   100 00

Frequency Missing = 16

        STATISTICS FOR TABLE OF RINF10 BY COM25

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     2     8 564     0 014
Likelihood Ratio Chi-Square    2    10 915     0 004
Mantel-Haenszel Chi-Square     1     8 218     0 004
Phi Coefficient                      0 395
Contingency Coefficient              0 367
Cramer’s V                           0 395

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF11 BY COM25

RINF11            COM25

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     31 |      0 |     31
               | 26 867 | 4 1333 |
               | 0 6359 | 4 1333 |
               |  51 67 |   0 00 |  51 67
---------------+--------+--------+
             2 |     13 |      5 |     18
               |   15 6 |    2 4 |
               | 0 4333 | 2 8167 |
               |  21 67 |   8 33 |  30 00
---------------+--------+--------+
             3 |      8 |      3 |     11
               | 9 5333 | 1 4667 |
               | 0 2466 |  1 603 |
               |  13 33 |   5 00 |  18 33
---------------+--------+--------+
Total                52        8       60
                  86 67    13 33   100 00

Frequency Missing = 11

        STATISTICS FOR TABLE OF RINF11 BY COM25

Statistic                     DF     Value      Prob
------------------------------------------------------
Chi-Square                     2     9 869     0 007
Likelihood Ratio Chi-Square    2    12 960     0 002
Mantel-Haenszel Chi-Square     1     7 734     0 005
Phi Coefficient                      0 406
Contingency Coefficient              0 376
Cramer’s V                           0 406

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF13 BY COM25

       INF13           COM25

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                     1 |     21 |      7 |     28
                      | 24 451 | 3 5493 |
                      |  0 487 | 3 3549 |
                      |  29 58 |   9 86 |  39 44
       ---------------+--------+--------+
                     2 |     41 |      2 |     43
                      | 37 549 | 5 4507 |
                      | 0 3171 | 2 1846 |
                      |  57 75 |   2 82 |  60 56
       ---------------+--------+--------+
       Total               62        9       71
                        87 32    12 68   100 00

          STATISTICS FOR TABLE OF INF13 BY COM25

Statistic                          DF     Value       Prob
----------------------------------------------------------
Chi-Square                          1     6 344      0 012
Likelihood Ratio Chi-Square         1     6 317      0 012
Continuity Adj  Chi-Square          1     4 638      0 031
Mantel-Haenszel Chi-Square          1     6 254      0 012
Fisher's Exact Test (Left)                           0 016
                    (Right)                          0 998
                    (2-Tail)                         0 024
Phi Coefficient                          -0 299
Contingency Coefficient                   0 286
Cramer's V                               -0 299

Sample Size = 71
WARNING   25% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF14 BY COM25

       INF14           COM25

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                     1 |     26 |      1 |     27
                      |  22 39 | 4 6098 |
                      |  0 582 | 2 8267 |
                      |  63 41 |   2 44 |  65 85
       ---------------+--------+--------+
                     2 |      4 |      1 |      5
                      | 4 1463 | 0 8537 |
                      | 0 0052 | 0 0251 |
                      |   9 76 |   2 44 |  12 20
       ---------------+--------+--------+
                     3 |      1 |      4 |      5
                      | 4 1463 | 0 8537 |
                      | 2 3875 | 11 597 |
                      |   2 44 |   9 76 |  12 20
       ---------------+--------+--------+
                     4 |      3 |      1 |      4
                      | 3 3171 | 0 6829 |
                      | 0 0303 | 0 1472 |
                      |   7 32 |   2 44 |   9 76
       ---------------+--------+--------+
       Total               34        7       41
                        82 93    17 07   100 00

       Frequency Missing = 30

          STATISTICS FOR TABLE OF INF14 BY COM25

Statistic                          DF     Value       Prob
----------------------------------------------------------
Chi-Square                          3    17 600      0 001
Likelihood Ratio Chi-Square         3    14 417      0 002
Mantel-Haenszel Chi-Square          1     8 708      0 003
Phi Coefficient                           0 655
Contingency Coefficient                   0 548
Cramer's V                                0 655

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_4 BY COM26

       INF5_4          COM26

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                     0 |     42 |      7 |     49
                      | 38 648 | 10 352 |
                      | 0 2907 | 1 0854 |
                      |  59 15 |   9 86 |  69 01
       ---------------+--------+--------+
                     1 |     14 |      8 |     22
                      | 17 352 | 4 6479 |
                      | 0 6476 | 2 4176 |
                      |  19 72 |  11 27 |  30 99
       ---------------+--------+--------+
       Total               56       15       71
                        78 87    21 13   100 00

          STATISTICS FOR TABLE OF INF5_4 BY COM26

Statistic                          DF     Value       Prob
----------------------------------------------------------
Chi-Square                          1     4 441      0 035
Likelihood Ratio Chi-Square         1     4 187      0 041
Continuity Adj  Chi-Square          1     3 215      0 073
Mantel-Haenszel Chi-Square          1     4 379      0 036
Fisher's Exact Test (Left)                           0 991
                    (Right)                          0 039
                    (2-Tail)                         0 057
Phi Coefficient                           0 250
Contingency Coefficient                   0 243
Cramer's V                                0 250

Sample Size = 71
WARNING   25% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_5 BY COM26

       INF5_5          COM26

       Frequency      |
       Expected       |
       Cell Chi-Square|
       Percent        |       0|       1|  Total
       ---------------+--------+--------+
                     0 |     54 |     11 |     65
                      | 51 268 | 13 732 |
                      | 0 1456 | 0 5437 |
                      |  76 06 |  15 49 |  91 55
       ---------------+--------+--------+
                     1 |      2 |      4 |      6
                      | 4 7324 | 1 2676 |
                      | 1 5776 | 5 8898 |
                      |   2 82 |   5 63 |   8 45
       ---------------+--------+--------+
       Total               56       15       71
                        78 87    21 13   100 00

          STATISTICS FOR TABLE OF INF5_5 BY COM26

Statistic                          DF     Value       Prob
----------------------------------------------------------
Chi-Square                          1     8 157      0 004
Likelihood Ratio Chi-Square         1     6 475      0 011
Continuity Adj  Chi-Square          1     5 445      0 020
Mantel-Haenszel Chi-Square          1     8 042      0 005
Fisher's Exact Test (Left)                           0 999
                    (Right)                          0 016
                    (2-Tail)                         0 016
Phi Coefficient                           0 339
Contingency Coefficient                   0 321
Cramer's V                                0 339

Sample Size = 71
WARNING   50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_8 BY COM26

INF5_8          COM26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     56 |     13 |     69
               | 54 423 | 14 577 |
               | 0 0457 | 0 1707 |
               |  78 87 |  18 31 |  97 18
---------------+--------+--------+
             1 |      0 |      2 |      2
               | 1 5775 | 0 4225 |
               | 1 5775 | 5 8892 |
               |   0 00 |   2 82 |   2 82
---------------+--------+--------+
Total                56       15       71
                  78 87    21 13   100 00


       STATISTICS FOR TABLE OF INF5_8 BY COM26

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       7 683     0 006
Likelihood Ratio Chi-Square    1       6 441     0 011
Continuity Adj  Chi-Square     1       3 584     0 058
Mantel-Haenszel Chi-Square     1       7 575     0 006
Fisher's Exact Test (Left)                       1 000
                    (Right)                      0 042
                    (2-Tail)                     0 042
Phi Coefficient                        0 329
Contingency Coefficient                0 312
Cramer's V                             0 329

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF10 BY COM26

RINF10          COM26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     26 |      1 |     27
               | 20 618 | 6 3818 |
               | 1 4048 | 4 5385 |
               |  47 27 |   1 82 |  49 09
---------------+--------+--------+
             2 |     13 |      6 |     19
               | 14 509 | 4 4909 |
               |  0 157 | 0 5071 |
               |  23 64 |  10 91 |  34 55
---------------+--------+--------+
             3 |      3 |      6 |      9
               | 6 8727 | 2 1273 |
               | 2 1823 | 7 0503 |
               |   5 45 |  10 91 |  16 36
---------------+--------+--------+
Total                42       13       55
                  76 36    23 64   100 00

Frequency Missing = 16


       STATISTICS FOR TABLE OF RINF10 BY COM26

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      15 840     0 000
Likelihood Ratio Chi-Square    2      16 443     0 000
Mantel-Haenszel Chi-Square     1      15 473     0 000
Phi Coefficient                        0 537
Contingency Coefficient                0 473
Cramer's V                             0 537

Effective Sample Size = 55
Frequency Missing = 16
WARNING   23% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF11 BY COM26

RINF11          COM26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     30 |      1 |     31
               | 24 283 | 6 7167 |
               | 1 3458 | 4 8656 |
               |  50 00 |   1 67 |  51 67
---------------+--------+--------+
             2 |     13 |      5 |     18
               |   14 1 |    3 9 |
               | 0 0858 | 0 3103 |
               |  21 67 |   8 33 |  30 00
---------------+--------+--------+
             3 |      4 |      7 |     11
               | 8 6167 | 2 3833 |
               | 2 4735 | 8 9428 |
               |   6 67 |  11 67 |  18 33
---------------+--------+--------+
Total                47       13       60
                  78 33    21 67   100 00

Frequency Missing = 11


       STATISTICS FOR TABLE OF RINF11 BY COM26

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      18 024     0 000
Likelihood Ratio Chi-Square    2      18 193     0 000
Mantel-Haenszel Chi-Square     1      17 509     0 000
Phi Coefficient                        0 548
Contingency Coefficient                0 481
Cramer's V                             0 548

Effective Sample Size = 60
Frequency Missing = 11
WARNING   15% of the data are missing
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF RINF12 BY COM26

RINF12          COM26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     42 |      7 |     49
               | 38 648 | 10 352 |
               | 0 2907 | 1 0854 |
               |  59 15 |   9 86 |  69 01
---------------+--------+--------+
             2 |     10 |      3 |     13
               | 10 254 | 2 7465 |
               | 0 0063 | 0 0234 |
               |  14 08 |   4 23 |  18 31
---------------+--------+--------+
             3 |      4 |      5 |      9
               | 7 0986 | 1 9014 |
               | 1 3526 | 5 0496 |
               |   5 63 |   7 04 |  12 68
---------------+--------+--------+
Total                56       15       71
                  78 87    21 13   100 00


       STATISTICS FOR TABLE OF RINF12 BY COM26

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       7 808     0 020
Likelihood Ratio Chi-Square    2       6 618     0 037
Mantel-Haenszel Chi-Square     1       6 942     0 008
Phi Coefficient                        0 332
Contingency Coefficient                0 315
Cramer's V                             0 332

Sample Size = 71
WARNING   33% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF13 BY COM26

INF13          COM26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     17 |     11 |     28
               | 22 085 | 5 9155 |
               | 1 1706 | 4 3703 |
               |  23 94 |  15 49 |  39 44
---------------+--------+--------+
             2 |     39 |      4 |     43
               | 33 915 | 9 0845 |
               | 0 7623 | 2 8457 |
               |  54 93 |   5 63 |  60 56
---------------+--------+--------+
Total               56       15       71
                 78 87    21 13   100 00
```

```
       STATISTICS FOR TABLE OF INF13 BY COM26

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      9 149      0 002
Likelihood Ratio Chi-Square     1      9 084      0 003
Continuity Adj  Chi-Square      1      7 438      0 006
Mantel-Haenszel Chi-Square      1      9 020      0 003
Fisher's Exact Test (Left)                     3 35E-03
                    (Right)                       1 000
                    (2-Tail)                   5 91E-03
Phi Coefficient                       -0 359
Contingency Coefficient                0 338
Cramer's V                            -0 359

Sample Size = 71
```

```
              TABLE OF INF4 BY COM27

INF4           COM27

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |      7 |      1 |      8
               | 5 3714 | 2 6286 |
               | 0 4938 |  1 009 |
               |  10 00 |   1 43 |  11 43
---------------+--------+--------+
             3 |     14 |      2 |     16
               | 10 743 | 5 2571 |
               | 0 9875 |  2 018 |
               |  20 00 |   2 86 |  22 86
---------------+--------+--------+
             4 |     26 |     20 |     46
               | 30 886 | 15 114 |
               | 0 7729 | 1 5793 |
               |  37 14 |  28 57 |  65 71
---------------+--------+--------+
Total               47       23       70
                 67 14    32 86   100 00

Frequency Missing = 1
```

```
       STATISTICS FOR TABLE OF INF4 BY COM27

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      2      6 860      0 032
Likelihood Ratio Chi-Square     2      7 573      0 023
Mantel-Haenszel Chi-Square      1      4 548      0 033
Phi Coefficient                        0 313
Contingency Coefficient                0 299
Cramer's V                             0 313

Effective Sample Size = 70
Frequency Missing = 1
```

```
              TABLE OF INF14 BY COM26

INF14          COM26

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     24 |      3 |     27
               | 19 098 | 7 9024 |
               | 1 2585 | 3 0413 |
               |  58 54 |   7 32 |  65 85
---------------+--------+--------+
             2 |      2 |      3 |      5
               | 3 5366 | 1 4634 |
               | 0 6676 | 1 6134 |
               |   4 88 |   7 32 |  12 20
---------------+--------+--------+
             3 |      1 |      4 |      5
               | 3 5366 | 1 4634 |
               | 1 8193 | 4 3967 |
               |   2 44 |   9 76 |  12 20
---------------+--------+--------+
             4 |      2 |      2 |      4
               | 2 8293 | 1 1707 |
               | 0 2431 | 0 5874 |
               |   4 88 |   4 88 |   9 76
---------------+--------+--------+
Total               29       12       41
                 70 73    29 27   100 00

Frequency Missing = 30
```

```
       STATISTICS FOR TABLE OF INF14 BY COM26

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      3     13 627      0 003
Likelihood Ratio Chi-Square     3     13 456      0 004
Mantel-Haenszel Chi-Square      1      9 025      0 003
Phi Coefficient                        0 577
Contingency Coefficient                0 499
Cramer's V                             0 577

Effective Sample Size = 41
Frequency Missing = 30
WARNING  42% of the data are missing
WARNING  75% of the cells have expected counts less
          than 5  Chi-Square may not be a valid test
```

```
              TABLE OF INF5_1 BY COM27

INF5_1         COM27

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     30 |      7 |     37
               | 25 014 | 11 986 |
               | 0 9938 |  2 074 |
               |  42 25 |   9 86 |  52 11
---------------+--------+--------+
             1 |     18 |     16 |     34
               | 22 986 | 11 014 |
               | 1 0815 | 2 2571 |
               |  25 35 |  22 54 |  47 89
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00
```

```
       STATISTICS FOR TABLE OF INF5_1 BY COM27

Statistic                      DF      Value       Prob
-------------------------------------------------------
Chi-Square                      1      6 406      0 011
Likelihood Ratio Chi-Square     1      6 523      0 011
Continuity Adj  Chi-Square      1      5 186      0 023
Mantel-Haenszel Chi-Square      1      6 316      0 012
Fisher's Exact Test (Left)                        0 998
                    (Right)                       0 011
                    (2-Tail)                      0 021
Phi Coefficient                        0 300
Contingency Coefficient                0 288
Cramer's V                             0 300

Sample Size = 71
```

```
               TABLE OF INF5_2 BY COM27

INF5_2          COM27

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     31 |      7 |     38
               |  25 69 |  12 31 |
               | 1 0975 | 2 2904 |
               |  43 66 |   9 86 |  53 52
---------------+--------+--------+
             1 |     17 |     16 |     33
               |  22 31 |  10 69 |
               | 1 2638 | 2 6374 |
               |  23 94 |  22 54 |  46 48
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00


        STATISTICS FOR TABLE OF INF5_2 BY COM27

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1       7 289     0 007
Likelihood Ratio Chi-Square    1       7 409     0 006
Continuity Adj  Chi-Square     1       5 981     0 014
Mantel-Haenszel Chi-Square     1       7 186     0 007
Fisher's Exact Test (Left)                       0 999
                    (Right)                   6 99E-03
                    (2-Tail)                     0 011
Phi Coefficient                        0 320
Contingency Coefficient                0 305
Cramer's V                             0 320

Sample Size = 71
```

```
               TABLE OF INF5_4 BY COM27

INF5_4          COM27

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     41 |      8 |     49
               | 33 127 | 15 873 |
               | 1 8712 | 3 9052 |
               |  57 75 |  11 27 |  69 01
---------------+--------+--------+
             1 |      7 |     15 |     22
               | 14 873 | 7 1268 |
               | 4 1677 | 8 6979 |
               |   9 86 |  21 13 |  30 99
---------------+--------+--------+
Total               48       23       71
                 67 61    32 39   100 00


        STATISTICS FOR TABLE OF INF5_4 BY COM27

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     1      18 642     0 000
Likelihood Ratio Chi-Square    1      18 296     0 000
Continuity Adj  Chi-Square     1      16 349     0 000
Mantel-Haenszel Chi-Square     1      18 380     0 000
Fisher's Exact Test (Left)                       1 000
                    (Right)                   3 16E-05
                    (2-Tail)                  5 36E-05
Phi Coefficient                        0 512
Contingency Coefficient                0 456
Cramer's V                             0 512

Sample Size = 71
```

```
               TABLE OF RINF6 BY COM27

RINF6           COM27

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
ADM            |      3 |      0 |      3
               |      2 |      1 |
               |    0 5 |      1 |
               |   4 35 |   0 00 |   4 35
---------------+--------+--------+
DHD            |     22 |     22 |     44
               | 29 333 | 14 667 |
               | 1 8333 | 3 6667 |
               |  31 88 |  31 88 |  63 77
---------------+--------+--------+
DIET           |      5 |      0 |      5
               | 3 3333 | 1 6667 |
               | 0 8333 | 1 6667 |
               |   7 25 |   0 00 |   7 25
---------------+--------+--------+
MGR            |     16 |      1 |     17
               | 11 333 | 5 6667 |
               | 1 9216 | 3 8431 |
               |  23 19 |   1 45 |  24 64
---------------+--------+--------+
Total               46       23       69
                 66 67    33 33   100 00

Frequency Missing = 2


        STATISTICS FOR TABLE OF RINF6 BY COM27

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     3      15 265     0 002
Likelihood Ratio Chi-Square    3      19 236     0 000
Mantel-Haenszel Chi-Square     1       7 751     0 005
Phi Coefficient                        0 470
Contingency Coefficient                0 426
Cramer's V                             0 470

Effective Sample Size = 69
Frequency Missing = 2
WARNING  50% of the cells have expected counts less
          than 5 Chi-Square may not be a valid test
```

```
               TABLE OF RINF10 BY COM27

RINF10          COM27

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     26 |      1 |     27
               | 18 164 | 8 8364 |
               | 3 3809 | 6 9495 |
               |  47 27 |   1 82 |  49 09
---------------+--------+--------+
             2 |      9 |     10 |     19
               | 12 782 | 6 2182 |
               | 1 1189 | 2 3001 |
               |  16 36 |  18 18 |  34 55
---------------+--------+--------+
             3 |      2 |      7 |      9
               | 6 0545 | 2 9455 |
               | 2 7152 | 5 5813 |
               |   3 64 |  12 73 |  16 36
---------------+--------+--------+
Total               37       18       55
                 67 27    32 73   100 00

Frequency Missing = 16


        STATISTICS FOR TABLE OF RINF10 BY COM27

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2      22 046     0 000
Likelihood Ratio Chi-Square    2      25 170     0 000
Mantel-Haenszel Chi-Square     1      20 942     0 000
Phi Coefficient                        0 633
Contingency Coefficient                0 535
Cramer's V                             0 633

Effective Sample Size = 55
Frequency Missing = 16
WARNING  23% of the data are missing
```

```
                 TABLE OF RINF11 BY COM27

      RINF11          COM27

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     29 |      2 |     31
                     | 20 667 | 10 333 |
                     | 3 3602 | 6 7204 |
                     |  48 33 |   3 33 |  51 67
      ---------------+--------+--------+
                   2 |      7 |     11 |     18
                     |     12 |      6 |
                     | 2 0833 | 4 1667 |
                     |  11 67 |  18 33 |  30 00
      ---------------+--------+--------+
                   3 |      4 |      7 |     11
                     | 7 3333 | 3 6667 |
                     | 1 5152 | 3 0303 |
                     |   6 67 |  11 67 |  18 33
      ---------------+--------+--------+
      Total               40       20       60
                       66 67    33 33   100 00

      Frequency Missing = 11


         STATISTICS FOR TABLE OF RINF11 BY COM27

  Statistic                     DF       Value      Prob
  ------------------------------------------------------
  Chi-Square                     2      20 876     0 000
  Likelihood Ratio Chi-Square    2      23 073     0 000
  Mantel-Haenszel Chi-Square     1      17 046     0 000
  Phi Coefficient                        0 590
  Contingency Coefficient                0 508
  Cramer's V                             0 590

  Effective Sample Size = 60
  Frequency Missing = 11
  WARNING   15% of the data are missing
```

```
                 TABLE OF INF14 BY COM27

      INF14           COM27

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     21 |      6 |     27
                     | 15 805 | 11 195 |
                     | 1 7077 | 2 4108 |
                     |  51 22 |  14 63 |  65 85
      ---------------+--------+--------+
                   2 |      1 |      4 |      5
                     | 2 9268 | 2 0732 |
                     | 1 2685 | 1 7908 |
                     |   2 44 |   9 76 |  12 20
      ---------------+--------+--------+
                   3 |      1 |      4 |      5
                     | 2 9268 | 2 0732 |
                     | 1 2685 | 1 7908 |
                     |   2 44 |   9 76 |  12 20
      ---------------+--------+--------+
                   4 |      1 |      3 |      4
                     | 2 3415 | 1 6585 |
                     | 0 7685 |  1 085 |
                     |   2 44 |   7 32 |   9 76
      ---------------+--------+--------+
      Total               24       17       41
                       58 54    41 46   100 00

      Frequency Missing = 30


         STATISTICS FOR TABLE OF INF14 BY COM27

  Statistic                     DF       Value      Prob
  ------------------------------------------------------
  Chi-Square                     3      12 091     0 007
  Likelihood Ratio Chi-Square    3      12 526     0 006
  Mantel-Haenszel Chi-Square     1       8 941     0 003
  Phi Coefficient                        0 543
  Contingency Coefficient                0 477
  Cramer's V                             0 543

  Effective Sample Size = 41
  Frequency Missing = 30
  WARNING   42% of the data are missing
  WARNING   75% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF13 BY COM27

      INF13           COM27

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     12 |     16 |     28
                     |  18 93 | 9 0704 |
                     | 2 5367 |  5 294 |
                     |  16 90 |  22 54 |  39 44
      ---------------+--------+--------+
                   2 |     36 |      7 |     43
                     |  29 07 |  13 93 |
                     | 1 6518 | 3 4473 |
                     |  50 70 |   9 86 |  60 56
      ---------------+--------+--------+
      Total               48       23       71
                       67 61    32 39   100 00


         STATISTICS FOR TABLE OF INF13 BY COM27

  Statistic                     DF       Value      Prob
  ------------------------------------------------------
  Chi-Square                     1      12 930     0 000
  Likelihood Ratio Chi-Square    1      12 983     0 000
  Continuity Adj  Chi-Square     1      11 131     0 001
  Mantel-Haenszel Chi-Square     1      12 748     0 000
  Fisher's Exact Test (Left)                    4 24E-04
                      (Right)                      1 000
                      (2-Tail)                  5 86E-04
  Phi Coefficient                       -0 427
  Contingency Coefficient                0 392
  Cramer's V                            -0 427

  Sample Size = 71
```

```
                 TABLE OF INF5_1 BY COM28

      INF5_1          COM28

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   0 |     37 |      0 |     37
                     | 34 915 | 2 0845 |
                     | 0 1244 | 2 0845 |
                     |  52 11 |   0 00 |  52 11
      ---------------+--------+--------+
                   1 |     30 |      4 |     34
                     | 32 085 | 1 9155 |
                     | 0 1354 | 2 2684 |
                     |  42 25 |   5 63 |  47 89
      ---------------+--------+--------+
      Total               67        4       71
                       94 37     5 63   100 00


         STATISTICS FOR TABLE OF INF5_1 BY COM28

  Statistic                     DF       Value      Prob
  ------------------------------------------------------
  Chi-Square                     1       4 613     0 032
  Likelihood Ratio Chi-Square    1       6 151     0 013
  Continuity Adj  Chi-Square     1       2 665     0 103
  Mantel-Haenszel Chi-Square     1       4 548     0 033
  Fisher's Exact Test (Left)                       1 000
                      (Right)                      0 048
                      (2-Tail)                     0 048
  Phi Coefficient                        0 255
  Contingency Coefficient                0 247
  Cramer's V                             0 255

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
            than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF5_2 BY COM28

        INF5_2          COM28

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     0 |     38 |      0 |     38
                       | 35 859 | 2 1408 |
                       | 0 1278 | 2 1408 |
                       |  53 52 |   0 00 |  53 52
        ---------------+--------+--------+
                     1 |     29 |      4 |     33
                       | 31 141 | 1 8592 |
                       | 0 1472 | 2 4652 |
                       |  40 85 |   5 63 |  46 48
        ---------------+--------+--------+
        Total                67        4       71
                          94 37     5 63   100 00

          STATISTICS FOR TABLE OF INF5_2 BY COM28

Statistic                          DF     Value       Prob
-----------------------------------------------------------
Chi-Square                          1     4 881      0 027
Likelihood Ratio Chi-Square         1     6 405      0 011
Continuity Adj  Chi-Square          1     2 867      0 090
Mantel-Haenszel Chi-Square          1     4 812      0 028
Fisher's Exact Test (Left)                           1 000
                    (Right)                          0 042
                    (2-Tail)                         0 042
Phi Coefficient                           0 262
Contingency Coefficient                   0 254
Cramer's V                                0 262

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF5_4 BY COM28

        INF5_4          COM28

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     0 |     48 |      1 |     49
                       | 46 239 | 2 7606 |
                       |  0 067 | 1 1228 |
                       |  67 61 |   1 41 |  69 01
        ---------------+--------+--------+
                     1 |     19 |      3 |     22
                       | 20 761 | 1 2394 |
                       | 0 1493 | 2 5008 |
                       |  26 76 |   4 23 |  30 99
        ---------------+--------+--------+
        Total                67        4       71
                          94 37     5 63   100 00

          STATISTICS FOR TABLE OF INF5_4 BY COM28

Statistic                          DF     Value       Prob
-----------------------------------------------------------
Chi-Square                          1     3 840      0 050
Likelihood Ratio Chi-Square         1     3 493      0 062
Continuity Adj  Chi-Square          1     1 969      0 161
Mantel-Haenszel Chi-Square          1     3 786      0 052
Fisher's Exact Test (Left)                           0 992
                    (Right)                          0 085
                    (2-Tail)                         0 085
Phi Coefficient                           0 233
Contingency Coefficient                   0 227
Cramer's V                                0 233

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF9_5 BY COM29

        INF9_5          COM29

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     0 |     58 |      0 |     58
                       | 57 183 | 0 8169 |
                       | 0 0117 | 0 8169 |
                       |  81 69 |   0 00 |  81 69
        ---------------+--------+--------+
                     1 |     12 |      1 |     13
                       | 12 817 | 0 1831 |
                       | 0 0521 | 3 6446 |
                       |  16 90 |   1 41 |  18 31
        ---------------+--------+--------+
        Total                70        1       71
                          98 59     1 41   100 00

          STATISTICS FOR TABLE OF INF9_5 BY COM29

Statistic                          DF     Value       Prob
-----------------------------------------------------------
Chi-Square                          1     4 525      0 033
Likelihood Ratio Chi-Square         1     3 460      0 063
Continuity Adj  Chi-Square          1     0 681      0 409
Mantel-Haenszel Chi-Square          1     4 462      0 035
Fisher's Exact Test (Left)                           1 000
                    (Right)                          0 183
                    (2-Tail)                         0 183
Phi Coefficient                           0 252
Contingency Coefficient                   0 245
Cramer's V                                0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF14 BY COM29

        INF14           COM29

        Frequency      |
        Expected       |
        Cell Chi-Square|
        Percent        |       0|       1|  Total
        ---------------+--------+--------+
                     1 |     27 |      0 |     27
                       | 26 341 | 0 6585 |
                       | 0 0165 | 0 6585 |
                       |  65 85 |   0 00 |  65 85
        ---------------+--------+--------+
                     2 |      5 |      0 |      5
                       |  4 878 |  0 122 |
                       |  0 003 |  0 122 |
                       |  12 20 |   0 00 |  12 20
        ---------------+--------+--------+
                     3 |      5 |      0 |      5
                       |  4 878 |  0 122 |
                       |  0 003 |  0 122 |
                       |  12 20 |   0 00 |  12 20
        ---------------+--------+--------+
                     4 |      3 |      1 |      4
                       | 3 9024 | 0 0976 |
                       | 0 2087 | 8 3476 |
                       |   7 32 |   2 44 |   9 76
        ---------------+--------+--------+
        Total                40        1       41
                          97 56     2 44   100 00

        Frequency Missing = 30

          STATISTICS FOR TABLE OF INF14 BY COM29

Statistic                          DF     Value       Prob
-----------------------------------------------------------
Chi-Square                          3     9 481      0 024
Likelihood Ratio Chi-Square         3     4 904      0 179
Mantel-Haenszel Chi-Square          1     5 201      0 023
Phi Coefficient                           0 481
Contingency Coefficient                   0 433
Cramer's V                                0 481

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF9_2 BY COM30

INF9_2          COM30

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     60 |      0 |     60
               | 59 155 | 0 8451 |
               | 0 0121 | 0 8451 |
               |  84 51 |   0 00 |  84 51
---------------+--------+--------+
             1 |     10 |      1 |     11
               | 10 845 | 0 1549 |
               | 0 0658 | 4 6095 |
               |  14 08 |   1 41 |  15 49
---------------+--------+--------+
Total                70        1      71
                  98 59     1 41  100 00


        STATISTICS FOR TABLE OF INF9_2 BY COM30

Statistic                        DF     Value      Prob
-------------------------------------------------------
Chi-Square                        1     5 532     0 019
Likelihood Ratio Chi-Square       1     3 809     0 051
Continuity Adj  Chi-Square        1     0 922     0 337
Mantel-Haenszel Chi-Square        1     5 455     0 020
Fisher's Exact Test (Left)                        1 000
                    (Right)                       0 155
                    (2-Tail)                      0 155
Phi Coefficient                         0 279
Contingency Coefficient                 0 269
Cramer's V                              0 279

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF14 BY COM30

INF14           COM30

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             1 |     27 |      0 |     27
               | 26 341 | 0 6585 |
               | 0 0165 | 0 6585 |
               |  65 85 |   0 00 |  65 85
---------------+--------+--------+
             2 |      5 |      0 |      5
               |  4 878 |  0 122 |
               |  0 003 |  0 122 |
               |  12 20 |   0 00 |  12 20
---------------+--------+--------+
             3 |      5 |      0 |      5
               |  4 878 |  0 122 |
               |  0 003 |  0 122 |
               |  12 20 |   0 00 |  12 20
---------------+--------+--------+
             4 |      3 |      1 |      4
               | 3 9024 | 0 0976 |
               | 0 2087 | 8 3476 |
               |   7 32 |   2 44 |   9 76
---------------+--------+--------+
Total                40        1      41
                  97 56     2 44  100 00

Frequency Missing = 30

        STATISTICS FOR TABLE OF INF14 BY COM30

Statistic                        DF     Value      Prob
-------------------------------------------------------
Chi-Square                        3     9 481     0 024
Likelihood Ratio Chi-Square       3     4 904     0 179
Mantel-Haenszel Chi-Square        1     5 201     0 023
Phi Coefficient                         0 481
Contingency Coefficient                 0 433
Cramer's V                              0 481

Effective Sample Size = 41
Frequency Missing = 30
WARNING   42% of the data are missing
WARNING   88% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF9_8 BY COM30

INF9_8          COM30

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     68 |      0 |     68
               | 67 042 | 0 9577 |
               | 0 0137 | 0 9577 |
               |  95 77 |   0 00 |  95 77
---------------+--------+--------+
             1 |      2 |      1 |      3
               | 2 9577 | 0 0423 |
               | 0 3101 | 21 709 |
               |   2 82 |   1 41 |   4 23
---------------+--------+--------+
Total                70        1      71
                  98 59     1 41  100 00


        STATISTICS FOR TABLE OF INF9_8 BY COM30

Statistic                        DF     Value      Prob
-------------------------------------------------------
Chi-Square                        1    22 990     0 000
Likelihood Ratio Chi-Square       1     6 692     0 010
Continuity Adj  Chi-Square        1     5 252     0 022
Mantel-Haenszel Chi-Square        1    22 667     0 000
Fisher's Exact Test (Left)                        1 000
                    (Right)                       0 042
                    (2-Tail)                      0 042
Phi Coefficient                         0 569
Contingency Coefficient                 0 495
Cramer's V                              0 569

Sample Size = 71
WARNING   75% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
            TABLE OF INF9_5 BY COM31

INF9_5          COM31

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       0|       1|  Total
---------------+--------+--------+
             0 |     58 |      0 |     58
               | 57 183 | 0 8169 |
               | 0 0117 | 0 8169 |
               |  81 69 |   0 00 |  81 69
---------------+--------+--------+
             1 |     12 |      1 |     13
               | 12 817 | 0 1831 |
               | 0 0521 | 3 6446 |
               |  16 90 |   1 41 |  18 31
---------------+--------+--------+
Total                70        1      71
                  98 59     1 41  100 00


        STATISTICS FOR TABLE OF INF9_5 BY COM31

Statistic                        DF     Value      Prob
-------------------------------------------------------
Chi-Square                        1     4 525     0 033
Likelihood Ratio Chi-Square       1     3 460     0 063
Continuity Adj  Chi-Square        1     0 681     0 409
Mantel-Haenszel Chi-Square        1     4 462     0 035
Fisher's Exact Test (Left)                        1 000
                    (Right)                       0 183
                    (2-Tail)                      0 183
Phi Coefficient                         0 252
Contingency Coefficient                 0 245
Cramer's V                              0 252

Sample Size = 71
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                TABLE OF RINF12 BY COM31

      RINF12          COM31

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     49 |      0 |     49
                     |  48 31 | 0 6901 |
                     | 0 0099 | 0 6901 |
                     |  69 01 |   0 00 |  69 01
      ---------------+--------+--------+
                   2 |     13 |      0 |     13
                     | 12 817 | 0 1831 |
                     | 0 0026 | 0 1831 |
                     |  18 31 |   0 00 |  18 31
      ---------------+--------+--------+
                   3 |      8 |      1 |      9
                     | 8 8732 | 0 1268 |
                     | 0 0859 | 6 0156 |
                     |  11 27 |   1 41 |  12 68
      ---------------+--------+--------+
      Total                70        1       71
                        98 59     1 41   100 00


          STATISTICS FOR TABLE OF RINF12 BY COM31

  Statistic                         DF       Value      Prob
  ------------------------------------------------------------
  Chi-Square                         2       6 987      0 030
  Likelihood Ratio Chi-Square        2       4 232      0 120
  Mantel-Haenszel Chi-Square         1       4 893      0 027
  Phi Coefficient                            0 314
  Contingency Coefficient                    0 299
  Cramer's V                                 0 314

  Sample Size = 71
  WARNING   50% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF3 BY COM32

      INF3            COM32

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   3 |     20 |      0 |     20
                     | 19 718 | 0 2817 |
                     |  0 004 | 0 2817 |
                     |  28 17 |   0 00 |  28 17
      ---------------+--------+--------+
                   5 |     28 |      0 |     28
                     | 27 606 | 0 3944 |
                     | 0 0056 | 0 3944 |
                     |  39 44 |   0 00 |  39 44
      ---------------+--------+--------+
                   7 |     19 |      0 |     19
                     | 18 732 | 0 2676 |
                     | 0 0038 | 0 2676 |
                     |  26 76 |   0 00 |  26 76
      ---------------+--------+--------+
                   8 |      3 |      1 |      4
                     | 3 9437 | 0 0563 |
                     | 0 2258 | 15 806 |
                     |   4 23 |   1 41 |   5 63
      ---------------+--------+--------+
      Total                70        1       71
                        98 59     1 41   100 00


          STATISTICS FOR TABLE OF INF3 BY COM32

  Statistic                         DF       Value      Prob
  ------------------------------------------------------------
  Chi-Square                         3      16 989      0 001
  Likelihood Ratio Chi-Square        3       6 013      0 111
  Mantel-Haenszel Chi-Square         1       3 045      0 081
  Phi Coefficient                            0 489
  Contingency Coefficient                    0 439
  Cramer's V                                 0 489

  Sample Size = 71
  WARNING   63% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                TABLE OF INF14 BY COM31

      INF14           COM31

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       0|       1|  Total
      ---------------+--------+--------+
                   1 |     27 |      0 |     27
                     | 26 341 | 0 6585 |
                     | 0 0165 | 0 6585 |
                     |  65 85 |   0 00 |  65 85
      ---------------+--------+--------+
                   2 |      5 |      0 |      5
                     |  4 878 |  0 122 |
                     |  0 003 |  0 122 |
                     |  12 20 |   0 00 |  12 20
      ---------------+--------+--------+
                   3 |      5 |      0 |      5
                     |  4 878 |  0 122 |
                     |  0 003 |  0 122 |
                     |  12 20 |   0 00 |  12 20
      ---------------+--------+--------+
                   4 |      3 |      1 |      4
                     | 3 9024 | 0 0976 |
                     | 0 2087 | 8 3476 |
                     |   7 32 |   2 44 |   9 76
      ---------------+--------+--------+
      Total                40        1       41
                        97 56     2 44   100 00

      Frequency Missing = 30


          STATISTICS FOR TABLE OF INF14 BY COM31

  Statistic                         DF       Value      Prob
  ------------------------------------------------------------
  Chi-Square                         3       9 481      0 024
  Likelihood Ratio Chi-Square        3       4 904      0 179
  Mantel-Haenszel Chi-Square         1       5 201      0 023
  Phi Coefficient                            0 481
  Contingency Coefficient                    0 433
  Cramer's V                                 0 481

  Effective Sample Size = 41
  Frequency Missing = 30
  WARNING   42% of the data are missing
  WARNING   88% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                     TABLE OF INF9_9 BY IMP1

      INF9_9          IMP1

      Frequency      |
      Expected       |
      Cell Chi-Square|
      Percent        |       2|       3|       4|       5|  Total
      ---------------+--------+--------+--------+--------+
                   0 |      4 |     12 |     20 |     29 |     65
                     | 4 9242 | 11 818 | 19 697 | 28 561 |
                     | 0 1735 | 0 0028 | 0 0047 | 0 0068 |
                     |   6 06 |  18 18 |  30 30 |  43 94 |  98 48
      ---------------+--------+--------+--------+--------+
                   1 |      1 |      0 |      0 |      0 |      1
                     | 0 0758 | 0 1818 |  0 303 | 0 4394 |
                     | 11 276 | 0 1818 |  0 303 | 0 4394 |
                     |   1 52 |   0 00 |   0 00 |   0 00 |   1 52
      ---------------+--------+--------+--------+--------+
      Total                 5       12       20       29       66
                         7 58    18 18    30 30    43 94   100 00

      Frequency Missing = 5


          STATISTICS FOR TABLE OF INF9_9 BY IMP1

  Statistic                         DF       Value      Prob
  ------------------------------------------------------------
  Chi-Square                         3      12 388      0 006
  Likelihood Ratio Chi-Square        3       5 360      0 147
  Mantel-Haenszel Chi-Square         1       4 858      0 028
  Phi Coefficient                            0 433
  Contingency Coefficient                    0 398
  Cramer's V                                 0 433

  Effective Sample Size = 66
  Frequency Missing = 5
  WARNING   63% of the cells have expected counts less
             than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_4 BY IMP2

INF5_4          IMP2

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       2|       3|       4|       5|  Total
---------------+--------+--------+--------+--------+
             0 |      12|      13|      15|       5|     45
               |  8 7313|  10 746|  18 134|  7 3881|
               |  1 2237|  0 4727|  0 5417|  0 7719|
               |   17 91|   19 40|   22 39|    7 46|  67 16
---------------+--------+--------+--------+--------+
             1 |       1|       3|      12|       6|     22
               |  4 2687|  5 2537|  8 8657|  3 6119|
               |  2 5029|  0 9668|  1 1081|  1 5789|
               |    1 49|    4 48|   17 91|    8 96|  32 84
---------------+--------+--------+--------+--------+
Total                 13       16       27       11      67
                   19 40    23 88    40 30    16 42  100 00

Frequency Missing = 4


          STATISTICS FOR TABLE OF INF5_4 BY IMP2

    Statistic                     DF      Value       Prob
    ------------------------------------------------------
    Chi-Square                     3      9 167      0 027
    Likelihood Ratio Chi-Square    3     10 076      0 018
    Mantel-Haenszel Chi-Square     1      8 633      0 003
    Phi Coefficient                       0 370
    Contingency Coefficient               0 347
    Cramer's V                            0 370

    Effective Sample Size = 67
    Frequency Missing = 4
    WARNING   25% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF12 BY IMP2

RINF12          IMP2

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       2|       3|       4|       5|  Total
---------------+--------+--------+--------+--------+
             1 |      10|      15|      12|       9|     46
               |  8 9254|  10 985|  18 537|  7 5522|
               |  0 1294|  1 4674|  2 3054|  0 2775|
               |   14 93|   22 39|   17 91|   13 43|  68 66
---------------+--------+--------+--------+--------+
             2 |       2|       0|       9|       1|     12
               |  2 3284|  2 8657|  4 8358|  1 9701|
               |  0 0463|  2 8657|  3 5858|  0 4777|
               |    2 99|    0 00|   13 43|    1 49|  17 91
---------------+--------+--------+--------+--------+
             3 |       1|       1|       6|       1|      9
               |  1 7463|  2 1493|  3 6269|  1 4776|
               |  0 3189|  0 6145|  1 5528|  0 1544|
               |    1 49|    1 49|    8 96|    1 49|  13 43
---------------+--------+--------+--------+--------+
Total                 13       16       27       11      67
                   19 40    23 88    40 30    16 42  100 00

Frequency Missing = 4


          STATISTICS FOR TABLE OF RINF12 BY IMP2

    Statistic                     DF      Value       Prob
    ------------------------------------------------------
    Chi-Square                     6     13 796      0 032
    Likelihood Ratio Chi-Square    6     16 170      0 013
    Mantel-Haenszel Chi-Square     1      1 398      0 237
    Phi Coefficient                       0 454
    Contingency Coefficient               0 413
    Cramer's V                            0 321

    Effective Sample Size = 67
    Frequency Missing = 4
    WARNING   67% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF RINF6 BY IMP2

RINF6           IMP2

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       2|       3|       4|       5|  Total
---------------+--------+--------+--------+--------+
ADM            |       1|       2|       0|       0|      3
               |  0 5538|  0 6923|  1 2462|  0 5077|
               |  0 3594|  2 4701|  1 2462|  0 5077|
               |    1 54|    3 08|    0 00|    0 00|   4 62
---------------+--------+--------+--------+--------+
DHD            |       5|       7|      23|       8|     43
               |  7 9385|  9 9231|  17 862|  7 2769|
               |  1 0877|  0 8611|  1 4782|  0 0718|
               |    7 69|   10 77|   35 38|   12 31|  66 15
---------------+--------+--------+--------+--------+
DIET           |       1|       0|       3|       0|      4
               |  0 7385|  0 9231|  1 6615|  0 6769|
               |  0 0926|  0 9231|  1 0782|  0 6769|
               |    1 54|    0 00|    4 62|    0 00|   6 15
---------------+--------+--------+--------+--------+
MGR            |       5|       6|       1|       3|     15
               |  2 7692|  3 4615|  6 2308|  2 5385|
               |   1 797|  1 8615|  4 3913|  0 0839|
               |    7 69|    9 23|    1 54|    4 62|  23 08
---------------+--------+--------+--------+--------+
Total                 12       15       27       11      65
                   18 46    23 08    41 54    16 92  100 00

Frequency Missing = 6


          STATISTICS FOR TABLE OF RINF6 BY IMP2

    Statistic                     DF      Value       Prob
    ------------------------------------------------------
    Chi-Square                     9     18 987      0 025
    Likelihood Ratio Chi-Square    9     23 068      0 006
    Mantel-Haenszel Chi-Square     1      2 243      0 134
    Phi Coefficient                       0 540
    Contingency Coefficient               0 475
    Cramer's V                            0 312

    Effective Sample Size = 65
    Frequency Missing = 6
    WARNING   69% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF15 BY IMP2

INF15           IMP2

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       2|       3|       4|       5|  Total
---------------+--------+--------+--------+--------+
             2 |       5|       5|       8|       1|     19
               |  3 2656|    4 75|  8 0156|  2 9688|
               |  0 9211|  0 0132| 305E-7 |  1 3056|
               |    7 81|    7 81|   12 50|    1 56|  29 69
---------------+--------+--------+--------+--------+
             3 |       1|       8|      11|       3|     23
               |  3 9531|    5 75|  9 7031|  3 5938|
               |  2 2061|  0 8804|  0 1733|  0 0981|
               |    1 56|   12 50|   17 19|    4 69|  35 94
---------------+--------+--------+--------+--------+
             4 |       3|       1|       6|       0|     10
               |  1 7188|     2 5|  4 2188|  1 5625|
               |  0 9551|     0 9|  0 7521|  1 5625|
               |    4 69|    1 56|    9 38|    0 00|  15 63
---------------+--------+--------+--------+--------+
             5 |       2|       2|       2|       6|     12
               |  2 0625|       3|  5 0625|   1 875|
               |  0 0019|  0 3333|  1 8526|   9 075|
               |    3 13|    3 13|    3 13|    9 38|  18 75
---------------+--------+--------+--------+--------+
Total                 11       16       27       10      64
                   17 19    25 00    42 19    15 63  100 00

Frequency Missing = 7


          STATISTICS FOR TABLE OF INF15 BY IMP2

    Statistic                     DF      Value       Prob
    ------------------------------------------------------
    Chi-Square                     9     21 030      0 013
    Likelihood Ratio Chi-Square    9     21 011      0 013
    Mantel-Haenszel Chi-Square     1      2 731      0 098
    Phi Coefficient                       0 573
    Contingency Coefficient               0 497
    Cramer's V                            0 331

    Effective Sample Size = 64
    Frequency Missing = 7
    WARNING   75% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF5_5 BY IMP6

INF5_5          IMP6

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       2|       3|       4|       5|  Total
---------------+--------+--------+--------+--------+
             0 |     17 |     16 |     17 |      9 |     59
               | 15 431 | 14 523 | 17 246 |   11 8 |
               | 0 1596 | 0 1502 | 0 0035 | 0 6644 |
               |  26 15 |  24 62 |  26 15 |  13 85 |  90 77
---------------+--------+--------+--------+--------+
             1 |      0 |      0 |      2 |      4 |      6
               | 1 5692 | 1 4769 | 1 7538 |    1 2 |
               | 1 5692 | 1 4769 | 0 0345 | 6 5333 |
               |   0 00 |   0 00 |   3 08 |   6 15 |   9 23
---------------+--------+--------+--------+--------+
Total                17       16       19       13       65
                  26 15    24 62    29 23    20 00   100 00

Frequency Missing = 6


           STATISTICS FOR TABLE OF INF5_5 BY IMP6

    Statistic                     DF       Value        Prob
    ------------------------------------------------------
    Chi-Square                     3      10 592       0 014
    Likelihood Ratio Chi-Square    3      11 185       0 011
    Mantel-Haenszel Chi-Square     1       8 509       0 004
    Phi Coefficient                        0 404
    Contingency Coefficient                0 374
    Cramer's V                             0 404

    Effective Sample Size = 65
    Frequency Missing = 6
    WARNING   50% of the cells have expected counts less
               than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF INF5_6 BY IMP6

INF5_6          IMP6

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       2|       3|       4|       5|  Total
---------------+--------+--------+--------+--------+
             0 |     10 |      9 |     12 |     13 |     44
               | 11 508 | 10 831 | 12 862 |    8 8 |
               | 0 1975 | 0 3095 | 0 0577 | 2 0045 |
               |  15 38 |  13 85 |  18 46 |  20 00 |  67 69
---------------+--------+--------+--------+--------+
             1 |      7 |      7 |      7 |      0 |     21
               | 5 4923 | 5 1692 | 6 1385 |    4 2 |
               | 0 4139 | 0 6484 | 0 1209 |    4 2 |
               |  10 77 |  10 77 |  10 77 |   0 00 |  32 31
---------------+--------+--------+--------+--------+
Total                17       16       19       13       65
                  26 15    24 62    29 23    20 00   100 00

Frequency Missing = 6


           STATISTICS FOR TABLE OF INF5_6 BY IMP6

    Statistic                     DF       Value        Prob
    ------------------------------------------------------
    Chi-Square                     3       7 952       0 047
    Likelihood Ratio Chi-Square    3      11 819       0 008
    Mantel-Haenszel Chi-Square     1       4 852       0 028
    Phi Coefficient                        0 350
    Contingency Coefficient                0 330
    Cramer's V                             0 350

    Effective Sample Size = 65
    Frequency Missing = 6
```

```
                  TABLE OF INF8 BY IMP8

INF8            IMP8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       3|       4|       5|  Total
---------------+--------+--------+--------+
             1 |     17 |     19 |     20 |     56
               | 14 424 | 17 818 | 23 758 |
               |   0 46 | 0 0784 | 0 5943 |
               |  25 76 |  28 79 |  30 30 |  84 85
---------------+--------+--------+--------+
             2 |      0 |      2 |      8 |     10
               | 2 5758 | 3 1818 | 4 2424 |
               | 2 5758 |  0 439 | 3 3281 |
               |   0 00 |   3 03 |  12 12 |  15 15
---------------+--------+--------+--------+
Total                17       21       28       66
                  25 76    31 82    42 42   100 00

Frequency Missing = 5


        STATISTICS FOR TABLE OF INF8 BY IMP8

Statistic                     DF       Value        Prob
------------------------------------------------------
Chi-Square                     2       7 476       0 024
Likelihood Ratio Chi-Square    2       9 432       0 009
Mantel-Haenszel Chi-Square     1       7 118       0 008
Phi Coefficient                        0 337
Contingency Coefficient                0 319
Cramer's V                             0 337

Effective Sample Size = 66
Frequency Missing = 5
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                  TABLE OF RINF11 BY IMP8

RINF11          IMP8

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       3|       4|       5|  Total
---------------+--------+--------+--------+
             1 |     12 |      5 |     12 |     29
               | 7 6316 | 7 6316 | 13 737 |
               | 2 5005 | 0 9074 | 0 2196 |
               |  21 05 |   8 77 |  21 05 |  50 88
---------------+--------+--------+--------+
             2 |      2 |      8 |      8 |     18
               | 4 7368 | 4 7368 | 8 5263 |
               | 1 5813 |  2 248 | 0 0325 |
               |   3 51 |  14 04 |  14 04 |  31 58
---------------+--------+--------+--------+
             3 |      1 |      2 |      7 |     10
               | 2 6316 | 2 6316 | 4 7368 |
               | 1 0116 | 0 1516 | 1 0813 |
               |   1 75 |   3 51 |  12 28 |  17 54
---------------+--------+--------+--------+
Total                15       15       27       57
                  26 32    26 32    47 37   100 00

Frequency Missing = 14


        STATISTICS FOR TABLE OF RINF11 BY IMP8

Statistic                     DF       Value        Prob
------------------------------------------------------
Chi-Square                     4       9 734       0 045
Likelihood Ratio Chi-Square    4       9 741       0 045
Mantel-Haenszel Chi-Square     1       4 343       0 037
Phi Coefficient                        0 413
Contingency Coefficient                0 382
Cramer's V                             0 292

Effective Sample Size = 57
Frequency Missing = 14
WARNING   20% of the data are missing
WARNING   56% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF8 BY IMP9

INF8           IMP9

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       2|       3|       4|       5|  Total
--------------+--------+--------+--------+--------+
            1 |     26 |     17 |      6 |      7 |     56
              | 22 061 |  16 97 | 8 4848 | 8 4848 |
              | 0 7035 | 541E-7 | 0 7277 | 0 2598 |
              |  39 39 |  25 76 |   9 09 |  10 61 |  84 85
--------------+--------+--------+--------+--------+
            2 |      0 |      3 |      4 |      3 |     10
              | 3 9394 | 3 0303 | 1 5152 | 1 5152 |
              | 3 9394 | 0 0003 | 4 0752 | 1 4552 |
              |   0 00 |   4 55 |   6 06 |   4 55 |  15 15
--------------+--------+--------+--------+--------+
Total               26       20       10       10       66
                 39 39    30 30    15 15    15 15   100 00

Frequency Missing = 5


            STATISTICS FOR TABLE OF INF8 BY IMP9

   Statistic                        DF       Value      Prob
   ------------------------------------------------------------
   Chi-Square                        3      11 161     0 011
   Likelihood Ratio Chi-Square       3      13 557     0 004
   Mantel-Haenszel Chi-Square        1       8 924     0 003
   Phi Coefficient                           0 411
   Contingency Coefficient                   0 380
   Cramer's V                                0 411

   Effective Sample Size = 66
   Frequency Missing = 5
   WARNING   50% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF RINF12 BY IMP9

RINF12         IMP9

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       2|       3|       4|       5|  Total
--------------+--------+--------+--------+--------+
            1 |     23 |     11 |      4 |      8 |     46
              | 18 121 | 13 939 | 6 9697 | 6 9697 |
              | 1 3135 | 0 6198 | 1 2653 | 0 1523 |
              |  34 85 |  16 67 |   6 06 |  12 12 |  69 70
--------------+--------+--------+--------+--------+
            2 |      2 |      5 |      2 |      2 |     11
              | 4 3333 | 3 3333 | 1 6667 | 1 6667 |
              | 1 2564 | 0 8333 | 0 0667 | 0 0667 |
              |   3 03 |   7 58 |   3 03 |   3 03 |  16 67
--------------+--------+--------+--------+--------+
            3 |      1 |      4 |      4 |      0 |      9
              | 3 5455 | 2 7273 | 1 3636 | 1 3636 |
              | 1 8275 | 0 5939 |  5 097 | 1 3636 |
              |   1 52 |   6 06 |   6 06 |   0 00 |  13 64
--------------+--------+--------+--------+--------+
Total               26       20       10       10       66
                 39 39    30 30    15 15    15 15   100 00

Frequency Missing = 5


            STATISTICS FOR TABLE OF RINF12 BY IMP9

   Statistic                        DF       Value      Prob
   ------------------------------------------------------------
   Chi-Square                        6      14 456     0 025
   Likelihood Ratio Chi-Square       6      15 083     0 020
   Mantel-Haenszel Chi-Square        1       1 702     0 192
   Phi Coefficient                           0 468
   Contingency Coefficient                   0 424
   Cramer's V                                0 331

   Effective Sample Size = 66
   Frequency Missing = 5
   WARNING   67% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                    TABLE OF INF8 BY IMP10

INF8           IMP10

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       2|       3|       4|       5|  Total
--------------+--------+--------+--------+--------+
            1 |     20 |     14 |     12 |      9 |     55
              | 16 923 | 13 538 | 12 692 | 11 846 |
              | 0 5594 | 0 0157 | 0 0378 | 0 6838 |
              |  30 77 |  21 54 |  18 46 |  13 85 |  84 62
--------------+--------+--------+--------+--------+
            2 |      0 |      2 |      3 |      5 |     10
              | 3 0769 | 2 4615 | 2 3077 | 2 1538 |
              | 3 0769 | 0 0865 | 0 2077 |  3 761 |
              |   0 00 |   3 08 |   4 62 |   7 69 |  15 38
--------------+--------+--------+--------+--------+
Total               20       16       15       14       65
                 30 77    24 62    23 08    21 54   100 00

Frequency Missing = 6


            STATISTICS FOR TABLE OF INF8 BY IMP10

   Statistic                        DF       Value      Prob
   ------------------------------------------------------------
   Chi-Square                        3       8 429     0 038
   Likelihood Ratio Chi-Square       3      10 494     0 015
   Mantel-Haenszel Chi-Square        1       8 171     0 004
   Phi Coefficient                           0 360
   Contingency Coefficient                   0 339
   Cramer's V                                0 360

   Effective Sample Size = 65
   Frequency Missing = 6
   WARNING   50% of the cells have expected counts less
              than 5  Chi-Square may not be a valid test
```

```
                 TABLE OF INF5_8 BY IMP11

INF5_8         IMP11

Frequency     |
Expected      |
Cell Chi-Square|
Percent       |       3|       4|       5|  Total
--------------+--------+--------+--------+
            0 |     15 |     19 |     32 |     66
              |   16 5 | 18 441 | 31 059 |
              | 0 1364 | 0 0169 | 0 0285 |
              |  22 06 |  27 94 |  47 06 |  97 06
--------------+--------+--------+--------+
            1 |      2 |      0 |      0 |      2
              |    0 5 | 0 5588 | 0 9412 |
              |    4 5 | 0 5588 | 0 9412 |
              |   2 94 |   0 00 |   0 00 |   2 94
--------------+--------+--------+--------+
Total               17       19       32       68
                 25 00    27 94    47 06   100 00

Frequency Missing = 3


         STATISTICS FOR TABLE OF INF5_8 BY IMP11

Statistic                        DF       Value      Prob
------------------------------------------------------------
Chi-Square                        2       6 182     0 045
Likelihood Ratio Chi-Square       2       5 731     0 057
Mantel-Haenszel Chi-Square        1       4 502     0 034
Phi Coefficient                           0 302
Contingency Coefficient                   0 289
Cramer's V                                0 302

Effective Sample Size = 68
Frequency Missing = 3
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF5_7 BY IMP12

INF5_7          IMP12

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       3|       4|       5|  Total
---------------+--------+--------+--------+
             0 |      6 |     24 |     37 |     67
               | 6 8971 | 23 647 | 36 456 |
               | 0 1167 | 0 0053 | 0 0081 |
               |   8 82 |  35 29 |  54 41 |  98 53
---------------+--------+--------+--------+
             1 |      1 |      0 |      0 |      1
               | 0 1029 | 0 3529 | 0 5441 |
               | 7 8172 | 0 3529 | 0 5441 |
               |   1 47 |   0 00 |   0 00 |   1 47
---------------+--------+--------+--------+
Total                 7       24       37       68
                  10 29    35 29    54 41   100 00

Frequency Missing = 3

      STATISTICS FOR TABLE OF INF5_7 BY IMP12

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       8 844     0 012
Likelihood Ratio Chi-Square    2       4 683     0 096
Mantel-Haenszel Chi-Square     1       4 591     0 032
Phi Coefficient                        0 361
Contingency Coefficient                0 339
Cramer's V                             0 361

Effective Sample Size = 68
Frequency Missing = 3
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF5_4 BY IMP13

INF5_4          IMP13

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       3|       4|       5|  Total
---------------+--------+--------+--------+
             0 |      2 |      3 |     41 |     46
               | 1 3529 | 6 0882 | 38 559 |
               | 0 3095 | 1 5665 | 0 1546 |
               |   2 94 |   4 41 |  60 29 |  67 65
---------------+--------+--------+--------+
             1 |      0 |      6 |     16 |     22
               | 0 6471 | 2 9118 | 18 441 |
               | 0 6471 | 3 2754 | 0 3232 |
               |   0 00 |   8 82 |  23 53 |  32 35
---------------+--------+--------+--------+
Total                 2        9       57       68
                   2 94    13 24    83 82   100 00

Frequency Missing = 3

      STATISTICS FOR TABLE OF INF5_4 BY IMP13

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       6 276     0 043
Likelihood Ratio Chi-Square    2       6 483     0 039
Mantel-Haenszel Chi-Square     1       0 998     0 318
Phi Coefficient                        0 304
Contingency Coefficient                0 291
Cramer's V                             0 304

Effective Sample Size = 68
Frequency Missing = 3
WARNING   50% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF RINF6 BY IMP14

RINF6           IMP14

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       3|       4|       5|  Total
---------------+--------+--------+--------+
ADM            |      2 |      0 |      1 |      3
               | 0 5077 | 1 1077 | 1 3846 |
               | 4 3865 | 1 1077 | 0 1068 |
               |   3 08 |   0 00 |   1 54 |   4 62
---------------+--------+--------+--------+
DHD            |      8 |     12 |     23 |     43
               | 7 2769 | 15 877 | 19 846 |
               | 0 0718 | 0 9467 | 0 5012 |
               |  12 31 |  18 46 |  35 38 |  66 15
---------------+--------+--------+--------+
DIET           |      0 |      4 |      0 |      4
               | 0 6769 | 1 4769 | 1 8462 |
               | 0 6769 | 4 3103 | 1 8462 |
               |   0 00 |   6 15 |   0 00 |   6 15
---------------+--------+--------+--------+
MGR            |      1 |      8 |      6 |     15
               | 2 5385 | 5 5385 | 6 9231 |
               | 0 9324 |  1 094 | 0 1231 |
               |   1 54 |  12 31 |   9 23 |  23 08
---------------+--------+--------+--------+
Total                11       24       30       65
                  16 92    36 92    46 15   100 00

Frequency Missing = 6

      STATISTICS FOR TABLE OF RINF6 BY IMP14

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     6      16 104     0 013
Likelihood Ratio Chi-Square    6      16 688     0 011
Mantel-Haenszel Chi-Square     1       0 130     0 718
Phi Coefficient                        0 498
Contingency Coefficient                0 446
Cramer's V                             0 352

Effective Sample Size = 65
Frequency Missing = 6
WARNING   58% of the cells have expected counts less
           than 5  Chi-Square may not be a valid test
```

```
               TABLE OF INF13 BY IMP14

INF13           IMP14

Frequency      |
Expected       |
Cell Chi-Square|
Percent        |       3|       4|       5|  Total
---------------+--------+--------+--------+
             1 |      2 |      7 |     19 |     28
               | 5 0149 |  10 03 | 12 955 |
               | 1 8125 | 0 9153 | 2 8204 |
               |   2 99 |  10 45 |  28 36 |  41 79
---------------+--------+--------+--------+
             2 |     10 |     17 |     12 |     39
               | 6 9851 |  13 97 | 18 045 |
               | 1 3013 | 0 6571 | 2 0249 |
               |  14 93 |  25 37 |  17 91 |  58 21
---------------+--------+--------+--------+
Total                12       24       31       67
                  17 91    35 82    46 27   100 00

Frequency Missing = 4

      STATISTICS FOR TABLE OF INF13 BY IMP14

Statistic                     DF       Value      Prob
------------------------------------------------------
Chi-Square                     2       9 532     0 009
Likelihood Ratio Chi-Square    2       9 899     0 007
Mantel-Haenszel Chi-Square     1       8 837     0 003
Phi Coefficient                        0 377
Contingency Coefficient                0 353
Cramer's V                             0 377

Effective Sample Size = 67
Frequency Missing = 4
```

VITA

Edith M. Gierlatowicz

Candidate for the Degree of

Master of Science

Thesis: MARKETING TECHNIQUES UTILIZED BY OKLAHOMA HOSPITAL FOODSERVICE DEPARTMENTS

Major Field: Food, Nutrition and Institution Administration

Biographical:

Personal Data: Born in Atkinson, Georgia, April 24, 1950, the daughter of Julian B. and Julia H. Middleton. Married to Brian L. Gierlatowicz on July 14, 1978.

Education: Graduated from Brantley County High School, Nahunta, Georgia, in May, 1968; received Bachelor of Science Degree in Home Economics from Georgia College, Milledgeville, Georgia in June, 1972; completed an Administrative Dietetic Internship at Oklahoma State University, December, 1973; passed registration exam to meet requirements for American Dietetic Association membership in May, 1974; completed requirements for the Masters of Science degree at Oklahoma State University in May, 1991.

Professional Experience: Clinical Dietitian, University Hospital of Jacksonville, Jacksonville, Florida, January, 1974 to January, 1977; Manager, State Room Restaurant, Oklahoma State University, January, 1977 to April, 1977; Teaching Assistant, Department of Food, Nutrition and Institution Administration, Oklahoma State University, September, 1977 to May, 1978; Clinical Dietitian, Stillwater Medical Center, July, 1978 to April, 1981; Foodservice Director, April, 1981 to present.

Professional Organizations: American Dietetic Association, Oklahoma Dietetic Association, and American Society Hospital Foodservice Administrators.