THE UTILIZATION OF QUALITY CIRCLES IN MEDICAL RECORD SERVICES

By

NANCY SLEMP MCKOWN

Bachelor of Science

The University of Tulsa

Tulsa, Oklahoma

1979

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
July, 1985

THE UTILIZATION OF QUALITY

CIRCLES IN MEDICAL

RECORD SERVICES

Thesis Approved:

Wayne B. James
Thesis Adviser

John L. Brumbaugh

Leroy H. Davis

Norman N. Durham
Dean of Graduate College

ACKNOWLEDGMENTS

Appreciation and gratitude are extended to all the management personnel and employees of each facility who participated in the study.

A special expression of thanks to Dr. Waynne James, my major advisor, for her guidance and willingness to "see-me-to-the-end", after severing ties with Oklahoma State University. We have proven that a Master's thesis can be completed by mail and telephone, but it is not recommended. Sincere appreciation is also extended to Dr. John Baird and Dr. Jerry Davis for their assistance as committee members.

My sincerest thanks goes to Shirley Williams, RRA, my boss and Jaunita Honeyman, a dear friend, for their support throughout the completion of this thesis.

A special thanks to my typist, Earthine Caldwell, who types from the worst rough drafts.

I express my deepest appreciation to my family for their encouragement throughout this endeavor. As I complete this project, I am reminded of something my father once told me, "There is no such word as can't, if you want to do something bad enough, you can do it."

TABLE OF CONTENTS

Chapter		Page
I.	INTRODUCTION	1
	Statement of the Problem	3
	Purpose of the Study	3
	Need for the Study	
	Assumptions	4
	Limitations	4
	Definitions	5
	Organization of the Study	5
II.	REVIEW OF LITERATUEE	7
	The Development of Quality Circles	7
	The Japanese Experience	7
	The Cultural Differences	9
	The Basic Concepts of Quality Circles	12
	Philosophy	13
	Implementation	14
	Role Description of the Quality Circle Participants	17
	Management	17
	Facilitator	19
	Group Leader	21
	Group Members	21
	The Quality Circle Process	22
	Brainstorming	22
	Poling Method	24
	Pareto Analysis/ABC Analysis	25
	Cause and Effect Diagram/Fishboning	25
	Developing Solutions	27
	Presentation to Management	28
	Evaluating Outcome	29
	The Failure of Quality Circles	30
	Results from Utilizing Quality Circles	30
	Summary	31
III.	METHODOLOGY	33
	Selection of Subjects	33
	Description of the Data-Gathering Instruments	36
	Collection of Data	37
	Data Analysis	38

Chapter Page

IV. ANLAYSIS OF THE DATA. 39

Employer Responses 41
Employee Responses 59
A Comparison of Employer Responses
Employee Responses 77

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS 91

Summary. 91
Conclusions of the Study 93
Recommendations for Further Research 96
Recommendations for Practice 97

A SELECTED BIBLIOGRAPHY. 99

APPENDIXES 101

APPENDIX A - TELEPHONE INTERVIEW. 102

APPENDIX B - EXPLANATION OF HOSPITAL LISTINGS 104

APPENDIX C - INITIAL CONTACT LETTER 107

APPENDIX D - PREFERRED RETURN POSTCARD. 109

APPENDIX E - EMPLOYER QUESTIONNAIRE--PRESENT UTILIZATION OF QUALITY CIRCLES 111

APPENDIX F - EMPLOYER QUESTIONNAIRE--PAST UTILIZATION . . 116

APPENDIX G - EMPLOYEE QUESTIONNAIRE--PRESENT UTILIZATION. 121

APPENDIX H - EMPLOYEE QUESTIONNAIRE--PAST UTILIZATION . . 125

APPENDIX I - SECOND CONTACT LETTER. 129

APPENDIX J - CONTACT LETTER FOR THOSE HOSPITALS THAT MIGHT PARTICIPATE. 131

APPENDIX K - GEOGRAPHICAL LOCATIONS OF FACILITIES WHO WERE SENT QUESTIONNAIRES 133

APPENDIX L - COVER LETTER FOR QUESTIONNAIRE--MEDICAL RECORD ADMINISTRATOR 135

APPENDIX M - COVER LETTER FOR QUESTIONNAIRE--MEDICAL RECORD PROFESSIONAL. 137

LIST OF TABLES

Table		Page
I.	Responses to Initial Contact Letter Regarding the Utilization of Quality Circles (QC).	40
II.	Distribution of Questionnaires to the Hospitals on Present and Past Utilization of Quality Circles (QC) .	42
III.	Average Amount of Time Spent Per Quality Circle Participant.	51
IV.	Employers' Responses to the Questions Concerning the Reduction of Absenteeism and Turnover Since the Implementation of Quality Circles.	54
V.	Responses to Influence of Quality Circles on the Development of Problem-Solving Techniques and Utilizing Outside the Quality Circles.	56
VI.	Distribution of Ages Among Employee Participants	61
VII.	The Employees' Responses on the Improvement of Quality and the Increase in Quantity Since the Implementation of Quality Circles	67
VIII.	Employees' Responses to Increased Conscientiousness and Motivation Since the Implementation of Quality Circles.	69
IX.	Employees' Responses to the Affect of Quality Circles on How the Work is Done and the Work Environment in Medical Record Services	71
X.	Employees' Responses to Whether Quality Circles had Improved Communications and Relationships Between Employers and Employees.	74
XI.	Comparison of Employers' Versus Employees' Responses on the Number of Times the Quality Circle Meets. . . .	79
XII.	Comparison of Employers' and Employee's Responses Concerning the Average Number of Hours Spent on Quality Circles Per Month.	81

Table | Page

XIII. Comparison of Employers' and Employees' Responses on the Affect of Quality Circles on the Quality of Work Produced. 81

XIV. Comparison of Employers' and Employees' Responses on the Affect of Quality Circles on Productivity. 82

XV. Comparison of Employers' and Employees' Responses Concerning Absenteeism 82

XVI. Comparison of Employers' and Employees' Responses on the Utilization of Problem-Solving Techniques. 84

XVII. Comparison of Employers' and Employees' Responses on the Affect of Quality Circles on the Employees' Conscientiousness. 84

XVIII. Comparison of Employers' and Employees' Responses on the Affect of Quality Circles on the Employees' Motivation 86

XIX. Comparison of Employers' and Employees' Responses on the Affect of Quality Circles on the Employees' Development. 86

XX. Comparison of the Employers' and Employees' Responses on the Affect of Quality Circles on the Relationships Between Employer and Employee. 87

XXI. Comparison of Employers' and Employees' Responses on the Affect of Quality Circles on Communications. . . . 89

LIST OF FIGURES

Figure		Page
1.	A Hospital's Workflow as Compared to a Set of Concentric Circles.	2
2.	Japanese Versus American Attitudes.	10
3.	Organizational Structure of a Quality Circle Program. . . .	18
4.	The Quality Circle Process.	23
5.	Cause and Effect Diagram or Fishboning Technique.	26
6.	Age Distribution Among Employer Respondents	44
7.	The Number of Full-Time Employees Working in Those Hospitals Which Were Utilizing Quality Circles or had Utilized the Concept in the Past	45
8.	Frequency of Part-Time Employees.	46
9.	The Organizational Structure of Medical Record Services as Described by Employer Participants.	48
10.	The Amount of Time Devoted to Quality Circles by Employee Participants.	63
11.	The Number of Times a Quality Circle Met on a Monthly Basis	65

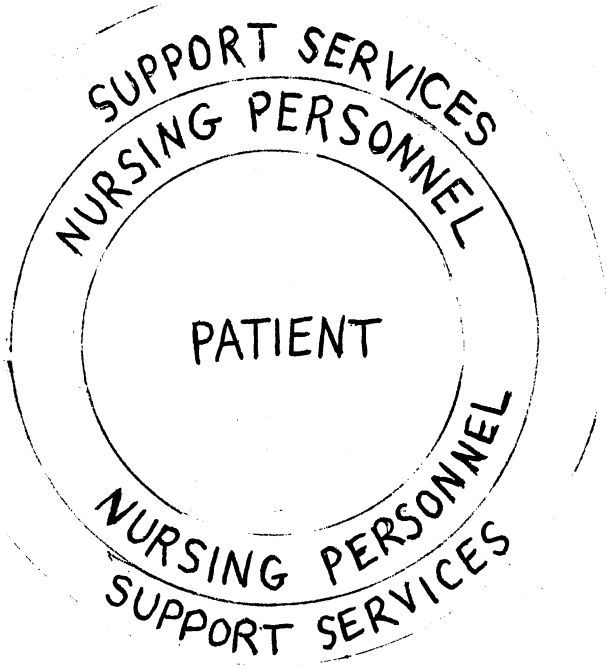
CHAPTER I

INTRODUCTION

Drucker (cited in Wasqak, 1982, p. 47) states that "hospitals are the most difficult organizations to manage". Unlike industry, a hospital's workflow is not predictable. Baird (1981) compares a hospital's workflow to a set of concentric circles (See Figure 1). The primary goal (the center of the circle) of a hospital is to provide quality patient care. This care is given by nursing personnel, ancillary, and support services. Baird (1981) emphasizes that in order to achieve this goal, nursing personnel, ancillary, and support services must cooperate and support one another.

According to the Bureau of Business Practice, Inc. (1981), the Health Care Industry has been affected by inflation; this has forced all management personnel to contain costs. The productivity of all employees seems to have decreased and the work that is produced is not quality work (Bureau of Business Practice, Inc., 1981). Absenteeism, as well as constant turnover, continues to plague managers. Employees seem disinterested in their work and attempts to motivate these employees have been unsuccessful (Bureau of Business Practice, Inc., 1981).

With such conditions facing the hospital industry, management personnel must continually seek out new and creative management tools. One management tool that has been examined with great interest is the concept of Quality Circles. Quality Circles is a form of participatory



Source: Baird, John. "Quality Circles May Substantially Improve Hospital Employees' Morale," Modern Healthcare. Vol. 11, No. 9 (September, 1981), p. 70.

Figure 1. A Hospital's Workflow as Compared to a Set of Concentric Circles

management. The Bureau of Business Practice, Inc. (1981) identified the following as objectives of Quality Circles: (1) reduction of errors; (2) enhancement of quality; (3) creation of problem solving groups; (4) promotion of job involvement; (5) motivation of emloyees; (6) creation of a cooperative and harmonious relationship between supervisor and employee; (7) development of problem prevention techniques; (8) promotion of personal and leadership development; and (9) reduction of costs.

Statement Of Problem

The problem with which this study dealt was the lack of knowledge regarding the use of Quality Circles in Medical Record Services. The use of Quality Circles in Medical Record Services had not been widely reported.

Purpose of the Study

The purpose of this study was to survey management personnel and employees of Medical Record Services who were utilizing the Quality Circle concept or those departments that had utilized the concept in the past. This study sought to answer the following questions:

1. To what extent are Quality Circles being utilized in Medical Record Services throughout the United States?

2. How is the Quality Circle concept organized within Medical Record Services?

3. How well has the Quality Circle concept functioned in Medical Record Services?

4. Do employers and employees perceive positive benefits from the use of Quality Circles?

Need for the Study

Limited research has been conducted on the Utilization of Quality Circles in Medical Record Services. The data collected as a result of this study could be a valuable reference to Medical Record Administrators who might be interested in utilizing the Quality Circle concept.

Assumptions

The following assumptions were made:

1. The functions within Medical Record Services are basically the same throughout the United States.

2. The management personnel of Medical Record Services, throughout the United States, were willing to share their experiences with one another in hopes of gaining knowledge that can be utilized in self improvement, and improvement of the department or the field of Medical Records.

3. The employees of Medical Record Services throughout the United States were willing to share their experience with others.

4. Data collected as a result of this study represent the honest opinions of the management personnel and employees of Medical Record Services who were utilizing Quality Circles or those that had utilized them in the past.

Limitations

This study was faced with the following limitations:

1. The outcome of this study may have been affected due to the fact that the use of Quality Circles in the Health Care Industry and

specifically Medical Record Services was relatively new.

2. The only management personnel or employees surveyed were those that were presently utilizing the Quality Circle concept or have used the concept in the past.

Definitions

The following terms have been defined for use in this study:

Employee - The personnel of Medical Record Services working at those facilities who participated in this study.

Employer - The management personnel of those facilities who participated in this study.

Medical Records Department/Medical Record Services - An established support service within a hospital whose major responsibility is the safekeeping of Medical Records.

Quality Circle - A group of employees performing similar tasks or those who work in the same area. Employees and management personnel volunteer to meet and discuss the problems they experience with their jobs.

Organization of the Study

Chapter I introduced the study by use of a problem statement, need for the study, the purpose of the study, objective to be accomplished, and by defining pertinent terms to be utilized in the study. Chapter II contains a review of literature with regard to the development of Quality Circles, the basic concepts behind Quality Circles, role descriptions of the Quality Circle participants, the Quality Circle process, Quality Circle failure, results from utilizing Quality Circles,

and a Summary of the Review of Literature. Chapter III describes the methodology that was utilized in this study. This chapter explains the selection of a sample, describes the data-gathering instrument, how the data were collected, and the statistical methods used in the analysis of the data. Chapter IV presents the findings of the study and observations. Chapter V summarizes the study and includes conclusions and recommendations for further research and practice.

CHAPTER II

REVIEW OF LITERATURE

This chapter reviews the literature in the following areas: (1) The development of Quality Circles; (2) The basic concepts of Quality Circles; (3) Role descriptions of the Quality Circle participants; (4) The Quality Circle process; (5) Quality Circle Failure; and (6) Results from the utilization of Quality Circles.

The Development of Quality Circles

The Japanese Experience

Prior to World War II, Japan was well known for cheap trinkets (Bureau of Business Practice, Inc., 1981) and junk (Campbell and Hatfield, 1982). At the end of World War II, due to Japan's defeat, Japanese industry was in ruins according to the Bureau of Business Practice, Inc. (1981). The Japanese people were discouraged as well as humiliated (Ross and Ross, 1982). The Japanese government decided to stop producing cheap trinkets and concentrate all their efforts on producing high quality products. The government quickly discovered that it lacked individuals who were trained or qualified in the area of quality control (Bureau of Business Practice, Inc., 1981).

The United States, in an effort to assist Japan in reconstructing its industries, taught Japanese engineers and statisticians the concepts

behind quality control functions. In 1950, Deming travelled to Japan and introduced the American system of quality control to the Japanese (Ross and Ross, 1982).

In 1954, Juran introduced a new twist to quality control. According to Ross and Ross (1982), Juran insisted that quality control must be part of middle management's function and should also be utilized throughout the firm. The Japanese defined middle management as anyone in an organization from top management to shop worker.

Cole (cited in Ross and Ross, 1982), director of the Center for Japanese Studies at the University of Michigan, related the following when he wrote:

> Workers began to participate in study groups to upgrade quality control practices. The practice gave both a simple and profound twist to the original ideas propagated by the western experts (p. 12).

Quality control became the responsibility of all employees. Each employee along with their co-workers were responsible for solving problems which pertained to quality (Ross and Ross, 1982).

During their educational process, the Japanese sought out and utilized information of American Management Techniques. These techniques included all aspects of business and personnel management. The Japanese were particularly interested in management theory and practice. The Japanese found the research efforts of the behavioral scientists to be a valuable resource. Ross and Ross (1982) reported that the Japanese utilized the ideas of Drucker, McGregor, Herzberg, and Maslow. In 1962, the Japanese synthesized the information they obtained from Deming, Juran, the behavioral scientists, and management techniques to develop what is known today as Quality Circles (Bureau of Business Practice, Inc., 1981).

The concept of Quality Circles was adopted from Japan's necessity to rebuild industry and to achieve the goals set by the government to produce quality products. The Japanese strived to achieve a quality product from the start. Each worker assumes the responsibility for assuring the excellence of his/her workmanship (Bureau of Business Practice, Inc., 1981).

Today, products that are "made in Japan" are considered to be of top quality. Japan's productivity is high. Products made in Japan control markets once dominated by American industries. In the 1980s, Japan aims to expand its market into computers. Japan gives Quality Circles the credit for its achievements.

Cultural Differences

Some individuals believed that Quality Circles would not succeed in the United States due to differences in the workers' attitudes, culture, and management styles of the Japanese (Bureau of Business Practice, Inc., 1981). Ross and Ross (1982) employed Cole to make the Japanese approach to management more understandable. According to Cole (cited in Ross and Ross, 1982, p. 12), "Japan is a remarkable homogenous country in race, ethnicity, religion and culture". Japanese managers accepted the proposition that the average worker was really not so very different from themselves (Ross and Ross, 1982).

The management personnel of Japan willingly believed that all employees have potential and can be educated. The Japanese felt that even blue collar workers can contribute to the firm (Ross and Ross, 1982). See Figure 2 which depicts the difference in attitude of the Japanese worker versus the American worker.

JAPAN	AMERICAN
I am always part of a group	I am an individual
I must carefully observe customs	I do as I please
Work is good for its own sake	Work is good for what I get
I must strive for perfection	Perfection isn't always practical
I am loyal to my company	I work where the money is
I am a disciplined person	I don't like discipline

Source: Bureau of Business Practice, Inc. Quality Circles. United States of America, 1981, p. 12-13.

Figure 2. Japanese Versus American Attitudes

The Japanese view the concept of Quality Circles as being of great importance. The Quality Circle is a group to which they belong and to which they must contribute their ideas to the best of their ability even if it should pose an inconvenience. The Japanese consider management's invitation to join the Quality Circle as the company's way of showing concern. Contributing to the Quality Circle is viewed by the Japanese as being for the good of the company (family) and is valued as an exercise in self discipline. Traditionally, in Japan, employers provide life-long employment for their employees. This practice creates strong company loyalty (Bureau of Business Practice, Inc., 1981).

Do the attitudes of American workers point to failure of the Quality Circle concept in the United States? In looking at the attitudes of the typical American worker, it was thought that the concept would succeed if utilized (Bureau of Business Practice, Inc., 1981). For example, Americans proclaim individuality. Individuality would allow workers to express their opinions and provide a variety of different viewpoints. Employees in any organization do as they please within the guidelines set down by the organization. This American characteristic conveys energy and spirit which would prove beneficial when utilized in the Quality Circle (Bureau of Business Practice, 1981).

As a rule, the Japanese take more time when making a decision. They spend time deliberating, defining, and analyzing; unlike Americans, who are quick to make decisions. Often, due to quick decisions, Americans must redo that which they were so committed to originally (Brown, 1982). Long-term problem solving in the Health Care Industry faces high odds due to the fact that medical personnel must react quickly, because they are constantly faced with life-death situations (Brown, 1982).

One difference between the two cultures is the fact that the Japanese have a strong sense of company loyalty. With the threat of impending layoffs due to a sagging economy, an American's sense of company loyalty tends to wane thus making a worker leary of giving 100 percent of his/her potential. The use of Quality Circles in an organization could increase quality and reduce expenses that would possibly postpone layoffs (Bureau of Business Practice, Inc., 1981). Quality Circles, when utilized, promote the employee/employer bond and assist the company in remaining competitive through economic hard times (Bureau of Business Practice, Inc., 1981).

The Basic Concepts of Quality Circles

Quality Circles are groups of workers who perform similar work or who work in the same geographical area and report to the same supervisor (Brown, 1982). In order for the Quality Circle concept to succeed, workers must volunteer to become a member of a Quality Circle. The employee must be free to leave the group at anytime. Waszak (1982), Director of Training and Development at St. Joseph's Hospital in Fort Wayne, Indiana, points out that if a manager coerces his/her employees to become members of a Quality Circle or views Quality Circles in a self-serving manner, his/her employees will perceive Quality Circles as a scheme by management to manipulate its employees.

Quality Circles meet on a regular basis during work hours (Metzger, 1982). The frequency of the meetings differ, but they may be held weekly, bi-weekly, or monthly. Meetings could be held daily depending on staffing, scheduling difficulties, the severity of the problem, or

if the facility is in the process of training facilitators or group leaders (Waszak, 1982).

According to the Bureau of Business Practice, Inc. (1981), the Quality Circle should meet in an environment that promotes free and open discussion. The meeting place should offer the group privacy, comfortable chairs, and adequate lighting.

The major goal of a Quality Circle is to identify, analyze, and solve work-related problems (Brown, 1982). Meetings are to be structured work sessions, not opportunities to complain and gossip (Waszak, 1982). The Quality Circle may address problems that relate to: (1) the quality of an individual's work; (2) the quality work of a team; (3) communications within an organization; (4) the process and procedures within an organization; (5) work methods; (6) tools, and (7) equipment. Quality Circles should avoid discussing institutional policies, benefits, salaries, wages, personalities, and problems outside the realm of the Quality Circle's work area (Waszak, 1982).

Philosophy

Development of people is the major focus of the philosophy behind Quality Circles. Quality Circles provide a forum setting which allows the employee to test new skills which have been acquired through Quality Circle participation. By acquiring new skills, the employee's self-esteem increases. Quality Circles are a means by which employees can reassure themselves that they are a contributing member of the institution, thus creating a sense of belonging. Quality Circles emphasize the establishment of a long-term relationship between the organization and the employee in which to enhance efforts toward staff development (Brown, 1982).

Goldberg, Chief Executive Officer at Mount Sinai Medical Center, of Greater Miami, sees Quality Circles as an opportunity to revive participative management in the Hospital Industry. According to Johnson (1981), Goldberg reflected that "we used to conduct ourselves this way in the Hospital community. We got away from it. We're trying to go back to the family concept (p. 68)". Goldberg was also reported by Johnson (1981) as saying,

> . . . those that do the work know what their frustrations are and how their jobs can be done better. If listened to, workers can improve quality and productivity, and they will be less likely to leave the hospitals (p. 68).

Implementation

According to Jardine (1982), the first step for an organziation to take in the implementation of a Quality Circle program is to become more aware and to investigate the concept of Quality Circles. The investigation of Quality Circles should include a review of literature on Quality Circles and the identification of external and internal resources. During the investigation phase potential facilitators and consultants should be identified. It is also recommended that interested line and staff managers attend a presentation on Quality Circles (Jardine, 1982). Another recommendation is to visit an institution that has functioning Quality Circles. The information gathered from the investigation phase would then be updated to the needs of the organization (Bureau of Business Practice, Inc., 1981).

The second phase in the implementation process is for the organization to perform a resource analysis. Organizations must determine if they are ready for a program such as Quality Circles which emphasize worker participation and the quality of work life. According

to Jardine (1982), to determine its readiness, an organization should answer the following questions: (1) Is management willing to delegate some of its power? (2) How effectively is the management team functioning at the present time? (3) Can the organization invest time and capital on a program that offers long-range rather than short-term pay-out? (4) How stable is the organization environment? (5) Does the environment of the organization promote an environment where management and labor could agree? (6) Does the organization possess the necessary skilled personnel to implement this program? (7) Does the organization employ individuals performing similar tasks? and (8) Are the work requirements within the institution flexible enough to allow cost effective suggestions to be presented by the Quality Circle for implementation?

Jardine (1982) emphasizes that during the resource analysis phase management must review its organizational philosophy. The philosophy should include its commitment to Quality Circles, its desire for a long-term relationship and the extent to which an employee can give input into decision making (Jardine, 1982). According to Adair and Nygard (1982), departments within the hospital should develop their own philosophy, policies, and procedures in light of the organizational philosophy.

Planning for action is the third phase in the implementation of Quality Circles (Jardine, 1982). The organizational structure of the Quality Circle program may vary. Jardine (1982) stresses that the organizational structure of the Quality Circle program must be made to function within the present management structure of the institution. This is to avoid bypassing the authority of middle management and

creating a situation in which the manager feels threatened (Bureau of Business Practice, Inc., 1981).

In developing the Quality Circle structure within the organizational structure, the institution appoints a program coordinator (Bureau of Business Practice, Inc., 1981) or facilitator (Dixon, 1982). Baird (1981) outlines that the facilitator should know the nuts and bolts of the organization and have the ability to pull things together. Baird (1981) goes on to relate that the program facilitator is responsible for scheduling and designing activities. It has proven beneficial to the Quality Circle process for the facilitator to be in a position to cross departmental lines and to possess good political skills (Baird, 1981).

The institution may elect to appoint a steering committee. This committee is composed of representatives of all employee levels and job functions in the institution. Baird (1981, p. 70) views the committee "as a source for expertise, providing a base of power that serves to assist the circles in accomplishing the tasks". The committee is responsible for the investigation phase and the collection of baseline data to be utilized in follow-up studies.

Managers are given the option to accept or reject the Quality Circle concept. Normally, the facilitator is under the control of the manager (Bureau of Business Practice, 1981).

In the organization in which the Quality Circle program is to function, there are two necessary roles that an institution must have: (1) facilitator and (2) group leader (Brown, 1982). The individuals to fulfill the role of facilitator and group leader are selected from those who volunteer to participate. It may be desirable to allow

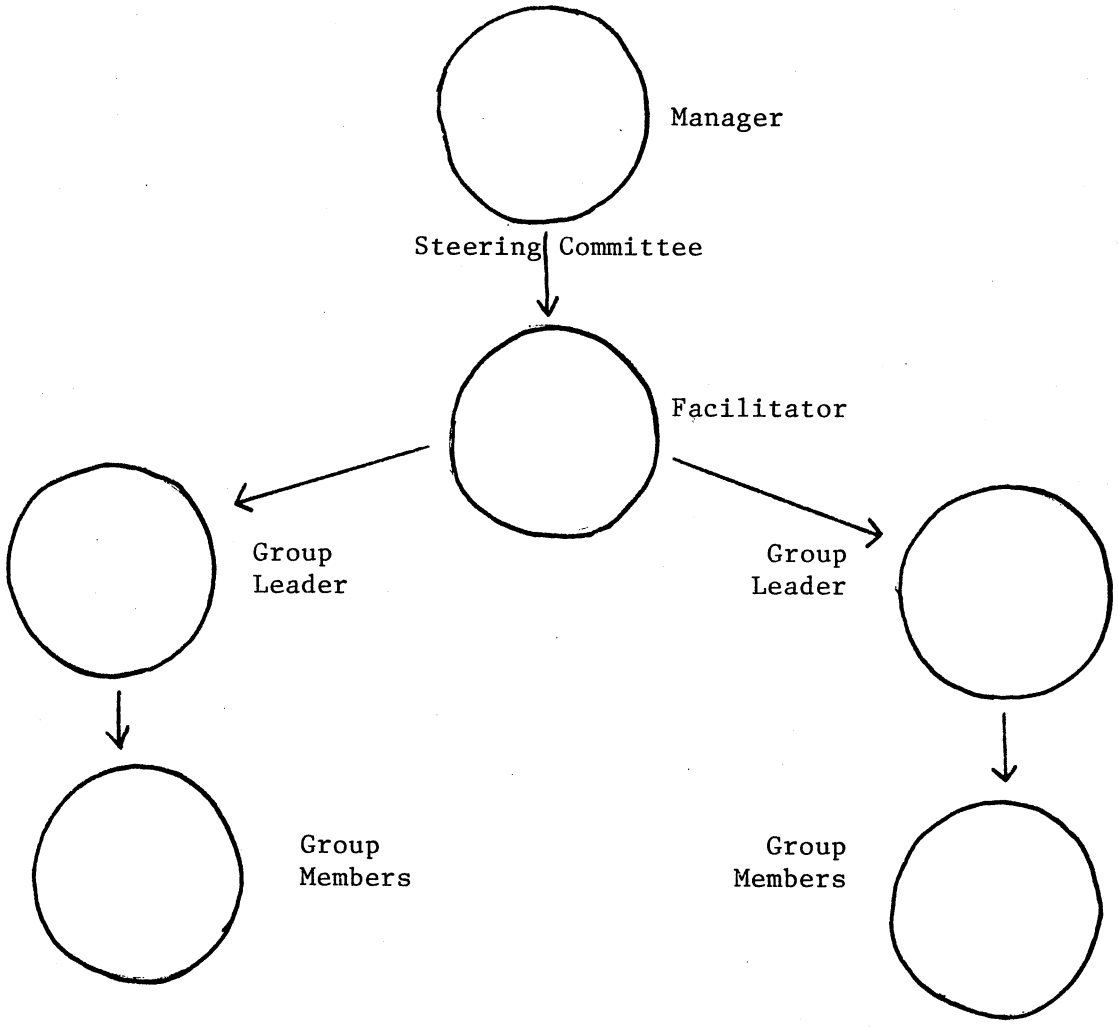
prospective group members to elect the facilitator. It is recommended that group leaders be supervisors. Having a supervisor as a group leader is advantageous with regard to having an individual that has authority to implement decisions made by circle members (Brown, 1982). The facilitator and group leader may also be selected by the steering committee or the manager (Bureau of Business Practice, Inc., 1981). The typical organization structure for a Quality Circle program is depicted in Figure 3.

Management must also examine the costs involved with a Quality Circle program. Costs may entail salaries for the program facilitator, steering committee members, training, supplies, and labor. If consultants are utilized, this will also be an additional cost. Without financial support, the Quality Circle concept can not succeed (Bureau of Business Practice, Inc., 1981).

Role Descriptions of the Quality Circle Participants

Management

Management is the key to the total success of a Quality Circle program. Management must be 100 percent behind the concept, support the Quality Circles with enthusiasm (Bureau of Business Practice, Inc., 1981), and recognize them for accomplishments (Waszak, 1982). Management must be willing to share its problem-solving responsibilities and to de-emphasize personal power (Metzger, 1982). Management should "keep a low profile", but still maintain visibility. Too much involvement or too little involvement may have an adverse affect on the Quality Circle program.



Source: Bureau of Business Practice, Inc. Quality Circles. United States of America, 1981.

Figure 3. Organizational Structure of a Quality Circle Program

Management must also be receptive to new ideas presented by the group members, who represent all levels of employees (Waszak, 1982). Management must also be willing to explain why solutions presented by the Quality Circle can not be implemented (Brown, 1982).

Facilitator

The Bureau of Business Practice, Inc. (1981, p. 21) states that the role of facilitator "combines the duties of teacher, sales person, planner, coordinator and consultant". The facilitator is responsible for introducing the Quality Circle concept to Hospital Management (Waszak, 1982) and possibly to potential circle members (Bureau of Business Practice, Inc., 1981). The facilitator may be responsible for enlisting the interest and support of the work group and to encourage the group to volunteer for circle membership. The facilitator is also responsible for training the group leaders and, in some facilities, the group members. The training involves teaching the group leaders statistical and analytical techniques and Quality Circle methodology (Waszak, 1982).

Initially, the facilitator assists the group leader in planning before each meeting. The facilitator helps take the group through a problem-solving exercise. During the meeting, he/she observes and comments on group process. The facilitator then helps the group leader evaluate himself/herself and the Quality Circle's process after each meeting. The facilitator, in turn, keeps the group leader's supervisor informed about the Quality Circle's progress. As the group leader gains experience and is in full control, the facilitator's involvement decreases; he/she then assumes the role of internal consultant. It is ultimately

desirable, after group members gain understanding of the Quality Circle concept and problem solving, for the group to work together on a daily basis. The group members would contact the facilitator and group leader if a problem arises or if a presentation is necessary (Bureau of Business Practice, Inc., 1981).

The facilitator's role is vital for the success of Quality Circles. If the facilitator is not respected by management and the employees, the success of the Quality Circle program is dubious (Bureau of Business Practice, Inc., 1981). According to Brown (1982), the facilitator should possess the following qualities: (1) The ability to be organized; (2) A self-starter; (3) Active listening skills; (4) The ability to communicate; (5) Is comfortable when dealing with management as well as blue collar workers; (6) Genuinely cares about people; and (7) Firm belief in participatory management. Additional qualities that have been cited by the Bureau of Business Practice, Inc. (1981) include: (1) Complete understanding of the role of teacher; (2) Being able to interpret both sides; and (3) Remaining neutral and unimposing.

Erickson (cited in Bureau of Business Practice, Inc., 1981) points out the eight "don'ts" that facilitators should avoid:

1. Don't become so task oriented that you forget to help Quality Circle members develop their skills.
2. Don't develop a proprietary interest in any Quality Circle.
3. Don't assume authority over Quality Circle members.
4. Don't allow any despondence to destroy enthusiasm.
5. Don't anticipate a letdown and rush in to head it off.
6. Don't become so involved in the content of the problem that you lose sight of the process.
7. Don't show partiality.
8. Don't become the Quality Circle's resident clerk (pp. 24-25).

An additional "don't" is outlined by the Bureau of Business Practice, Inc. (1981, p. 25) that could be considered the ninth,"Do not fail to make regular reports to your manager".

Group Leader

The group leader should be the front line supervisor and have a direct working relationship with the group members of the Quality Circle. The group leader should have a personality that is conducive for group leadership (Bureau of Business Practice, Inc., 1981).

The group leader may be responsible for introducing the Quality Circle concept and training of the group members. Ideally, the group dealer should possess the same quality of the facilitator as mentioned previously.

The group leader, like the facilitator, must believe in the concept of Quality Circles. The group leader serves to guide the members toward open discussion with disagreement. The group leader encourages and expresses pleasure when the group arrives at a solution. The group leader shows respect for each individual and treats each person as an equal. This respect is expressed by the leader's words and actions (Bureau of Business Practice, Inc., 1981).

The group leader is required to do a certain amount of outside study. This outside study is conducted to answer questions posed by group members. If the group leader fails to answer the questions, search out the answer, or misinforms the group members, the group leader will lose respect. The group leader will also lose respect if he/she ridicules the questions asked by group members (Bureau of Business Practice, Inc., 1981).

Group Members

Waszak (1982) indicates that although membership is voluntary,

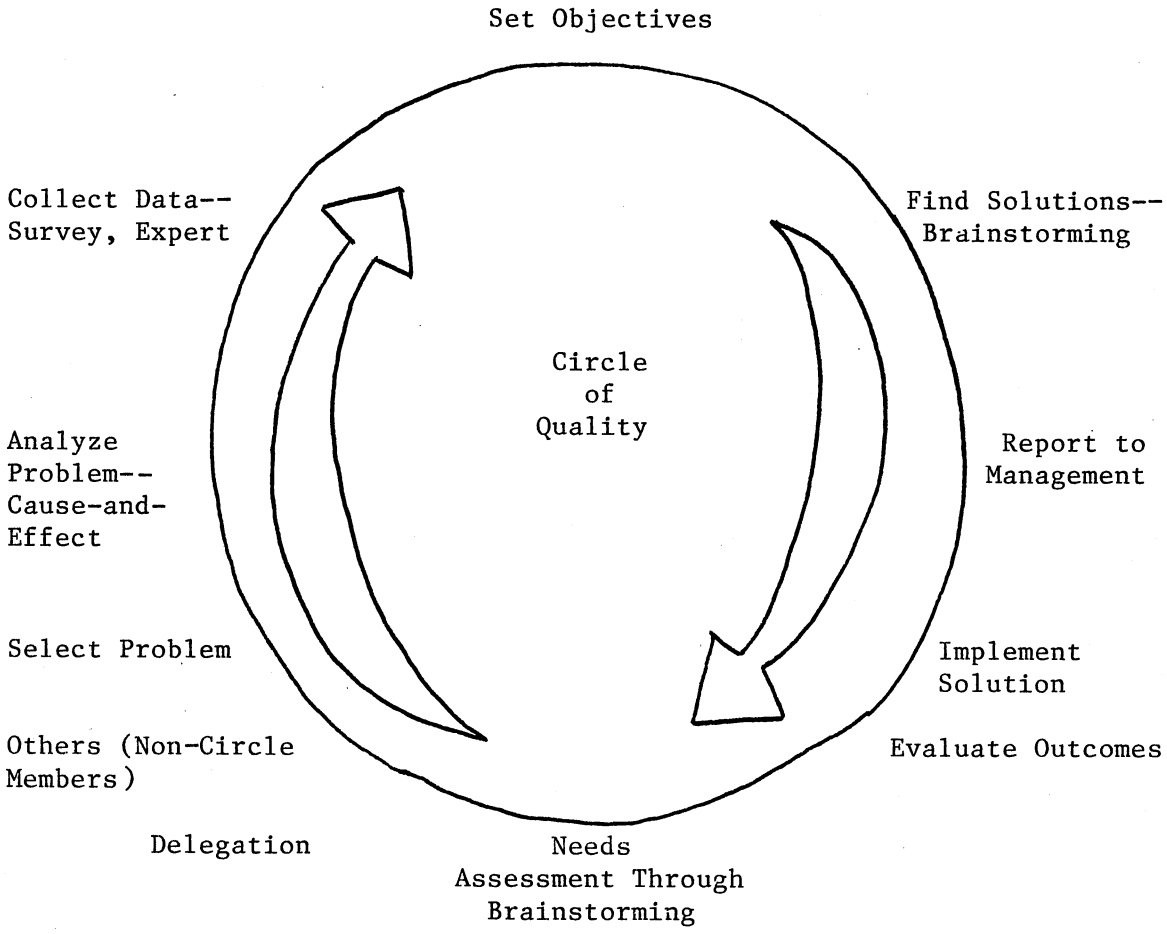
group members do have responsibilities if the concept of Quality Circles is to succeed. Group members must participate in the identification of problems that obstruct members from achieving maximum productivity and a quality product. The employees must analyze the causes of the problems they have determined as priorities and devise a solution (Baird, 1981). In examining the problem and the cause(s) behind the problem, the group members will be required to do additional investigation. This investigation will be conducted during the employee's off-duty hours (Dixon, 1982). In addition, when the Quality Circle has devised a solution for solving the problem, the members of the Quality Circle must make a formal presentation to top management (Baird, 1981).

The Quality Circle Process

On December 10, 1982, at a seminar on the "Implementation of Quality Circles", presented by Dixon and Hospital Learning Centers, Figure 4 was given to seminar participants. The Quality Circle process is visualized in Figure 4. In reviewing the literature on the Quality Circle process, four techniques were described as tools utilized during Quality Circle meetings. The following techniques will be described below: (1) Brainstorming; (2) Polling method; (3) Pareto Analysis/ABC Analysis; and (4) Cause-and-Effect Diagram/Fishboning.

Brainstorming

Brainstorming is one of the tools utilized by Quality Circles. By rotating turns, each member of the Quality Circle can offer ideas (Cline, 1982). Brainstorming is conducted throughout the Quality Circle process. This tool is used in the needs assessment, analysis of the problem, and



Source: Dixon, Jim/Hospital Learning Centers. Seminar-"Implementation of Quality Circles". Oklahoma City, Oklahoma, December 10, 1982

Figure 4. The Quality Circle Process

finding solutions (Dixon, 1982). According to the Bureau of Business Practice, Inc. (1981), brainstorming results in quality as well as quantity ideas which are:"(1) relevant, (2) ownership, (3) objective, and (4) specific (p. 33)". The technique of brainstorming provides the group leader with a format which has built-in freedom. By brainstorming, one individual's idea may trigger an idea in another group member. When a group brainstorms, its creativity is greater than that of a single individual. Dixon (1982) offered the following guidelines to be utilized in brainstorming: (1) Group members are not to criticize the ideas of other group members; (2) The wilder the idea, the better; (3) The immediate objective is to obtain a large quantity of ideas; and, (4) Combinations or modifications of ideas are welcomed.

During the brainstorming session(s), the group leader encourages all group members to participate, and records the ideas stated. A time-limit for the process will be set by the group leader at the beginning of each brainstorming session (Dixon, 1982).

Polling Method

The polling method is utilized to determine the priority of the problems listed by the group members. Depending on the number of ideas generated, the group leader will allow each group member to cast a certain number of votes. By casting votes, the group will select the problems with the greatest priority. The members can distribute their votes in any way they desire. This process represents the values and needs of the group and results in further examination by group members. As a general rule of thumb, the most complex problem is selected. In a group that is just starting,the group leader may recommend that the

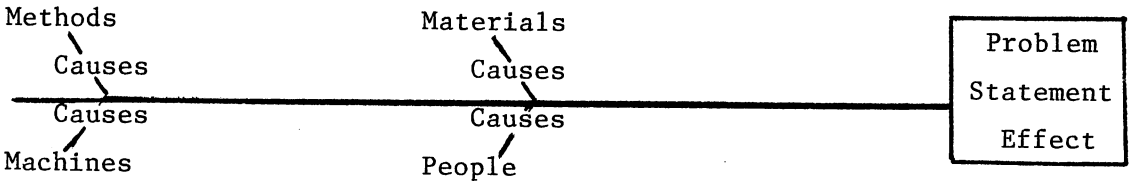
group attempt to solve a less complex problem in order for the group to have a better chance at success (Dixon, 1982).

Pareto Analysis/ABC Analysis

Pareto Analysis is another tool by which problems can be sorted according to importance. The technique is used along with histograms. The theory behind Pareto Analysis is that 80 percent of all problems, when examined, can be traced to a few "primary causes". This technique assists Quality Circle members in identifying the main issue to be discussed. The amount of time that would be wasted on discussing causes that only have a minor effect on the problem is reduced (Bureau of Business Practice, Inc., 1981).

Cause-and Effect Diagram/Fishboning

The Cause-and Effect Diagram or Fishboning is another tool which Quality Circles can use to define a problem and identify all the factors that might contribute to the problem (Bureau of Business Practice, Inc., 1981). The first step of this technique is to state the problem. Then, the group members will brainstorm to obtain the causes of the problem. According to Dixon (1982), the group must then categorize the causes into the following categories: (1) Methods; (2) Materials; (3) People; and (4) Machine. Usually, the group members find that the causes cluster under one category. The group then ranks the causes from most to least important; this can be accomplished by the polling method. The group then delegates the data collection of the most important causes previously identified to group members for further investigation (Dixon, 1982). Figure 5 pictures a diagram of the Cause-and-Effect



Source: Bureau of Business Practice, Inc. Quality Circles. United States of America, 1981, p. 31.

Figure 5. Cause and Effect Diagram or Fishboning Technique

or Fishboning technique. It has been found that after spending time on the Cause-and-Effect Diagram, the group may decide that the selected problem was not a good problem (Brown, 1982).

Developing Solutions

After the Quality Circle members have identified the causes of their problem, they are ready to develop a solution. The Quality Circle members should strive to suggest solutions that the unit or area can implement; otherwise, the group members will have to seek the approval of higher levels of management. The group memebers should not devise a solution that involves another unit or area unless that unit or area has been involved with the Quality Circle. The brainstorming technique is utilized to generate all possible solutions. The Quality Circle examines all solutions and selects the one that is perceived to be the best. In selecting the best solution, the Quality Circle should take into account budgetary considerations, effectiveness, staff requirements, and time (Adair and Nygard, 1982).

Before solutions are implemented or recommendations made to management, the Quality Circle members hold a meeting to inform other staff members in their unit of the work accomplished by the Quality Circle, because they too will be affected by the problem and the solution. These meetings serve as a check-and-balance system for Quality Circle members to assure that the solution has been carefully planned. In addition, it helps to assure that the other staff in their unit will support the implementation of the solution (Adair and Nygard, 1982).

Upon completion of the meeting, the group must determine who will assume the responsibility and accountability for implementing the solution (Adair and Nygard, 1982). If the solution is simple and is within the authority of the group leader, who is typically a supervisor, a formal presentation to management will not be necessary. The group leader can implement the solution. If the solution is outside the group leader's realm of authority, a formal presentation to management is necessary in order to implement the solution. The group leader, facilitator, or group member will then schedule a time for the group's presentation to management (Bureau of Business Practice, Inc., 1981).

Presentation to Management

The group leader, group members, and the facilitator will develop an agenda for the meeting and prepare the presentation. The group members will present their recommendations to management. In this presentation, the group members will give management complete information concerning cost, implementation, staff requirements, and amount of time required. The group members may want to augment their presentation by using the visual aids they utilized to derive the solution (graphs, statistics, and cost analysis) (Bureau of Business Practice, Inc., 1981).

Management's responsibility is to listen, ask questions, and reply to the Quality Circle's recommendations. If management decides that the recommendation is to be implemented, an objective explanation should be given for rejecting the proposal. Management should avoid ridiculing the suggestion in order to avoid discouraging the Quality Circle members. If a recommendation is viewed as border-line, management should allow the implementation of the recommendation (solution), but express the weaknesses

seen in the recommendation (Bureau of Business Practice, Inc., 1981).

The National League of Nursing (1982) indicated that it is important for the Quality Circle to report to management. The formal presentation to management provides an avenue to communicate the effectiveness of the Quality Circle. If the Quality Circle routinely selects solutions which are in the realm of the group leader's authority, the group members should arrange to have quarterly meetings with management to inform them of the Quality Circle's work and to provide Quality Circle members with an opportunity to interact with management (Brown, 1982).

Evaluating Outcome

Prior to implementation of the solution, the Quality Circle group should devise a time table and set a goal which is achievable. This goal should be related to the baseline data collected during the problem-solving phase of the Quality Circle process. The baseline data will be used to compare with follow-up data. The success of the Quality Circle in solving the problem will also be compared with the goal(s) set prior to implementation of the solution. The National League of Nursing (1982) states that the Quality Circle group must ask itself the following questions:

1. Have we allowed enough time to pass for successful results to have occurred?
2. Has the solution been implemented?
3. Should a more expensive and complex solution be utilized?
4. Was the initial analysis of the problem incorrect (p. 493)?

If the problem has not been solved, the group members should return to the solution phase of the Quality Circle process. The group members

are ready to tackle another problem when the problem on which they were working reaches the implementation of the solution and the solution is in the process (National League for Nursing, 1982).

The Failure of Quality Circles

The primary reason that Quality Circles have failed in the hospital setting is the fact that the institution did not adapt the Quality Circle concept to meet the needs of the facility. Baird (1982) cited the following as reasons for the failure of the Quality Circle concept:

1. Failure to recognize the systems nature of a hospital.
2. Failure to incorporate existing hospital committees.
3. Failure to incorporate the Medical Staff.
4. Failure to allow the Quality Circle to deal with non-work related issues.
5. Failure to assess the organization's readiness for quality Circles (p. 72).

Results from Utilizing Quality Circles

Hayes (cited in Johnson, 1981, p. 74) stated that "Quality Circles won't solve all quality, morale or productivity problems, and they're not necessarily the keys to an organization's success."

For the most part, the literature is highly complimentary and discusses the positive results gained from the use of Quality Circles. In companies with Quality Circle programs, they have shown increases in productivity of 40 percent (Johnson, 1981). With regard to improved quality, companies have reported a seven percent drop in their defect rate (Bureau of Business Practice, Inc., 1981) and one company reported up to 60 percent decline in defects (Bureau of Business Practice, Inc., 1981).

Mt. Sinai Medical Center's Dietary Department was working toward reducing the number of errors found on menus (Johnson, 1981). In the

Post Anesthesia Recovery (PAR) at Mt. Sinai Medical Center, a bedside care plan was developed which has improved the quality of patient care (Cline and Palau, 1982). Improvement in communications has been exhibited by the PAR bedside care plan, and thorough utilization of a blackboard which posts the available beds in each Intensive Care Unit (Cline and Palau, 1982).

The Operating Room at Barnes Hospital has been involved with improving the morale of its employees. It was discovered that the problem was a direct result from the institution of a 10:00 a.m.--6:00 p.m. shift to avoid overtime. The solution which the Quality Circle implemented was to have a portion of the staff members work 10 hour shifts (Geldbach, 1981).

In an effort to further develop the staff in the Operating Room at Barnes Hospital, a Preceptor System has been instituted. This system also includes a formal training program and evaluation for new staff (Geldbach, 1981). Hatfield (1982) wrote about a large 300-plus bed hospital located in a large metropolitan area. The facility reported an improvement in overall communications in the hospital, a significant improvement in morale, and an increase in the recruitment of Registereed Nurses. In addition, there had been a reduction in patient complaints, absenteeism, turnover, and lost charges (Hatfield, 1982).

Summary

The use of Quality Circles in the Health Care Industry began in 1980. According to Johnson (1981), with the serious risks and uncertainties that face managers in the Health Care Industry, Quality

Circles are a tool which provides benefits for the facility, the manager and the employee.

For the facility and the manager, Quality Circles offer an avenue by which errors can be reduced and quality improved. They also promote job involvement, motivate employees, improve employee-employer relations, develop problem prevention techniques, promote the development of personal and leadership skills and reduce costs. For the employee, Quality Circles offer membership, an avenue by which to provide input so the department of facility can avoid, identify, and develop solutions for problems. Quality Circle membership is an opportunity for employees to get involved, to interact with management and to develop personal as well as leadership skills.

CHAPTER III

METHODOLOGY

In this chapter, the various aspects of the methodology are discussed. Those aspects include: (1) Selection of subjects; (2) Description of the data-gathering instrument; (3) Collection of the data; and (4) Statistical methods used in the analysis of the data.

Selection of Subjects

From the review of literature, there were four hospitals that were identified which were utilizing the Quality Circle concept. In addition, it was learned from a seminar on the "Implementation of Quality Circles", that St. Agnes Hospital in Fondelac, Wisconsin has functioning Quality Circles.

It was decided to contact, by telephone, each of the five hospitals identified as utilizing Quality Circles. Telephone numbers for each facility were obtained from the American Hosptial Association Guide to the Health Care Field (1981). In contacting them by telephone, an interview was conducted. See Appendix A for the listing of interview questions. During the telephone interviews, the names of two additional hospitals who were utilizing the Quality Circle concept were obtained. After the telephone interviews had been

conducted, three hospitals were identified as having Medical Records Departments which were utilizing, or had utilized, Quality Circles.

Due to the findings that the number of hospitals identified was small, it was decided to survey randomly hospitals throughout the United States. Utilizing the American Hospital Association Guide to the Health Care Field (1981), 500 hospitals were selected. It was discovered that those hospitals which had been previously identified by the telephone interview as utilizing Quality Circles had specific characteristics. All three hopitals were controlled by a non-governmental or not-for-profit organization. These organizations were placed into two categories. The first category was referred to as "Church Operated". The second category was entitled "Other". See Appendix B for breakdown of hospital characteristics. Another characteristic identified was the type of services provided. Each hospital was classified as a General Medical and Surgical Facility. In addition, they were classified as short-stay facilities. The American Hospital Association Guide to the Health Care Industry (1981, p. 43) defined a short-stay facility as one in which "the patients' average length of stay was less than 30 days". The only unsimilar item between the hospitals was the number of beds that each facility was authorized to operate. The number of beds for each facility ranged from 314 to 1,208.

Based on this information, the researcher decided that the 500 hospitals to be selected should have the same characteristics as identified above. Considering the difference in authorized beds, it was further resolved that the hospitals to be selected would have no less than 314 beds and no more than 1,208 beds. Shortly into the

selection process, it became apparent that the larger states would include a larger selection of hospitals. At this point, each city was limited to only one hospital. It also became apparent that hospitals in the smaller states might not be authorized to operate as many as 314 beds. In these cases, the hospitals with the greatest number of beds were selected. With these guidelines in mind, 453 hospitals were selected for inclusion in the sample.

During the selection process, each hospital was given a corresponding number which was used to identify the facility. The assignment of numbers was also conducted to assure confidentiality of each facility.

An initial contact letter was composed to be sent to each facility. See Appendix C for an example of the initial contact letter. In addition to the contact letter, a pre-printed, stamped return postcard was enclosed. An example of the postcard utilized can be viewed in Appendix D. Participants were instructed to return the postcard after answering the questions. The postcards were numbered in the lower left-hand corner with the numbers assigned to each facility. The cover letters and postcards were mailed on October 28, 1983. The last postcard was returned on January 24, 1984. It was concluded after examining the postcards that 26 facilities would definitely participate and that another six facilities might participate.

Based on the results of the survey by mail, it was decided that this study would include not only feedback from management personnel at each facility, but from employees as well. Four employees from each facility were identified as necessary. With this in mind, two questionnaires were devised.

Description of the Data-Gathering Instruments

Since the study sought the feedback from both the employer and the employee, it was necessary to design two questionnaires. In designing both questionnaires, it was taken into consideration that some of the facilities had utilized Quality Circles in the past. It was hoped that this could be accomplished through two questionnaires: one for the employer and one for the employee. It was apparent, after both questionnaires were designed, that the use of present and past tense in each question made the questions difficult to understand. It was therefore necessary to design questionnaires for the employer and employee of those facilities who were not utilizing Quality Circles.

Appendix E serves as an example of the questionnaire that was answered by the employer who was currently utilizing Quality Circles. The questionnaire consisted of 36 multiple choice or short answer questions. The questionnaire answered by the employer who was no longer utilizing Quality Circles was composed of 37 questions (See Appendix F for a copy of the final version). The only difference in the two questionnaires was the use of past tense instead of present tense and the addition of question #37 which asked, "What were the reasons for discontinuing the Quality Circle concept in your department?"

The questionnaire answered by employees currently involved in a Quality Circle consisted of 27 multiple choice and short-answer questions. See Appendix G for a copy of the employee questionnaire. The questionnaire completed by the employees who had participated in Quality Circles in the past is presented in Appendix H. There were only two differences between these questionnaires. The past tense was

utilized instead of the present tense and the addition of question #28 which asked, "What were the reasons for discontinuing the Quality Circle concept in your department?"

The questionnaires for the employer were reviewed by Shirley Williams, R.R.A., Director of Medical Record Services at Saint Francis Hospital and Juanita Honeyman, R.N., MS Ed. Both suggested a few minor working changes. The employee questionnaires were given to employees of Medical Record Services to review. Minor changes were made. The questionnaires were then field tested by other employees of Medical Record Services and other departments within Saint Francis Hospital. The revised versions of these questionnaires appear in Appendixes E through H.

Collection of Data

Due to the length of time that had elapsed since the initial contact, it was felt that a follow-up letter was appropriate. For an example of this follow-up letter see Appendix I. These letters were mailed on October 4, 1984. The primary purpose of this letter was to bring participants up-to-date on the status of the study and to find out if they still wished to participate. Likewise, those individuals indicating they might participate were contacted. For the letter sent to those indicating they might participate see Appendix J. These letters were mailed on October 6, 1984. As a result of these letters, one individual contacted the researcher by telephone to decline to participate. The six participants who indicated they might participate did not respond and were contacted by telephone on October 17, 1984. Five out of the six hospitals declined to participate.

Questionnaires were mailed to the management personnel of each facility on October 17, 1984. For the geographical locations of the

facilities who were sent questionnaires, see Appendix K. Management personnel distributed the questionnaires to four employees in Medical Record Services. Attached to each questionnaire was a cover letter and a self-addressed, stamped return envelope. See Appendix L for the cover letter that was sent with the employer's questionnaire. See Appendix M for the cover letter that was sent with the employee's questionnaire. Both employer and employees were allowed seven days in which to return the questionnaires. As of October 27, 1984, only 54 questionnaires had been returned. Sixty-eight were needed to have 50 percent of the 130 questionnaires mailed to 27 hospitals. On October 29th and 30th, 1984, long distance telephone calls were made to those facilities who had not returned their questionnaires.

As of November 5th, only 60 questionnaires had been returned. On November 6th, 1984, long distance telephone calls were again made to those hospitals who had not responded. As a result of these telephone calls, another set of questionnaires were mailed to one facility who stated that it had not received any questionaires. In addition, a single quesionnaire was mailed to an employer who had thrown hers away because she had not been able to answer it before the stated deadline.

Data Analysis

The data gathered from the questionnaires were summarized. This was accomplished by summarizing each question. The primary analysis methods utilized were frequencies and percentages.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter includes an analysis of the initial contact letter and the questionnaires sent to the employer and employees of the various facilities who consented to participate in the study. The questionnaires are summarized according to: (1) Response rate; (2) Employer responses; (3) Employee responses; and (4) A comparison of employer response to employee response. For simplicity, in the presentation of data, the researcher will refer to each participant as "she" or "her".

Four hundred and fifty-three hospitals were sent an initial contact letter. The responses to the initial contact letter regarding the utilization of Quality Circles are presented in Table I. From the responses, there were 34 hospitals that were utilizing Quality Circles. Three hundred nineteen Medical Record Departments indicated that they did not presently utilize the Quality Circle concept. There were 14 hospitals that reported they had previously utilized the Quality Circle concept. Three hundred thirty-nine indicated that they had not utilized Quality Circles previously. Of the 34 hospitals that had indicated that they were utilizing Quality Circles, 21 agreed to participate. Total response rate to the initial contact letter was 78 percent. (N=353).

TABLE I

RESPONSES TO INITIAL CONTACT LETTER
REGARDING THE UTILIZATION OF
QUALITY CIRCLES (QC)

QUESTION	RESPONSE	
	YES N	NO N
Present Utilization of QC	34	319
Previous Utilization of QC	14	339
Willingness to Participate in Study	26	321
Might Participate in Study	6	---

N=353

Distribution of the 135 questionnaires which were mailed to 27 hospitals on October 27, 1984 is presented in Table II. Twenty-one of the hospitals were currently utilizing Quality Circles while seven had utilized Quality Circles in the past. One questionnaire was sent to the employer at each facility, thus making a total of 27. Four questionnaires were sent to each facility for employees to complete, thus making a total of 108. The distribution of questionnaires throughout the United States is displayed in Appendix K. After the questionnaires were mailed, the researcher was contacted by telephone and letter by three hospitals that did not care to participate in the study. Of the 27 questionnaires sent to the employer at each hospital, 15 were returned. This represents a response rate of 56 percent. One of the 15 that was returned had not been completed. The percentage of usable questionnaires was 54 percent. Of the 108 questionnaires mailed to the four employees at each facility, a total of 59 were returned for a 55 percent response rate. Of the 59 returned, five were not usable. When the total number of completed questionnaires (74) by both the employer and the employee was combined, the response rate was 55 percent. The total number of usable questionnaires was 68, or 50 percent.

Employer Responses

Upon return of the employers' questionnaires, it was found that the Director of Medical Record Services was responsible for the completion of 10 of the 14 questionnaires (71%). The remainder of the questionnaires were completed by two Assistant Directors of Medical Record Services (14%), one DRG (Diagnosis Related Groups) Coordinator (7%), and a Supervisor of Medical Record Services (7%).

TABLE II

DISTRIBUTION OF QUESTIONNAIRES TO THE HOSPITALS ON PRESENT AND PAST UTILIZATION OF QUALITY CIRCLES (QC)

QUESTIONNAIRES	DISTRIBUTION	
	EMPLOYER N	EMPLOYEE N
Past Utilization of QC	7	28
Present Utilization of QC	20	80
Total Questionnaires	27	108

The ages of the 14 employer participants ranged from 24-65 years of age. The age distribution among employers is illustrated in Figure 6. Two of the 14 participants were between 24-29 years of age (14%). Four of the 14 were betweeen 30-25 years of age (29%). Three participants fell between 36-42 years of age (21%). One participant (7%) indicated that she was between 42-47 years of age. One participant (7%) indicated that she was between 48-53 years of age. Another two participants (14%) were in the 54-59 years of age group. There was one participant (7%) in the 60-65 years of age category. The mode of this distribution were those employees (4) that were between the ages of 30-35. There were no participants 66 years of age or older.

The number of full-time employees ranged from 16 to over 50. There were four hospitals (29%) which had 16-20 employees. Four hospitals (29%) which had 26-30 employees. Two hospitals (14%) reported to have between 31-35 employees in their department. Two hospitals (14%) reported they had over 50 employees. There was only one hosptial (7%) with 21-15 employees and one (7%) with 36-40 employees. The frequency of full-time employees is pictured in Figure 7.

The number of part-time employees working at each hospital ranged from two to over six and is represented in Figure 8. Five hospitals stated they had two part-time employees. One hospital indicated it had four. One hospital reported it had five part-time employees. Six of the 14 hospitals stated that they had more than six part-time employees. Two of the participants wrote on their questionnaires that they had 12 and 14 part-time employees.

The organizational structure of each Medical Record Department participating in this study was basically the same. The organizational

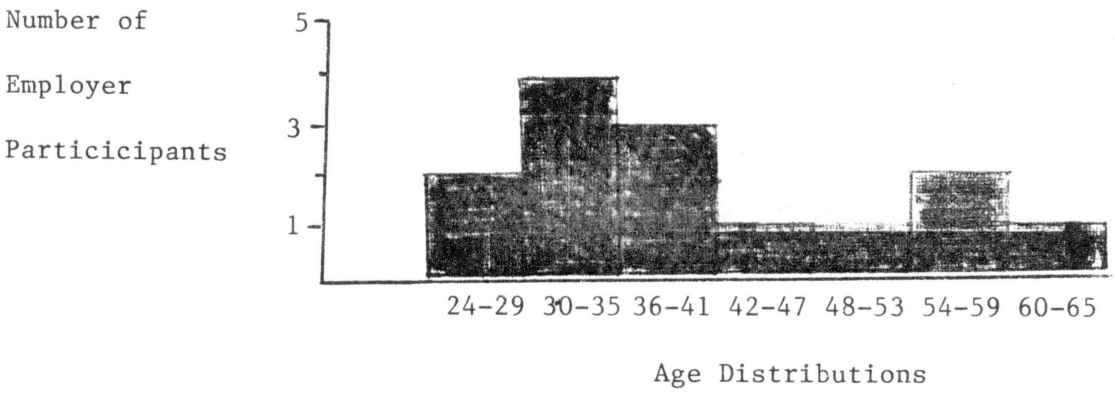


Figure 6. Age Distribution Among Employer Respondents

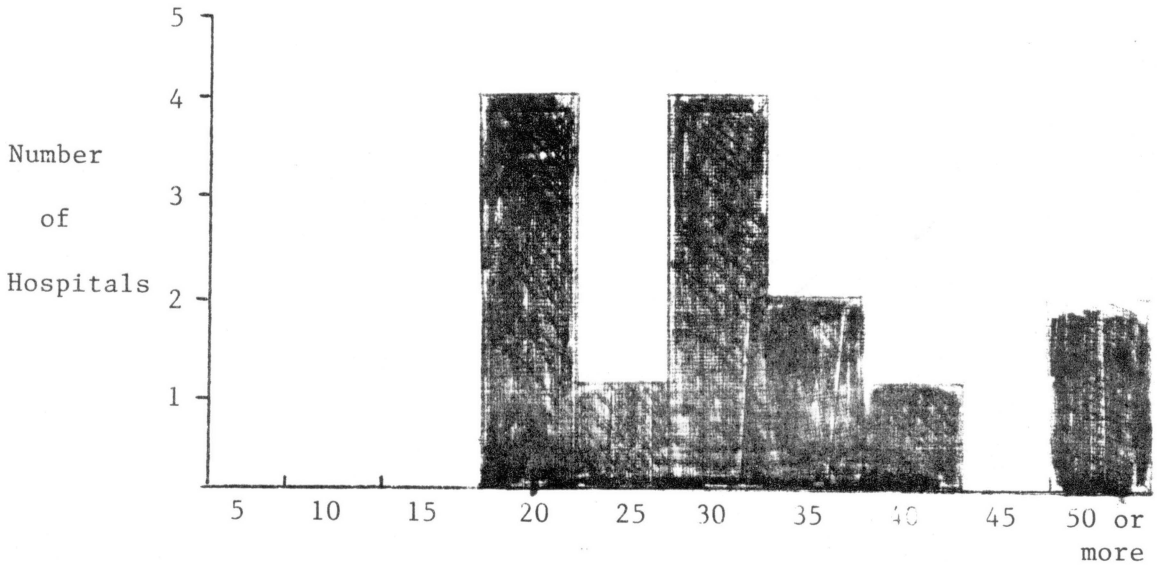


Figure 7. The Number of Full-Time Employees Working in Those Hospitals Which Were Utilizing Quality Circles or had Utilized the Concept in the Past

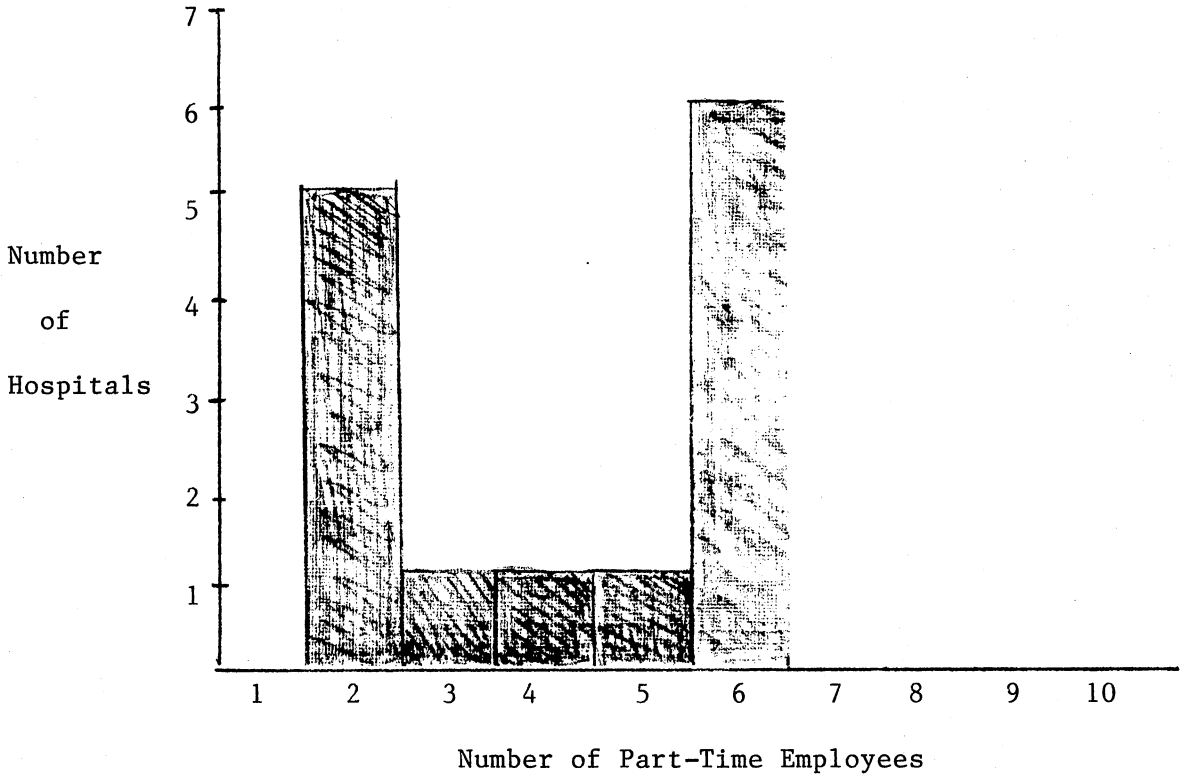


Figure 8. Frequency of Part-Time Employees

structures of the Medical Record Department as described by the employer is pictured in Figure 9. In three of the hospitals, there was no Assistant Director. In these instances, the Supervisors reported directly to the Director of Medical Record Services.

The Quality Circle concept did appear to be an integral part of each hospital's organizational structure. For the most part, supervisors were functioning as group leaders. One hospital indicated that the Quality Circle concept was not a part of its organizational structure.

Ten (71%) of the 14 hospitals participating had one Quality Circle functioning in Medical Record Services. Three (21%) of the 14 reported that they had two Quality Circles functioning in Medical Record Services. Of the three hospitals with two Quality Circles, only one of those hospitals employed over 50 employees.

The number of members per Quality Circle ranged from 3-14. The majority of the hospitals (57%) had between 6-8 members per Quality Circle. It should be noted that the one hospital with 12-14 members in its Quality Circle had between 16-20 full-time employees. It could be concluded that the size of the facility does not necessarily affect the number of members per circle.

In 21 percent of the hospitals (3), the Quality Circle met one time a month. In another 29 percent of the hospitals (4), the Quality Circles met twice a month. Forty-two percent reported that their Quality Circles met four or more times per month. One participant specifically stated that the Quality Circle met once a week in the beginning and then gradually decreased to one time per month. Another participant related that the Quality Circle at her facility began meeting once a month and then the meetings were held sporadically. Both

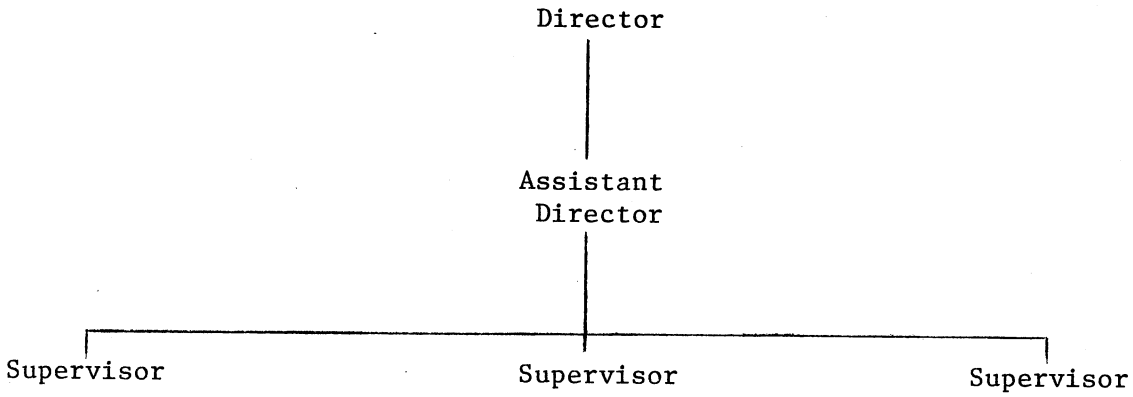


Figure 9. The Organizational Structure of Medical Record Services as Described by Employer Participants

hospitals that cited a change in their meeting times no longer utilized Quality Circles in their departments.

The individual functioning in the role of facilitator seemed to vary from hospital to hospital. The following list represents those functioning in that capacity: (1) Director of Medical Record Services; (2) Assistant Director of Medical Record Services; (3) Medical Record Analyst; (4) Medical Record Clerk; (5) Nursing Administrator; (6) Personnel Management Development; (7) Education Department; (8) Education-Training Coordinator; (9) Management Engineer; and (10) Director of Management Engineering. Two of the three hospitals that utilized Medical Record personnel in the role of facilitator, no longer had functioning Quality Circles. The results would indicate that the facilitator did not have to be an employee of Medical Records for the concept to succeed.

Ninety-three percent of the individuals functioning in the capacity of group leader were employees of the Medical Record Department. Only one group leader was from another area of the hospital (Management Engineering). A variety of individuals from Medical Record Services function as group leader. The titles of those individuals functioning in the role of group leader are as follows: (1) Director; (2) Assistant Director; (3) Department Supervisor; (4) Transcription Supervisor; (5) Coordinator of Record Processing; (6) Utilization Review Coordinator; (7) Junior Medical Records Clerk; (8) Incomplete Chart Clerk; and (9) Medical Records File Clerk.

After summarizing the data from question #10 which asked who functioned in the role of facilitator and question #11 which asked who functions in the role of group leader, it appeared that question #6

regarding how the structure of Quality Circles fit into the present organizational structure received a variety of responses. It appeared that participants interpreted "organizational structure" to mean the actual chart of the department's structure.

The amount of time each participant devoted to Quality Circles is presented in Table III. Fifty percent (7) of the employers spend 1-2 hours per month on Quality Circles. One participant indicated that she spent less than 10 minutes per month while one participant did not answer. It is possible that the individual who did not answer spent less than one hour.

Thirty-six percent of the facilitators spent an average of five or more hours per month on Quality Circles. These results support the reports made in the literature. Twenty-one percent of the participants stated that the facilitator spent two hours per month on Quality Circles.

Forty-three percent of the group leaders spent an average of five or more hours per month on Quality Circles. Twenty-nine percent were reported to spend four hours per month. The results seemed to indicate that the group leader was perceived to spend about the same amount of time involved with Quality Circles as did the facilitator.

Thirty-six percent of group members devoted an average of four hours per month on Quality Circles; while 21 percent were reported to spend two hours per month. The amount of time spent by each participant appeared to be directly related to the number of times the Quality Circle met during the month.

Eight of 14 employers (57%) indicated that departmental plans were developed prior to the implementation of Quality Circles. Five departments (36%) indicated that no departmental plans were developed

TABLE III

AVERAGE AMOUNT OF TIME SPENT PER
QUALITY CIRCLE PARTICIPANT

Participant	Hours Spent Per Month											
	1 Hr. Per Month		2 Hrs. Per Month		3 Hrs. Per Month		4 Hrs. Per Month		5 Hrs. Per Month		Other Responses	
	N	%	N	%	N	%	N	%	N	%	N	%
Employer	4	29	3	21	1	7	2	14	2	14	2	14
Facilitator	1	7	3	21	2	14	2	14	5	36	1	7
Group Leader	-	-	2	14	2	14	4	29	6	43	-	-
Group Member	2	14	3	21	1	7	5	36	2	14	1	7

N=14

prior to the implementation of Quality Circles. One person chose not to answer this question.

Forty-three percent (5) of the employers reported that no changes were made to the departmental plans after the implementation of Quality Circles. Three employers (21%) reported that their departmental plans were revised. One participant commented that her department went from the selection of members who were required to participate to a voluntary process. Nine participants responded to question #17 which asked if changes were made to the departmental plan, while only eight participants responded "Yes" to question #16 which asked if a departmental plan had been developed. The number of responses to the yes portion of question #16 should equal the combined responses of the A-B portions to question #17.

Ten (7 %) of the 14 participants reported that they had a better understanding of their own area of responsibility after the implementation of Quality Circles. One individual commented that the implementation of Quality Circles made her more aware of her departments' need for production standards. Four participants (29%) felt that the implementation of Quality Circles had not affected their understanding with regard to their own area of responsibility.

Ninety-three percent (13%) of the participants responded that their ability to communicate had improved since the implementation of Quality Circles. Only one individual (7%) did not feel her ability to communicate had improved. One individual commented that she had found the nominal group process and consensus development helpful.

The implementation of Quality Circles seemed to have improved the quality of work produced in nine (64%) of the 14 facilities. Five facilities (36%) reported that the quality of work in their department

had not improved. One person commented that communication problems were cleared up.

While the quality of work seemed to improve, a majority of the facilities, 57 percent, reported that the productivity of their department had not increased since the implementation of Quality Circles. Forty-three percent of the participants seemed to think that the productivity had increased in their department.

Twelve (86%) of 14 employers reported that they had not seen a reduction in departmental expenses since the implementation of Quality Circles. Two departments (14%) indicated that their departmental costs had been reduced since the implementation of Quality Circles. Although a majority of the participants had not seen a reduction in departmental expenses, the departments had observed a reduction in the duplication of efforts and a smoother flow of the work.

Absenteeism and emloyee turnover did not appear to be effected by the utilization of Quality Circles. The employers' responses to the affect of Quality Circles on absenteeism and turnover are depicted in Table IV. Seventy percent of employers (11) reported that they had not seen a reduction in absenteeism, or employee turnover. Three employers (21%) had seen a reduction in employee turnover. One individual chose not to respond to question #24 which asked if employee turnover had been reduced since the implementation of Quality Circles, but commented that her department had never had much employee turnover before, or after, the implementation of Quality Circles.

Since the implementation of Quality Circles, 85 percent of employers felt that the employees participating in the process had developed the ability to solve problems. The employers' responses to the employees'

TABLE IV

EMPLOYERS' RESPONSES TO THE QUESTIONS CONCERNING THE REDUCTION OF ABSENTEEISM AND TURNOVER SINCE THE IMPLEMENTATION OF QUALITY CIRCLES

Topic	Employers' Response			
	Yes		No	
	N	%	N	%
Absenteeism	3	21	11	79
Turnover	2	14	11	79

N=14

ability to solve problems is presented in Table V. Two employers (14%) did not feel their employees had gained the ability to solve problems. One employer wrote that employees have problems in this area. Eleven employers (79%) had seen their employees utilizing problem-solving techniques while they completed their routine work. Three employers (21%) had not observed their employees utilizing problem-solving techniques while completing their routine work.

Ten employers (71%) reported that with the implementation of Quality Circles, employees seemed to be more conscientious and motivated with regard to their jobs. Four employers (29%) did not feel that the implementation of Quality Circles had affected the conscientiousness or motivation of their employees.

Personal and leadership development was observed to occur in Quality Circle participants by 79 percent of the employers. Three employers (21%) had not observed such development in their employees.

Nine facilities (64%) reported that the relationships between employer and employee were more cooperative and harmonious since the implementation of Quality Circles. Five facilities (36%) reported that the relationships between employer and employee were not more co-operative and harmonious.

Ten employers (71%) indicated that communications had improved in their department since the implementation of Quality Circles. On the other hand, 29 percent of the employers had not experienced an improvement in the area of communications within their department.

TABLE V

RESPONSES TO INFLUENCE OF QUALITY CIRCLES ON THE DEVELOPMENT OF PROBLEM-SOLVING TECHNIQUES AND UTILIZATION OUTSIDE THE QUALITY CIRCLES

Problem Solving	Employer Response			
	Yes		No	
	N	%	N	%
Development of Ability	12	86	2	14
Utilization of Ability	11	79	3	21

N=14

Of the 14 participants, 13 (93%) reported that they were unable to document a cost savings since the implementation of Quality Circles. One participant (7%) indicated that she had documented a cost savings since the implementation of Quality Circles. This individual elaborated that the cost savings was due to better systems that had evolved within the department. These new systems had resulted in a decrease of personnel time which had led to an increase in efficiency.

When asked to identify those aspects of Quality Circles they liked best, employers volunteered the following: (1) Problem solving; (2) Employee participation; (3) Problem identification; (4) A mechanism for employee recognition; and (5) The employees' involvement in decision making. Other individuals commented that Quality Circles seemed to enhance communications in their department and create a group spirit. One employer observed that the employees seemed to exhibit not only the ability, but also the desire, to solve everyday work problems. Another employer stated that creativity was stimulated through the discussion of ideas and concepts. One facility reported that the use of Quality Circles had resulted in a greater team effort among the first and second shifts. In addition, all employees seemed to have a better understanding of how the whole department and hospital management functioned.

When asked to identify the aspects of Quality Circles they liked the least, employers responded with the following:

1. Non-circle members were jealous of circle participants.

2. When there was descension among circle members, it carried over into the department.

3. It was hard to keep cirlce members motivated.

4. Quality Circle meetings were used for gripe and grievance sessions.

5. The training of leaders.

One participant stated that problems involving other departments tended to slow down the group's progress or completely "bog" down the group.

The topic mentioned most frequently was the amount of time required for the Quality Circle process. Some employers seemed to think that Quality Circles took time away from the employees' daily tasks. One participant commented that during brain-storming sessions, large lists were compiled with problems that needed change or implementation of solutions. The employer respondents added that the problems identified required more time than was allotted for problem solving, investigation, and resolution.

On a positive note, employers reported that the Quality Circle concept was a good learning experience and that they enjoyed the presentations given by the circles. One participant expressed that the Quality Circle concept should be implemented through the education department. Another participant stated that she had been under this system for 10 years and did not have anything to compare it with. On a negative note, an employer commented that employees did not have skills to solve problems and that her department needed better employees. One employer revealed that her administration did not support Quality Circles and it was abandoned within the institution. The participants who had utilized Quality Circles in the past indicated that the concept was discontinued due to budget cuts and staff reductions.

When asked if there were any aspects of the Quality Circle concept they wished to change, employers expressed the following comments:

1. The number of individuals participating in the concept should be reduced.

2. The discussions in circle meetings should be limited to departmental problems.

3. The Quality Circle concept required too much time.

4. The need for presentations should be eliminated.

5. A training film should be developed for leaders, group leader, and group members.

6. Some solutions were not practical, employees were not always aware of all information.

Facilities that had utilized Quality Circles in the past, indicated that the concept was discontinued due to: (1) a change in management; (2) loss of interest; (3) a reorganization of the department changed employees' responsibilities; (4) not all problems discussed in the Quality Circle meeting related to the entire group, some participants felt left out; (5) problems were solved more quickly outside the group; and (6) when personnel left, additional time was required for training.

Employee Responses

Upon return of the employee questionnaires, it was found that these questionnaires were completed by a variety of personnel in Medical Record Services. A total of 54 employee questionnaires were returned. The questionnaires were completed by the: (1) DRG (Diagnosis Related Group) Coordinator; (2) Supervisor; (3) Assistant Supervisor; (4)

Coordinator of Records Processing; (5) Control Supervisor; (6) Cancer Register/Supervisor; (7) Utilization Review Secretary; (8) Concurrent Monitor; (9) Statistical Specialist; (10) Secretary to Special Assignments; (11) Abstractor; (12) Coding Clerk; (13) Tumor Registrar; (14) Tumor Registry Clerk; (15) Junior Medical Record Clerk; (16) Senior Medical Record Clerk; (17) Physicians Services Clerk; (18) Medical Record Phone Clerk; and (19) File Clerk/Chart Analyst. Two of the 54 questionnaires (4%) were completed by Transcription Supervisors. Accredited Record Technicians were responsible for the completion of two questionnaires (4%) while another two questionnaires (4%) were completed by Medical Transcriptionists. Two Medical Record Secretaries and two Health Record Technicians completed questionnaires (7%). Three questionnaires (6%) were completed by Discharge Clerks, and three questionnaires (6%) were completed by Correspondence Clerks. Five ICD-9-CM (International Classification of Diseases - 9th Edition - Clinical Modification) Coders completed questionnaires (9%) while another five (9%) were completed by Medical Record Technicians. The largest number of questionnaires were completed by clerks in Medical Record Services (16%). Two (4%) individuals chose not to state their position titles.

The ages of the employees participating fell into eight categories. The distribution of ages among employees participating can be found in Table VI. Six of the 53 participants were between 18-23 years of age (11%). Seventeen of the 54 participants were between 24-29 years of age (31%). Six participants fell between 30-35 years of age (11%). Nine participants (19%) indicated they were between 36-41 years of age; another two participants (4%) indicated they were 42-47 years of age. Six participants (11%) fell between the ages of 48-53; another six

TABLE VI

DISTRIBUTION OF AGES AMONG
EMPLOYEE PARTICIPANTS

Age Categories	N	Percent
18-23	6	11
24-29	17	31
30-35	6	11
36-41	10	19
42-47	2	4
48-53	6	11
54-59	6	11
60-65	1	2

N-54

participants (11%) indicated they were between 54-59 years of age. There was one participant who was in the 60-65 age group.

Only one employee participant (2%) was found to be serving as a facilitator for a Quality Circle. There were five employee participants (9%) who were serving as Group Leaders for the Quality Circle. Forty-eight employee participants (89%) were involved in a Quality Circle as a group members.

The average amount of time devoted to the Quality Circle concept is represented in Figure 10. Five participants (9%) indicated they devoted one hour per month to Quality Circles. Twelve of the 54 employee participants (22%) spent two hours per month on Quality Circles. Three hours per month were utilized by 10 of the employee participants (19%) on the Quality Circle function. A majority of the employee participants (21%) spent four hours per month on Quality Circles. There were six employee participants (11%) that indicated they spent five or more hours per month on Quality Circles. One participant commented that the Quality Circle may meet as much as an hour every day when the circle is involved in a project. One participant chose not to answer this question.

Eight (15%) of the 54 employee participants indicated that their Quality Circle met one time a month. Twenty-one employees (39%) reported that their Quality Circle met two times a month. One participant (2%) responded that her Quality Circle met three times a month; another 33 percent of the participants indicated that their Quality Circle met four times a month. Five (9%) participants specified that their Quality Circles meet other than 1-4 times a month.

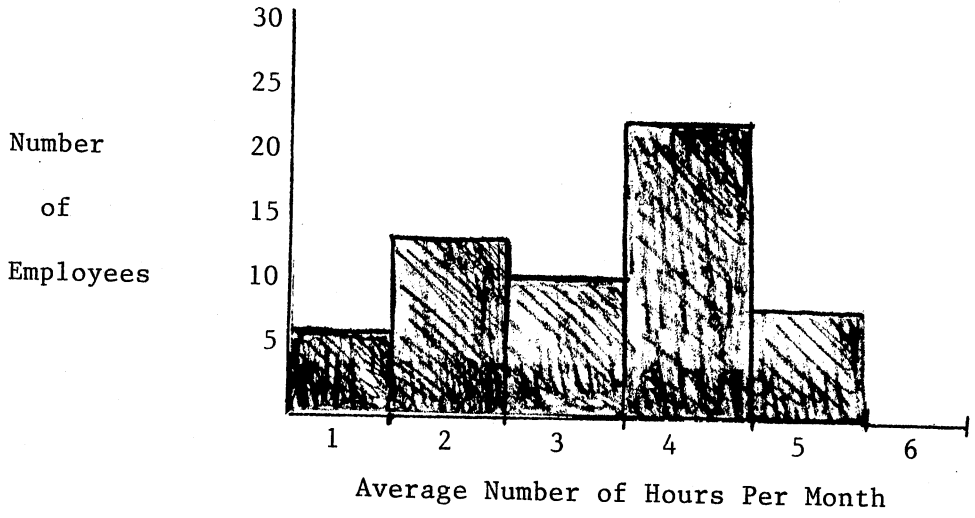


Figure 10. The Amount of Time Devoted to Quality Circles by Employee Participants

Quality Circles were reported to have met on a weekly basis, one time per month and from three to four times a week, when the circle was working on a project. One participant wrote that the Quality Circle in her facility had not met on a regular basis. The number of times the Quality Circle met on a monthly basis is pictured in Figure 11.

Twenty-nine participants (54%) felt that they had developed skills and abilities they did not know they had since they became involved with Quality Circles. Two participants (4%) chose not to indicate if they had acquired new skills and abilities, while 39 out of 54 participants (74%) indicated that their ability to communicate had also improved. Forty-three percent (23) indicated that they had not developed additional skills and abilities since their involvement with Quality Circles. In addition, 14 participants (26%) felt that their ability to communicate had not improved.

Thirty-one (58%) employee participants indicated that the quality of their work had improved and 22 participants (41%) felt that the implementation of Quality Circles had not affected the quality of their work. One individual (2%) added that the quality of the coding had improved in her area. Another participant indicated that she was conscientious prior to the implementation of Quality Circles, while another attributed the improved quality to government regulations. One individual (2%) chose not to answer this question.

Fifty percent of the participants reported that the quantity of work they produced had increased. The other 27 participants (50%) did not feel that Quality Circles had affected the amount of work they produced. One participant (2%) commented that the increase in quantity was definitely not due to the implementation of Quality Circles. Other

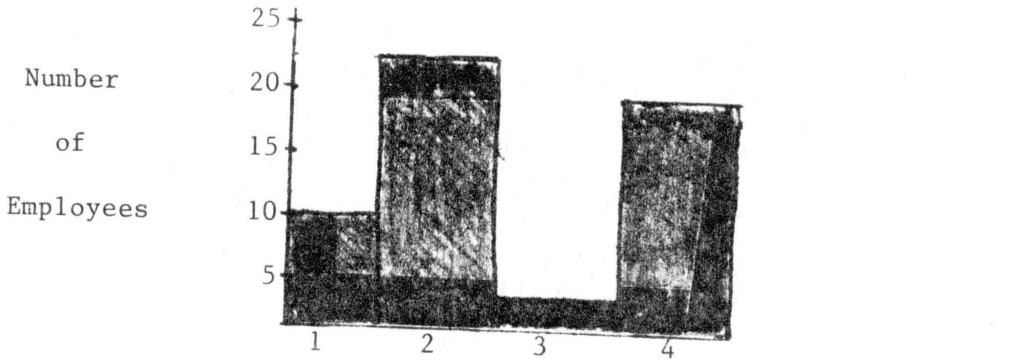


Figure 11. The Number of Times a Quality Circle Met on a Monthly Basis

participants stated that they had always been conscientious and were able to complete their work on time prior to implementation of Quality Circles. The employees' responses on the improvement of quality and the increase of quantity is depicted in Table VII.

Thirteen of the 54 participants (24%) indicated that their attendance had improved since the implementation of Quality Circles. Seventy-six percent (41) of the participants did not feel that the implementation of Quality Circles had affected their attendance. Several of the participants who had responded "No" commented that their attendance had always been good. One person felt the question was unclear and asked if this question was referring to the office personnel or to members of the Quality Circle.

Since the implementation of Quality Circles, 57 percent of the participants (31) reported to be more satisfied with their job. Thirty-five percent of the participants (19) did not feel that Quality Circles had an affect on their job satisfaction. Two participants (4%) were not sure that Quality Circles had affected their job satisfaction. Two participants (4%) responded that they were satisfied with their jobs prior to the implementation of Quality Circles.

Thirty-four participants (63%) stated that they were utilizing the problem-solving techniques learned in the Quality Circle process during the course of their eight-hour day. Seventeen participants (31%) indicated they were not utilizing problem-solving techniques throughout the course of their day. One participant (2%) utilized the problem-solving techniques sometimes; another participant (2%) was not sure whether she utilized problem-solving techniques or not. One (2%) participant had utilized problem-solving techniques prior to the

TABLE VII

THE EMPLOYEES' RESPONSES ON THE IMPROVEMENT OF QUALITY AND THE INCREASE IN QUANTITY SINCE THE IMPLEMENTATION OF QUALITY CIRCLES

Topic	Employees' Response					
	Yes		No		No Response	
	N	%	N	%	N	%
Quality	31	57	22	41	1	2
Quantity	27	50	27	50	-	-

N=54

implementation of Quality Circles at her facility. One person commented that the utilization of problem-solving techniques was limited due to discouraging attitudes of those individuals who were not involved in the Quality Circle process.

Sixty-nine percent of the participants (37) reported that they were more conscientious since the implementation of Quality Circles. Twenty-six percent (14) of the participants did not feel more conscientious since the implementation of Quality Circles. One participant (2%) wrote that she had always been conscientious. One person (2%) stated that the question was not applicable. One person (2%) chose not to answer the question.

Twenty-nine of the 54 participants (54%) indicated they felt more motivated since the implementation of Quality Circles; another 23 participants (43%) did not feel more motivated. One participant (2%) expressed that her motivation fluctuated. One participant (2%) chose not to answer this question. One of the participants who had answered "No" to this question, wrote that she was already motivated prior to the implementation of Quality Circles. Employees' responses to increased conscientiousness and motivation are seen in Table VIII.

One-hundred percent of the participants indicated that they felt free to express their opinion during a Quality Circle meeting, while 98 percent felt that their opinion was respected by the other group members. One participant (25) stated that her opinion was respected most of the time.

TABLE VIII

EMPLOYEES' RESPONSES TO INCREASED CONSCIENTIOUSNESS AND MOTIVATION SINCE THE IMPLEMENTATION OF QUALITY CIRCLES

	Employees' Response					
	Yes		No		No Response	
Topic	N	%	N	%	N	%
Conscientiousness	37	69	14	26	3	6
Motivation	29	54	23	43	2	4

N=54

Thirty-nine of the 54 participants (72%) indicated that their participation in Quality Circles gave them a real voice in deciding how the work will be done in Medical Record Services. Twelve of the 54 participants (22%) did not feel that their involvement in Quality Circles made a difference in how the work would be done. Two participants (4%) expressed that their involvement with Quality Circles sometimes made a difference in how the work would be done. One person (2%) chose not to answer the question. One individual who had responded "Yes", added that the affect was minimal.

Thirty-eight of the participants (70%) felt that their involvement with Quality Circles had improved the work environment in Medical Record Services; while 14 (26%) of the participants felt that their involvement had not improved the work environment in Medical Record Services. One individual (2%) felt the environment was improved sometimes and then sometimes it was not. One (2%) participant added that "changes in things improved but there was minimal changes in people." Employees' responses to the affect of Quality Circles on how the work is done and the environment is presented in Table IX.

Forty-five out of 54 participants (83%) indicated that by being involved in Quality Circles they felt their skills and knowledge were valuable to Medical Record Services. Eight (15%) of the 54 did not feel that their skills and knowledge were valuable to Medical Record Services.

Eighty-five percent of the participants (46) felt that by being involved in Quality Circles, their department was aided in accomplishing its goals. Thirteen percent of the participants did not feel their participation in Quality Circles aided the department in

TABLE IX

EMPLOYEES' RESPONSES TO THE AFFECT OF QUALITY CIRCLES ON HOW THE WORK IS DONE AND THE WORK ENVIRONMENT IN MEDICAL RECORD SERVICES

	Employees' Response					
	Yes		No		No Response	
Topic	N	%	N	%	N	%
Participation in Quality Circles and its affect on how the work is done	39	72	12	22	3	6
Participation in Quality Circles and its affect on the work environment	38	70	14	26	2	4

N=54

accomplishing its goals. One person (2%) indicated that participation in Quality Circles aided the department in achieving its goals on a short-term basis.

Thirty-seven of the participants (69%) reported to have a greater sense of belonging to Medical Record Services and the hospital since participating in Quality Circles. Seventeen participants (31%) reported that they did not feel a greater sense of belonging since being involved with Quality Circles. One participant (2%) commented that she felt a sense of belonging prior to the implementation of Quality Circles.

Thirty-six participants (67%) indicated that since the implementation of Quality Circles, communications have improved throughout Medical Record Services. Sixteen participants (30%) had not seen an improvement in communications in their department. One participant (2%) was undecided as to whether Quality Circles had improved communications in Medical Record Services. One participant (2%) chose not to answer this question. One participant added that communciations had improved between Quality Circle members. Another individual commented that communications is something that must always be worked on and is one of the leading causes of problems.

Fifty-nine percent of the participants (32) felt that the relationship between employer and employee was more cooperative and harmonious since the implementation of Quality Circles. Thirty-three percent of the participants did not feel that the relationship between employer and employee was more harmonious and cooperative since the implementation of Quality Circles. Four percent of the participants (2) were undecided if the relationship between employer and employee had improved. Two percent (2) of the participants wanted to know "what

level" of the employee and employer relationship the question was referring to; another two percent (1) of the participants chose not to answer the question. One participant commented that the relationship between employer and employee was cooperative and harmonious prior to the implementation of Quality Circles. The employees' responses on the affect of Quality Circles on communications and the relationship between employer and employee are depicted in Table X.

When asked to identify the aspects of Quality Circles they liked best, employee participants responded with the following:

1. Challenge of identifying a problem and seeing it solved
2. Voluntary exchange of ideas, complaints and needs with workers
3. Gaining respect for people you work with
4. Improving the department and work procedures
5. Better work environment
6. Awareness of how the department functions
7. Improves ability to communicate
8. Provided opportunity to communicate with the Assistant Director and receiving feedback
9. Involves group effort; group cohesiveness
10. Results are rewarding
11. Involvement with other departments
12. Awareness of other departments' procedures and how they affect Medical Record Services
13. Preparing and giving presentations
14. The process used does not allow anyone to get hurt
15. The way the Quality Circle process is set up
16. Communications and problem solving has developed their creative thinking

TABLE X

EMPLOYEES' RESPONSES TO WHETHER QUALITY CIRCLES HAD IMPROVED COMMUNICATIONS AND RELATIONSHIPS BETWEEN EMPLOYERS AND EMPLOYEES

	Employees' Response					
	Yes		No		Other	
Topic	N	%	N	%	N	%
Improved Communications	36	67	16	30	2	4
Improved Relations between employer and employee	32	59	18	33	4	7

N=54

17. Brainstorming

18. Having input into the way procedures are set up and the day-to-day office operations.

When asked to identify the aspects of Quality Circles they liked the least, employees responded with the following:

1. The time away from work; time consuming

2. Constraints placed on projects by supervisors

3. The solutions to problems did not last long

4. Nothing was ever really solved

5. There is no follow-up on changes and investigations

6. The long processes; moved too slowly

7. Did not meet enough

8. Not enough problems to solve.

9. Employees with personal problems wanted the Quality Circle to solve them

10. Attitude of some non-participating co-workers; lack of support

11. Not enough time to spend on Quality Circles

12. Supervisor participation

13. Other co-workers did not take Quality Circles seriously; department support

14. Dissension within the group and personalities prevented the Quality Circle from getting anywhere

15. Same people always did the outside work on problems.

16. Presentations

17. Training program

18. Not everyone got an opportunity to participate in Quality Circles

19. Everyone talking at the same time

20. Working on smaller problems, not the larger ones

21. Having to choose just one problem to work on

22. Interfacing with facilitators and department heads

23. Gripe sessions, people were argumentative

When asked to provide additional comments, the employee participants provided the following:

1. It is a good idea and seems to be working, circles beneficial

2. Discouraging, not being able to solve problems across department lines

3. Problems did not stay solved for any length of time

4. Never really solved big problems

5. Problems not followed up

6. Program too short in duration to aid the department

7. Our department got several needs and problems solved where we otherwise would not have

8. Quality Circle is a definite must in any working environment.

9. No one wanted to be involved

10. Ineffective

11. Quality Circle has been on hold due to budget cutbacks

12. We have not had an active Quality Circle in our department in over six months

13. Quality Circles have made a difference in the department as a whole

14. Quality Circles are effective if the leader is good

15. If the Quality Circle is discussing a problem that directs a person, they should not be there

Those participants whose facility had utilized Quality Circles in the past were asked to identify what they thought were the reasons for their facility to discontinue Quality Circles. The participants volunteered the following comments:

1. Increased workload in the department
2. Time involvement; lack of time; no time
3. Loss of facilitator or leader
4. Do not know; management just quit having the meetings
5. Nothing was accomplished
6. Per order of Director of Medical Records
7. Lack of input by department personnel; lack of interest; poor response
8. Take care of problems during departmental meeting
9. Solved little
10. Department director resigned and there was a shortage of management personnel
11. Ran out of problems

A Comparison of Employer Responses to Employee Responses

There were a total of 15 questions on the employers' and employees' questionnaires that were identical. The primary reason for placing the same questions on both questionnaires was to provide a means by which to compare the employers' responses to the responses given by employees.

Question number five on the employee questionnaires and question number nine on the employer questionnaires inquired as to how often the Quality Circles met.

The majority of employers (5 of 14) and employees (21 of 54) reported that the Quality Circles at their facilities met four times per month. The second largest response indicated that the Quality Circles met twice a month. One major difference was seen between the employers' and the employees' responses. Ten of the 54 employees (19%) participating indicated that Quality Circles at their facilities met three times per month. The employers' responses on the other hand indicated that none of the Quality Circles at their facilities met three times a month. One explanation for this could be that the employers of those facilities whose circles met three times per month chose not to complete the questionnaire. It should be noted that the responses on the employer questionnaires were slightly different than those on the employee questionnaires. Selection "D" on the employer questionnaires read "four or more times"; while selection "E" read "other, please describe." On the employee questionnaires, selection "D" read "four times a month", while selection "E" read "other, please describe." A comparison of employers' and employees' responses on the number of times the Quality Circle meets can be viewed in Table XI.

Agreement was seen between the employers' and employees' responses on the amount of time that was spent on Quality Circles per month. Employers and employees indicated that an average of four hours per month was spent on Quality Circles. The second largest response disclosed that employees at other facilities spent an average of two hours per month on Quality Circles.

TABLE XI

COMPARISON OF EMPLOYERS' VERSUS EMPLOYEES' RESPONSES ON THE NUMBER OF TIMES THE QUALITY CIRCLE MEETS

Number of Times Per Month	Responses			
	Employers'		Employees'	
	N	%	N	%
1	3	21	5	9
2	4	29	13	24
3	0	0	10	19
4	5	36	21	39
Other	2	14	5	9

N=68

One factor to be considered in comparing responses to this question is the role of the employee in the Quality Circle concept. Forty-eight of the 54 employee participants were group members; while five of the employees function as group leaders and one as a facilitator. This could account for the slight differences that are seen in Table XII. The percentage of employees spending four hours per month on Quality Circles is fractionally higher than that reported by employers.

Both employers (64%) and employees (58%) seemed to think that the implementation of Quality Circles had improved the quality of work produced in Medical Records Services. An equal number of employers and employees felt that Quality Circles had no effect on the quality of work produced. The comparison of employers' and employees' responses to the affect of Quality Circles on the quality of work is presented in Table XIII.

Employers and employees agreed that Quality Circles had not increased productivity. The employers felt slightly stronger about this than the employees did. The employers were more equally divided in the responses than the employers. A comparison of responses on the affects of Quality Circles on productivity is presented in Table XIV.

Employers had not observed a reduction in absenteeism since the implementation of Quality Circles. Likewise, employees did not feel that the implementation of Quality Circles had improved their attendance. Again, there was a similar distribution of the responses between employers and employees as to the affects of Quality Circles on attendance. The comparison of employers' responses to employees' responses on the affects of Quality Circles on attendance are depicted in Table XV.

TABLE XII

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES CONCERNING THE AVERAGE NUMBER OF HOURS SPENT ON QUALITY CIRCLES PER MONTH

Hours Per Month	Responses			
	Employers'		Employees'	
	N	%	N	%
1	2	14	5	9
2	3	21	12	22
3	1	7	10	19
4	5	36	21	39
5 or more	2	14	6	11

N=68

TABLE XIII

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE AFFECT OF QUALITY CIRCLES ON THE QUALITY OF WORK PRODUCED

Affect	Responses			
	Employers'		Employees'	
	N	%	N	%
Improved Quality of Work	9	64	32	59
No Affect on the Quality of Work	5	36	21	39
No Response	-	--	1	2

N=68

TABLE XIV

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE AFFECT OF QUALITY CIRCLES ON PRODUCTIVITY

Affect	Responses			
	Employers'		Employees'	
	N	%	N	%
Increased Productivity	6	43	27	50
No Affect on Productivity	8	57	27	50

N=68

TABLE XV

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES CONCERNING ABSENTEEISM

Absenteeism/Attendance	Responses			
	Employers'		Employees'	
	N	%	N	%
Decreased Absenteeism/ Improved Attendance	3	21	13	24
No Affect on Absenteeism/ Attendance	11	79	41	76

N=68

Since the implementation of Quality Circles, employers and employees indicated that they were utilizing problem-solving techniques. Eighty-six percent of the employers responded yes, while only 63 percent of the employees responded yes. The responses of the employers and employees on the utilization of problem-solving techniques since the implementation of Quality Circles is pictured in Table XVI. There was one employee who responded "sometimes". Another employee responded that she had utilized problem-solving techniques prior to the implementation of Quality Circles. A portion of those employees responding "No" may have utilized this technique, but did not realize that it was called problem-solving.

Since the implementation of Quality Circles, nine employers (64%) reported that they saw their employees were more conscientious. Sixty-four percent of the employees (37) reported that they were more conscientious since the implementation of Quality Circles. Twenty-six percent of the employers and the same percentage of employees had not seen an improvement. One employee commented that she had always been conscientious. This, too, could be the case with a portion of those 14 employees who responded "No". Responses to the affect of Quality Circles on the employees' conscientiousness are represented in Table XVII.

Seventy-one percent of the employers had observed their employees to be more motivated since the implementation of Quality Circles; while only 54 percent of the employees reported that they were more motivated. A greater number of employees did not feel that they were more motivated since the implementation of Quality Circles. One employee commented that they had always been motivated. A comparison

TABLE XVI

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE UTILIZATION OF PROBLEM-SOLVING TECHNIQUES

Utilization of Problem-Solving Techniques	Responses			
	Employers'		Employees'	
	N	%	N	%
Yes	12	86	34	63
No	2	14	17	31
Other Answers	--	--	3	6

N=68

TABLE XVII

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE AFFECT OF QUALITY CIRCLES ON THE EMPLOYEES' CONSCIENTIOUSNESS

Affect	Responses			
	Employers'		Employees'	
	N	%	N	%
More Conscientious	9	64	37	64
No Improvement Seen	4	26	14	26
Other Responses	-	--	3	6

N=68

of the employers' responses to employees' responses on the affect of Quality Circles on the employees' motivation is presented in Table XVIII.

Question number 29 on the employers questionnaire asked if they had observed personal and leadership development among their employees since the implementation of Quality Circles. The employees' questionnaire asked if the employee had developed skills and abilities they did not know they had since the implementation of Quality Circles. Although the questions were worded slightly different, they seem to ask the same things.

Seventy-six percent of the employers had observed personal, as well as leadership development, among their employees who were involved with Quality Circles. Fifty-four percent of the employees thought that they had developed skills and abilities they did not know they had since the implementation of Quality Circles. There was a greater number of employees (43%) than employers (21%) who did not feel they had developed new skills and abilities. A comparison of the employers' responses to the employees' responses on the employees' development since the implementation of Quality Circles is depicted in Table XIX. One employee commented that she saw more teamwork in the department.

Both employers (64%) and employees (60%) felt that the implementation of Quality Circles had resulted in a more cooperative and harmonious relationship between the employers and the employees; these comparisons are presented in Table XX. Thirty-six percent of the employers and 33 percent of the employees felt that Quality Circles had no affect on the relationship between employer and the employee. Two

TABLE XVIII

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE AFFECT OF QUALITY CIRCLES ON THE EMPLOYEES' MOTIVATION

Affect of Quality Circles on Employees' Motivation	Responses Employers' N	Employers' %	Employees' N	Employees' %
More Motivated	10	71	29	54
No Improvement Seen	4	29	23	43
Other	--	--	2	4

N=68

TABLE XIX

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE AFFECT OF QUALITY CIRCLES ON THE EMPLOYEES' DEVELOPMENT

Affect of Quality Circles on the Employees' Development	Responses Employers' N	Employers' %	Employees' N	Employees' %
Yes	11	76	29	54
No	3	21	23	43
Other	--	--	2	4

N=68

TABLE XX

COMPARISON OF THE EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE AFFECT OF QUALITY CIRCLES ON THE RELATIONSHIPS BETWEEN EMPLOYER AND EMPLOYEE

Affect	Responses			
	Employers'		Employees'	
	N	%	N	%
More Cooperation and Harmonious	9	64	32	60
No Affect on the Relationship	5	36	18	33
Other	-	--	4	7

N=68

employees responded that it seemed to make somewhat of a difference, but not consistently.

Seventy-one percent of the employers reported improved communications since the implementation of Quality Circles. Sixty-seven percent of the employees reported that communications were improved. About the same percentage of employers (29%), and employees (30%), had not observed an improvement in communications. One employee seemed to feel that communications were somewhat improved, but that there was still room for improvement. A comparison of employers' or employees' responses on the affect of Quality Circles on communications is depicted in Table XXI.

Employers and employees agreed with each other on the aspects of Quality Circles they liked the best. Those aspects were as follows:

1. Problem identification
2. An avenue by which employees can participate
3. The solving of problems
4. Employee recognition (preparing and giving presentations)
5. Employees' involvement in decision-making
6. Opportunity to communicate and share ideas with co-workers and management personnel
7. Creativity is stimulated through utilization of problem-solving and brain-storming techniques
8. Involves teamwork and group awareness of how the department functions

Employers and employees agreed on the aspects they did not like about Quality Circles. Those aspects were as follows:

1. Lack of support from non-circle members

TABLE XXI

COMPARISON OF EMPLOYERS' AND EMPLOYEES' RESPONSES ON THE AFFECT OF QUALITY CIRCLES ON COMMUNICATIONS

Affect	Responses			
	Employers'		Employees'	
	N	%	N	%
Improved Communications	10	71	36	67
No Affect on Communications	4	29	16	50
Other	--	--	2	4

N=68

2. Dissention among circle members carried over into the department.

3. Quality Circle meetings were used for gripe sessions and individuals became argumentative

4. Long process, moves too slowly

5. The amount of time required for the Quality Circle process

6. Quality Circles took time away from the work

7. No training program

Employers and employees only agreed on one aspect, they wished to change, that aspect dealt with training. Employees felt that the training should be completed in one session while employers thought this might be done by utilizing a film. The employees seemed to state numerous aspects of Quality Circles that should be changed. Employees also identified a minimal number of aspects they wished to change of the Quality Circle function. Employers and employees alike volunteered a wide variety of comments. In comparing the employers comments to that of the employees, there were no two alike. Employers and employees from facilities who had utilized Quality Circles in the past agreed that the Quality Circles were abandoned for the following reasons:

1. A change in management personnel

2. Lack of input by department personnel; lack of interest; poor response

3. Time involvement; lack of time; no time

4. Loss of facilitator or leader; required time for training.

Employees volunteered other ideas such as: (a) increased work load in the department, (b) did not know, management quit having meetings, (c) nothing was accomplished, (d) problems taken care of in departmental meetings, and (e) ran out of problems.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The content of Chapter V is divided into four sections. The first section will serve to summarize the study and is followed by the conclusion of the study. The final sections present recommendations for further study and practice.

Summary

The purpose of this study was to survey management personnel and employees of Medical Records Services who were utilizing the Quality Circle concept or those departments who had utilized the concept in the past.

This study sought to answer the following questions:

1. To what extent are Quality Circles being utilized in Medical Records Services throughout the United States?

2. How is the Quality Circle concept organized within the Medical Record Services?

3. How well has the Quality Circle concept functioned in Medical Records Services?

4. Do employers and employees perceive positive benefits from the use of Quality Circles?

A comprehensive review of literature was conducted by the researcher. The review of literature revealed that the use of Quality Circles

in the Health Care industry began in 1980. Quality Circles had been identified as a tool which benefits the facility, managers, and employees who provide health care. Quality Circles provide an avenue for the facility and managers to reduce errors, improve quality, promote job involvement, motivate employees, improve employee-employer relations, develop problem-solving techniques, promote the development of personal and leadership skills, and reduce costs. Quality Circles provide the employee an avenue in which to give input, identify problems, and develop solutions for problems. By volunteering to be a member of a Quality Circle, employees have the opportunity to get involved, to interact with management, and to develop personal as well as leadership skills.

There was a total of 68 participants who cooperated in this descriptive study. Fourteen of the participants were management personnel of Medical Record Services who were presently utilizing or who had utilized Quality Circles in the recent past. These 14 participants were employed in hospitals located throughout the United States. Fifty-four of the participants were employees of Medical Record Services and were participating or had participated in Quality Circles. These employees were also employed in hospitals located throughout the United States.

The instruments, four questionnaires, were designed to elicit the responses of both employers and employees concerning their experience with the Quality Circle function. The employers' questionnaires addressed a few demographic characteristics, specifics concerning the Medical Record Services, the integration of Quality Circles into the current departmental structure, the specifics of how the Quality Circle

concept functioned in their facility, the affects of Quality Circles on departments or employees, and elicited opinions on their experiences with Quality Circles. The employee questionnaires addressed a few demographic characteristics, the specifics of how the Quality Circle concept functioned in their facility, the affects of Quality Circles on the department and themselves; the questionnaires also elicited their opinions on the experiences they had with the Quality Circle concept. The instruments were administered on October 24, 1984.

The data were compiled and analyzed utilizing descriptive statistics. Percentages and frequency counts were the primary techniques used to present the data.

Conclusions of the Study

The conclusions that resulted from the findings are as follows:

1. Of the total number of hospitals that responded to the initial contact letter the results would indicate that the Quality Circle concept is not heavily used in Medical Record Services throughout the United States. The fact that Quality Circles were not utilized in the Health Care industry until 1980 could also explain the low percentage of usage in Medical Record Services.

2. In the facilities utilizing the Quality Circle concept, the concept does appear to be an integral part of structure. In order for the Quality Circle concept to succeed, it must be supported by all management personnel. In Medical Record Services, administrators throughout the departmental structure functioned in the capacity of facilitators and group leaders. A few nonmanagement personnel functioned in the role of group leader, but the majority participated as

group members of Quality Circles. The amount of time spent on Quality Circles varied according to the participants' role in the Quality Circle function. Employer participants reported that their facilities had one or two Quality Circles functioning in Medical Record Services. The majority of facilities had six to eight members per Quality Circle. A majority of the facilities reported that their Quality Circles met four or more times per month. The number of times the Quality Circle meets per month had a direct affect on the amount of time all participants spent on the Quality Circle function.

3. Time was the number one element that was raised by both the employer and the employee. A majority of the individuals who were participating in Quality Circles spent an average of four hours per week on the process. Both employers and employees commented on the fact that Quality Circles affected the department's work flow. Some of the employers stated that the process should be abandoned during overload situations. Time was a consideration that needs to be taken seriously by the facility and management personnel when considering the implementation of Quality Circles.

In order for the concept of Quality Circles to succeed, it must have the support of hospital administration. It seems to be extremely important for the management personnel who were involved in the Quality Circle process to actively support the concept. If the management personnel were unsupportive, hostile, and placed restrictions on the circle, the chances for success would be minimal. One of the employee participants had commented that the Quality Circle was only as good as the leaders.

The progress made during a Quality Circle meeting depended on the

group leader. Both employers and employees commented that there was a tendency for the meetings to turn into gripe sessions. One employee stated that Quality Circle members with personal problems sometimes expected the Quality Circle to solve their problems. A strong group leader would be needed to keep the circle headed in the right direction.

Problem selection was another topic that was mentioned numerous times. Brainstorming sessions seemed to produce lengthy problem lists. Determining which problem should be given priority was mentioned as a stumbling block in slowing down the Quality Circle process. Several employees mentioned the fact that insignificant problems often were given priority. Another aspect that was discussed was the fact that problems identified and worked on should be those that affect the Medical Records department. However, numerous comments were made as to the necessity of crossing over departmental lines in order to get to the root of the problem. This aspect could be very detrimental to interdepartmental relations if it was not handled in a diplomatic fashion.

One of the biggest gripes registered on the Quality Circle process was the lack of follow-up on the implemented solutions. Several employee participants felt that problems were only temporarily resolved. Follow up would appear to be a necessary element of the process in order to ensure that the best solution had been selected. If a problem was only temporarily solved, the effectiveness of the solution should be questioned.

Improved communications seemed to be one of the benefits of utilizing the Quality Circle process. Quality Circles provided employees with the opportunity to express their ideas, interact with management

personnel, and have an active voice in improving procedures and the environment of the department. The presentation aspect of the Quality Circle process gave the employee an opportunity to interact with hospital administration and management, while providing the employee with practical experience in utilizing oral and written communication skills.

Noncircle members appeared to be a somewhat destructive force on the Quality Circle process. If noncircle members were unsupportive of the Quality Circle, it could be just as detrimental to the process as if there were dissention among circle members. Dissention among group members should slow the Quality Circle process down and may even be carried over into the department. A strong group leader would be needed to assist the Quality CIrcle in working through its problems. Quality Circles on a more positive note were reported to be a very instrumental tool in the development of a cohesive, team-oriented department.

4. Employers and employees agreed that the implementation of Quality Circles had improved the quality of work and communications, employees were more conscientious and motivated, the Quality Circle concept needed the utilization of problem-solving techniques and lead to the development of new skills and abilities. As a result of utilizing Quality Circles, there was greater cooperation and a more harmonious atmosphere within Medical Record Services.

Recommendations for Further Research

The following are recommendations for further research:

1. Due to the changes in the Health Care industry in the last year, the questionnaire should inquire as to the number of hospitals who have abandoned the concept due to a change in priorities.

2. In order to determine if Quality Circles actually reduce costs, it would be necessary to replicate the study in about two years.

3. In replicating the questionnaire, the researcher should inquire if production standards were implemented before or after the implementation of Quality Circles.

4. The questionnaire should inquire if employees worked more efficiently after the implementation of Quality Circles.

5. Another aspect that should be determined is to what extent the Quality Circle participates in the setting of departmental goals.

6. A list of the skills and abilities developed since the implementation of Quality Circles should be obtained from employee participants.

Recommendations for Practice

Upon conclusion of the study, the following are recommendations for practice.

1. During the resource analysis phase, prior to the implementation of Quality Circles, management should seriously consider their commitment to Quality Circles.

2. The individuals involved in the Quality Circle concept should be limited to those that volunteer to participate; forcing individuals to participate, could be detrimental to the whole Quality Circle process.

3. Specific departmental plans are needed to provide guidelines for all those involved. A section should be included to outline what

will be discussed in the Quality Circle meetings.

4. A definite follow-up mechanism is essential to ensure that problems were solved and that solutions were effective.

5. Any facility in the process of implementing the Quality Circle concept should take into consideration the pitfalls that other facilities have reported and built into their plan and guidelines to avoid those situations.

A SELECTED BIBLIOGRAPHY

Adair, Melanic N. and Nygard, N. Kortner. "Theory Z Management: Can It Work for Nursing?" Nursing and Health Care, Vol. 3, No. 9 (November, 1982), pp. 490-493.

American Hospital Association. American Hospital Association Guide to the Health Care Field. Chicago, IL: American Hospital Association, 1981.

Baird, John. "Quality Circles May Substantially Improve Hospital Employees' Morale." Modern Health Care, Vol. II, No. 9 (September, 1981), pp. 70, 72, 74.

Brown, Barbara J. "Creativity and Innovation." Nursing Administration Quarterly, Vol. 6, No. 3 (Spring, 1982), pp. 23-46.

Bureau of Business Practice, Inc., Quality Circles. Washington, DC: Bureau of Business Practice, 1981.

Bureau of Business Practice, Inc. Productivity Improvement Bulletin. Washington, DC: Bureau of Business Practice, 1982.

Campbell, Dianne and Hatfield, Bruce P. "How Quality Circles Work: An Inside Look at Two Different Hospitals with Actual Meeting Notes." Hospital Topics, Vol. 60, No. 2 (March/April, 1982), pp. 46-48.

Cline, Nancy and Palau, Dalia. "Qualtiy Circles in the Recovery Room: How it Worked for these Staff Members." Nursing and Health Care, Vol. 3, No. 9 (November, 1982), pp. 494-496.

Geldbach, Patricia L., Klein, Walter F., and Moore, Rusti C. "Quality Control Circles Solving or Problems." AORN Journal, Vol. 34, No. 6 (December, 1981), pp. 1029-1035.

Hatfield, Bruce. "Quality Circles in Nursing." Hospital Topics, Vol. 60, No. 1 (January/February, 1982), pp. 34, 40.

Dixon , Jim. "Implementing Quality Circles." Oklahoma City, OK: Hospital Learning Centers, 1982.

Jardine, Gil. Quality Circles--Adopting a Japanese Model to the American Workplace. Lynn, MA:

Johnson, Donal E. L. "Quality Circles Put Workers in Charge of Their Productivity." Modern Health Care, Vol. 11, No. 9 (September, 1981), pp. 68, 69, 74.

Metzger, Norman. The Health Care Supervisors Handbook. Rockville, MD: Aspen Systems Corporation, 1982.

National League of Nursing. "The Quality Circle Process." Nursing and Health Care, Vol. 3, No. 9 (November, 1982), pp. 492-493.

Ross, Joel E. and Ross, William C. Japanese Quality Circles and Productivity. Reston, VA: Reston Publishing Company, Inc., 1982.

Waszak, John J. "Adapting Quality Circles to Health Care: Some Special Challenges." Hospital Progress, Vol. 63, No. 8 (August, 1982), pp. 47-48, 63.

APPENDIXES

APPENDIX A

TELEPHONE INTERVIEW

1. Inquired of the receptionist as to who was the Director of Medical Services?

2. Asked to speak to the Director.

3. Identified myself to the Director.

4. Identified that I worked for St. Francis Hospital in Tulsa, Oklahoma.

5. Explained that I was pursuing my master's degree in Occupational and Adult Education through Oklahoma State University.

6. Discussed that I was investigating the Utilization of Quality Circles in Medical Record Services.

7. Inquired if they were presently utilizing or had previously utilized the concept of Quality Circles in their department (If they responded no, I did not ask questions #8, or #9 but went on to question #10)?

8. Those responding yes were asked if they would be willing to participate in the study.

9. All hospitals were asked if they were aware of any other Medical Record Departments that were presently utilizing or had previously utilized the Quality Circle concept?

10. Each individual was thanked for his/her time.

APPENDIX B

EXPLANATION OF HOSPITAL LISTINGS

Hospital, Address, Telephone, Administrator, Approval and Facility Codes	Classification Codes: Control	Service	Stay	Inpatient Data: Beds	Admissions	Census	Occupancy (percent)	Newborn Data: Bassinets	Births	Expense (thousands of dollars): Total	Payroll	Personnel
ANYTOWN—Universal County												
*COMMUNITY HOSPITAL, First St and Main Ave., Zip 62836, tel 204/391-2345, John Doe, adm A-1-2-3-6-9-10 F-1-2-3-4-5-6-8-9-10-11-12-13-14-15-16-17-18-19-23-24-27-28-30-31-34	23	10	5	455	18982	595	90.8	45	2114	14135	9227	1782

- Indicates membership in the American Hospital Association
- Indicates AHA membership and JCAH accreditation
- Indicates JCAH accreditation — see note on Page A2
- Indicates membership in the American Osteopathic Hospital Association (AOHA)
- Indicates accreditation by American Osteopathic Association (AOA)
- Indicates AOHA membership and AOA accreditation. Control codes 61, 83, 84, 71, 72, and 73 indicates hospitals listed by the AOHA but not registered by AHA. For definitions and explanation of other codes see page A2

APPROVAL CODES

Reported by the approving bodies specified, as of the dates noted

1—Accreditation under one of the programs of the Joint Commission on Accreditation of Hospitals; requests for more specific information should be directed to the JCAH (Feb. 1, 1981).

2—Cancer program approved by American College of Surgeons (Feb. 1, 1981).

3—Residency approved by the American Council on Graduate Medical Education (Feb. 1, 1981). As of June 30, 1975, internship (formerly code 4) was included under residency, code 3.

5—Medical school affiliation, reported to the American Medical Association (Feb. 1, 1981).

6—Hospital-controlled professional nursing school, reported by National League for Nursing (Feb. 1981).

8—Member of Council of Teaching Hospitals of the Association of American Medical Colleges (Feb. 1981).

9—Hospital contracting or participating in Blue Cross Plan, reported by Blue Cross Association (Feb. 1981).

10—Certified for participation in the Health Insurance for the Aged (Medicare) Program by the Department of Health and Human Services (Feb. 1981).

11—Accreditation by American Osteopathic Association (Feb. 1981).

12—Internship approved by American Osteopathic Association (Feb. 1, 1981).

13—Residency approved by American Osteopathic Association (Feb. 1, 1981).

Nonreporting indicates that the 1980 annual survey questionnaire for the hospital had not been received by March 27, 1981, the cutoff date for statistical processing.

Newly Registered indicates that the hospital was registered after the mailing of the 1980 Annual Survey.

Data Not Available indicates that the hospital had returned a questionnaire but its statistics were combined with nonhospital data, or were otherwise unusable.

FACILITY CODES

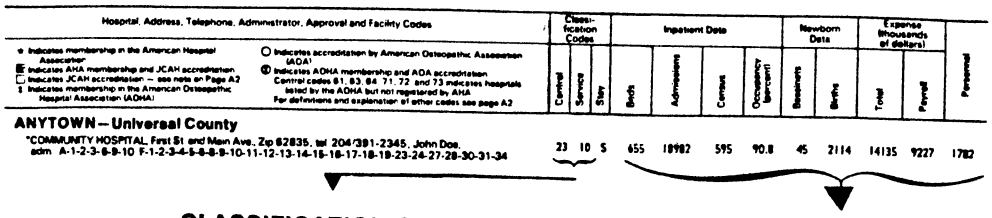
Actually available within, and reported by, the institution; for definitions, see page A4

(Numerical Order)

1—Postoperative recovery room
2—Intensive care unit (cardiac care only)
3—Intensive care unit (mixed or other)
4—Open-heart surgery facilities
5—Pharmacy with FT registered pharmacist
6—Pharmacy with PT registered pharmacist
7—X-ray radiation therapy
8—Megavoltage radiation therapy
9—Radioactive implants
10—Diagnostic radioisotope facility
11—Therapeutic radioisotope facility
12—Histopathology laboratory
13—Organ bank
14—Blood bank
15—Electroencephalography
16—Respiratory therapy services
17—Premature nursery
18—Self-care unit
19—Skilled nursing or other long-term care unit
20—Hemodialysis (inpatient)
21—Hemodialysis (outpatient)
22—Burn care unit
23—Physical therapy services
24—Occupational therapy services
25—Rehabilitation inpatient unit
26—Rehabilitation outpatient services
27—Psychiatric inpatient unit
28—Psychiatric outpatient services
29—Psychiatric partial hospitalization program
30—Psychiatric emergency services
31—Psychiatric foster and/or home care program
32—Psychiatric consultation and education services
33—Clinical psychology services
34—Organized outpatient department
35—Emergency department
36—Social work services
37—Family-planning service
38—Genetic counseling service
39—Abortion service (inpatient)
40—Abortion service (outpatient)
41—Home care program
42—Dental services
43—Podiatric services
44—Speech pathology services
45—Hospital auxiliary
46—Volunteer services department
47—Patient representative services
48—Alcoholism/chemical dependency inpatient unit
49—Alcoholism/chemical dependency outpatient services
50—TB and other respiratory diseases unit
51—Neonatal intensive care unit
52—Pediatric inpatient unit
53—CT scanner

(Alphabetical Order)

Abortion service (inpatient)—**39**
Abortion service (outpatient)—**40**
Alcoholism/chemical dependency inpatient unit—**48**
Alcoholism/chemical dependency outpatient services—**49**
Blood bank—**14**
Burn care unit—**22**
Clinical psychology services—**33**
CT scanner—**53**
Dental services—**42**
Diagnostic radioisotope facility—**10**
Electroencephalography—**15**
Emergency department—**35**
Family-planning service—**37**
Genetic counseling service—**38**
Hemodialysis (inpatient)—**20**
Hemodialysis (outpatient)—**21**
Histopathology laboratory—**12**
Home care program—**41**
Hospital auxiliary—**45**
Intensive care unit (cardiac care only)—**2**
Intensive care unit (mixed or other)—**3**
Megavoltage radiation therapy—**8**
Neonatal intensive care unit—**51**
Occupational therapy services—**24**
Open-heart surgery facilities—**4**
Organ bank—**13**
Organized outpatient department—**34**
Patient representative services—**47**
Pediatric inpatient unit—**52**
Pharmacy with FT registered pharmacist—**5**
Pharmacy with PT registered pharmacist—**6**
Physical therapy services—**23**
Podiatric services—**43**
Postoperative recovery room—**1**
Premature nursery—**17**
Psychiatric consultation and education services—**32**
Psychiatric emergency services—**30**
Psychiatric foster and/or home care program—**31**
Psychiatric inpatient unit—**27**
Psychiatric outpatient services—**28**
Psychiatric partial hospitalization program—**29**
Radioactive implants—**9**
Rehabilitation inpatient unit—**25**
Rehabilitation outpatient services—**26**
Respiratory therapy services—**16**
Self-care unit—**18**
Skilled nursing or other long-term care unit—**19**
Social work services—**36**
Speech pathology services—**44**
TB and other respiratory diseases unit—**50**
Therapeutic radioisotope facility—**11**
Volunteer services department—**46**
X-ray radiation therapy—**7**



Hospital, Address, Telephone, Administrator, Approval and Facility Codes	Classification Codes: Control	Classification Codes: Service	Classification Codes: Stay	Inpatient Data: Beds	Inpatient Data: Admissions	Inpatient Data: Census	Inpatient Data: Occupancy (percent)	Newborn Data: Bassinets	Newborn Data: Births	Expense (thousands of dollars): Total	Expense (thousands of dollars): Payroll	Personnel
ANYTOWN—Universal County												
*COMMUNITY HOSPITAL, First St and Main Ave., Zip 62835, tel 204/381-2345, John Doe, adm A-1-2-3-8-9-10 F-1-2-3-4-5-8-8-9-10-11-12-13-14-15-16-17-18-19-23-24-27-28-30-31-34	23	10	S	655	18982	595	90.8	45	2114	14135	9227	1782

- ● Indicates membership in the American Hospital Association
- ■ Indicates AHA membership and JCAH accreditation
- □ Indicates JCAH accreditation — see note on Page A2
- ‡ Indicates membership in the American Osteopathic Hospital Association (AOHA)
- ○ Indicates accreditation by American Osteopathic Association (AOA)
- ⊕ Indicates AOHA membership and AOA accreditation. Control codes 61, 63, 64, 71, 72, and 73 indicates hospitals listed by the AOHA but not registered by AHA. For definitions and explanation of other codes see page A2

CLASSIFICATION CODES

CONTROL

Government, nonfederal
12—State
13—County
14—City
15—City-county
16—Hospital district or authority

Nongovernment not-for-profit
21—Church operated
23—Other

Investor-owned (for-profit)
31—Individual
32—Partnership
33—Corporation

Government, federal
41—Air Force
42—Army
43—Navy
44—Public Health Service other than 47
45—Veterans Administration
46—Federal other than 41-45, 47-48
47—Public Health Service Indian Service
48—Department of Justice

Osteopathic
61—Church operated
63—Other not-for-profit
64—Other
71—Individual for-profit
72—Partnership for-profit
73—Corporation for-profit

SERVICE

10—General medical and surgical
11—Hospital unit of an institution (prison hospital, college infirmary, etc.)
12—Hospital unit within an institution for the mentally retarded
22—Psychiatric
33—Tuberculosis and other respiratory diseases
44—Obstetrics and gynecology
45—Eye, ear, nose, and throat
46—Rehabilitation
47—Orthopedic
48—Chronic disease
49—Other specialty†
50—Children's general
51—Children's hospital unit of an institution
52—Children's psychiatric
53—Children's tuberculosis and other respiratory diseases
55—Children's eye, ear, nose, and throat
56—Children's rehabilitation
57—Children's orthopedic
58—Children's chronic disease
59—Children's other specialty†
62—Institution for mental retardation
82—Alcoholism and other chemical dependency

†When a hospital restricts its service to a specialty not defined by a specific code, it is coded 49 (59 if a children's hospital) and the specialty is indicated in parentheses following the name of the hospital.

STAY

S—Short-term—average length of stay for all patients is less than 30 days or over 50 percent of all patients are admitted to units where average length of stay is less than 30 days.

L—Long-term—average length of stay for all patients is 30 days or more or over 50 percent of all patients are admitted to units where average length of stay is 30 days or more.

HEADINGS

Definitions are based on the American Hospital Association's *Uniform Hospital Definitions*. Where a 12-month period is specified, hospitals were requested to report on the Annual Survey of Hospitals for the 12 months ending Sept. 30, 1980. Hospitals reporting for less than a 12-month period are so designated.

INPATIENT DATA: Beds—Number of beds, cribs, and pediatric bassinets regularly maintained (set up and staffed for use) for inpatients as of the close of the reporting period; does not include bassinets for newborn infants. **Admissions**—Number of patients accepted for inpatient service during a 12-month period; does not include newborn. **Census**—Average number of inpatients receiving care each day during the 12-month reporting period; does not include newborn. **Occupancy**—Ratio of average daily census to the average number of beds (statistical beds) maintained during the 12-month reporting period. (Note that the number of these "statistical beds" may differ from the bed count at the close of the reporting period.)

NEWBORN DATA: Bassinets—Number of bassinets normally available for newborn infants. **Births**—Number of infants born in the hospital and accepted for service in a newborn infant bassinet during a 12-month period; excludes stillbirths.

EXPENSES: Expense for a 12-month period; both total expense and payroll components are shown. Payroll expenses include all salaries and wages except those paid to medical and dental interns and residents, and other trainees (e.g., medical technology trainees, x-ray therapy trainees, administrative residents, etc.).

PERSONNEL: Includes persons on payroll on Sept. 30, 1980; includes full-time equivalents of part-time personnel but excludes medical and dental interns and residents and other trainees. Full-time equivalents were calculated on the basis that two part-time persons equal one full-time person.

Source: American Hospital Association. "American Hospital Association Guide to the Health Care Field." 1981.

APPENDIX C

INITIAL CONTACT LETTER

Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145
Home - (918) 627-5119 Work - (918) 494-6201

October 24, 1983

Dear Medical Record Administrator,

As a fellow Medical Record Administrator, I am writing this letter in an effort to seek your assistance and support. My name is Nancy McKown. I am presently employed as the Assistant Director of Medical Record Services at Saint Francis Hospital in Tulsa, Oklahoma.

In my spare time, I am a student at Oklahoma State University. I am pursuing a Masters in Adult and Occupational Education. The final requirement in this program is to complete a thesis.

I have choosen to study the Utilization of Quality Circles in Medical Record Services. One of the initial steps in my study is to identify those hospitals who are presently utilizing or have utilized Quality Circles in the past. After reviewing the literature on Quality Circles, I have identified three hospitals that are presently utilizing Quality Circles.

I need to identify additional hospitals that are presently utilizing Quality Circles or have in the past. You can assist me by taking a few minutes, completing the enclosed postcard, and dropping it in the mail.

I appreciate the time you have spent and hope that someday I have the opportunity to assist you.

Sincerely,

Nancy S. McKown

APPENDIX D

PREPRINTED RETURN POSTCARD

Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145

451

1. Is your Medical Records Department presently utilizing the concept of Quality Circles?

_____ Yes _✓_ No

2. If your department is not utilizing Quality Circles presently, have they been utilized in the past?

_____ Yes _✓_ No

3. If your Medical Records Department is presently utilizing Quality Circles, or has utilized them in the past; would you and your employees be willing to participate in my study?

_____ Yes _____ No

If you indicated yes, please include your name and telephone number.

4. Are you aware of any other Medical Records Departments in your community, state or in the United States that are presently utilizing Quality Circles or have utilized Quality Circles in the past? If your would anwser yes, please include the name(s) of the institution(s). NO

APPENDIX E

EMPLOYER QUESTIONNAIRE--PRESENT UTILIZATION OF QUALITY CIRCLES

The Utilization of Quality Circles In Medical Record Services

Directions:

1. In answering the multiple choice questions, circle the appropriate response.
2. Please feel free to add comments regarding any of the multiple choice questions.
3. In responding to short answer questions, please feel free to use the back of the questionnaire.

1. What is your position title?

2. What age category would you fall?

A. 18-23 years	D. 36-41 years	G. 54-59 years	J. 72 years or older
B. 24-29 years	E. 42-47 years	H. 60-65 years	
C. 30-35 years	F. 48-53 years	I. 66-71 years	

3. How many full time employees do you have in Medical Record Services?

A. 1- 5	D. 16-20	G. 31-35	J. 46-50
B. 6-10	E. 21-25	H. 36-40	H. Over 50
C. 11-15	F. 26-30	I. 41-45	

4. How many part time employees do you have in Medical Record Services?

A. 1	D. 4	G. Over 6
B. 2	E. 5	
C. 3	F. 6	

5. Would you briefly describe the organizational structure of your department?

6. How does the Quality Circles concept fit into your present organizational structure?

7. How many Quality Circles do you have functioning in Medical Record Services?

A. 1	D. 4
B. 2	E. 5
C. 3	F. More than 5

8. What isthe number of members per Quality Circle?

A. 3-5	C. 9-11	E. 15 or more
B. 6-8	D. 12-14	

9. How often do the Quality Circles meet?
   A. 1 time a month
   B. 2 times a month
   C. 3 times a month
   D. 4 or more times a month
   E. Other, please describe. _____

10. Who functions in the role of facilitator?

11. Who functions in the group leader role?

12. On an average, how much of your time is devoted to Quality Circles?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

13. On an average, how much time does the facilitator spend on the Quality Circle function?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

14. On an average, how much time does the group leader spend on the Quality Circle function?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

15. On an average, how much time does the group member (employee) spend on the Quality Circle function?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

16. Prior to implementing Quality Circles in your department, did your department develop a departmental plan?
   A. Yes
   B. No

17. If a departmental plan was developed, have you had to make changes in the original plan?
   A. Yes, briefly describe the changes
   B. No

18. Has the implementation of Quality Circles given you a better understanding of your own area of responsibility?
   A. Yes
   B. No

19. Has the implementation of Quality Circles improved your ability to communicate with your work force?
   A. Yes
   B. NO

20. Has the implementation of Quality Circles improved the quality of work produced in your department?
A. Yes B. No

21. Has the implementation of Quality Circles increased productivity in your department?
A. Yes B. No

22. Have you seen a reduction in departmental expenses since the implementation of Quality Circles?
A. Yes B. No

23. Have you seen a reduction in absenteeism since the implementation of Quality Circles?
A. Yes B. No

24. Have you seen a reduction in employee turnover since the implementation of Quality Circles?
A. Yes B. No

25. Since the implementation of Quality Circles, have your employees participating in Quality Circles developed problem solving capabilities?
A. Yes B. No

26. Have these problem solving abilities carried over into their everyday work routine?
A. Yes B. No

27. Since the implementation of Quality Circles, do your employees seem more conscientious with regard to their jobs?
A. Yes B. No

28. Since the implementation of Quality Circles, do your employees seem more motivated?
A. Yes B. No

29. Since the implementation of Quality Circles, have you observed personal and leadership development among the employees involved with Quality Circles?
A. Yes B. No

30. Since the implementation of Quality Circles, are the relationships between employer and employee more cooperative and harmonious?
A. Yes B. No

31. Since the implementation of Quality Circles, have you seen an improvement in communications?
A. Yes B. No

32. Have you documented a cost savings since the implementation of Quality Circles?
A. Yes, How much? B. No

33. What aspects of Quality Circles do you like the best?

34. What aspects of Quality Circles do you like the least?

35. Do you wish to make any additional comments?

36. Is there any aspect of the Quality Circle concept that you wish you could change?

Please return by: October 24, 1984

Return to: Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145

Your time and participation is greatly appreciated.

APPENDIX F

EMPLOYER QUESTIONNAIRE--PAST UTILIZATION

The Utilization of Quality Circles In Medical Record Services

Directions:

1. In answering the multiple choice questions, circle the appropriate response.
2. Please feel free to add comments regarding any of the multiple choice questions.
3. In responding to short answer questions, please feel free to use the back of the questionnaire.

1. What is your position title?

2. What age category would you fall?

A. 18-23 years	D. 36-41 years	G. 54-59 years	J. 72 years or over
B. 24-29 years	E. 42-47 years	H. 60-65 years	
C. 30-35 years	F. 48-53 years	I. 66-71 years	

3. How many full time employees do you have in Medical Record Services?

A. 1- 5	D. 16-20	G. 31-35	J. 46-50
B. 6-10	E. 21-25	H. 36-40	
C. 11-15	F. 26-30	I. 41-45	

4. How many part time employees do you have in Medical Record Services?

A. 1	D. 4	G. Over 6
B. 2	E. 5	
C. 3	F. 6	

5. Would you briefly describe the organizational structure of your department?

6. How did the Quality Circle concept fit into your present organizational structure?

7. How many Quality Circles did you have functioning in Medical Record Services?

A. 1	D. 4
B. 2	E. 5
C. 3	F. More than 5

8. What was the number of members per Quality Circle?

A. 3-5	C. 9-11	E. 15 or more
B. 6-8	D. 12-14	

9. How often did the Quality Circles meet?
   A. 1 time a month
   B. 2 times a month
   C. 3 times a month
   D. 4 or more times a month
   E. Other, please describe. _____

10. Who functioned in the role of facilitator?

11. Who functioned in the group leader role?

12. On an average, how much of your time was devoted to Quality Circles?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

13. On an average, how much time did the facilitator spend on the Quality Circle function?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

14. On an average, how much time did the group leader spend on the Quality Circle function?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

15. On an average, how much time did the group member (employee) spend on the Quality Circle function?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

16. Prior to implementing Quality Circles in your department, did your department develop a departmental plan?
   A. Yes
   B. No

17. If a departmental plan was developed, did you have to make changes in the original plan?
   A. Yes, briefly describe the changes
   B. No

18. Did the implementation of Quality Circles give you a better understanding of your own area of responsibility?
   A. Yes
   B. no

19. Did the implementation of Quality Circles improve your ability to communicate with your work force?
   A. Yes
   B. No

20. Did the implementation of Quality Circles improve the quality of work produced in your department?
    A. Yes B. No

21. Did the implementation of Quality Circles increase productivity in your department?
    A. Yes B. No

22. Did you see a reduction in departmental expenses after the implementation of Quality Circles?
    A. Yes, please list major areas. B. No

23. Did you see a reduction in absenteeism with the implementation of Quality Circles?
    A. Yes B. No

24. Did you see a reduction in employee turnover with the implementation of Quality Circles?
    A. Yes B. No

25. After the implementation of Quality Circles, did your employees participating in Quality Circles develop problem solving capabilities?
    A. Yes B. No

26. Did these problem solving abilities carry over into their everyday work routine?
    A. Yes B. No

27. After the implementation of Quality Circles, did your employees seem more conscientious with regard to their jobs?
    A. Yes B. No

28. After the implementation of Quality Circles, did your employees seem more motivated?
    A. Yes B. No

29. After the implementation of Quality Circles, did you observe personal and leadership development among the employees involved with Quality Circles?
    A. Yes B. No

30. After the implementation of Quality Circles, did the relationships between employer and employee become more cooperative and harmonious?
    A. Yes B. No

31. After the implementation of Quality Circles, did you see an improvement in communications?
    A. Yes B. No

32. Did you document a cost savings after the implementation of Quality Circles?
    A. Yes, if yes, how much? B. No

33. What aspects of Quality Circles did you like the best?

34. What aspects of Quality Circles did you like the least?

35. Do you wish to make any additional comments?

36. Was there any aspect of the Quality Circle concept that you wished you could change?

37. What were the reason(s) for discontinuing the Quality Circle concept in your department?

Please return by: October 24, 1984

Return to: Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145

Your time and participation is greatly appreciated.

APPENDIX G

EMPLOYEE QUESTIONNAIRE--

PRESENT UTILIZATION

The Utilization of Quality Circles In Medical Record Services

Directions:

1. In answering the multiple choice questions, circle the appropriate response.
2. Please feel free to add comments regarding any of the multiple choice questions.
3. In answering the short answer questions, please feel free to use the back of the questionnaire.

1. What is your position title?

2. Into what age category would you fall?
   A. 18-23 years
   B. 24-29 years
   C. 30-35 years
   D. 36-41 years
   E. 42-47 years
   F. 48-53 years
   G. 54-59 years
   H. 60-65 years
   I. 66-71 years
   J. 72 years or over

3. What is your role in the Quality Circle concept?
   A. Facilitator
   B. Group leader
   C. Group member

4. On an average, how much time do you devote to the Quality Circle concept?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

5. How often does your Quality Circle meet?
   A. 1 time a month
   B. 2 times a month
   C. 3 times a month
   D. 4 times a month
   E. Other, please describe. _____

6. Since the implementation of Quality Circles have you developed skills and abilities you didn't know you had?
   A. Yes B. No

7. Since the implementation of Quality Circles has your ability to communicate improved?
   A. Yes B. No

8. Since the implementation of Quality Circles, has your quality of work improved?
   A. Yes B. No

9. Since the implementation of Quality Circles has your quantity of work increased?
   A. Yes B. No

10. Since the implementation of Quality Circles has your attendance improved?
    A. Yes B. No

11. Since the implementation of Quality Circles are you more satisfied with your job?
    A. Yes B. No

12. Do you utilize the problem solving techniques you learned due to Quality Circles outside the Quality Circle meetings?
    A. Yes B. No

13. Since the implementation of Quality Circles are you more conscientious with your job?
    A. Yes B. No

14. Since the implementation of Quality Circles do you feel more motivated when you are at work?
    A. Yes B. No

15. During a Quality Circle meeting, do you feel free to express your opinion?
    A. Yes B. No

16. During a Quality Circle meeting, do you feel your opinion is respected by the other group members?
    A. Yes B. No

17. Do you feel that your participation in a Quality Circle gives you a real voice in deciding how the work will be done?
    A. Yes B. No

18. Do you feel that your participation in Quality Circles improved your work environment?
    A. Yes B. No

19. Has your participation in Quality Circles made you feel that your skills and knowledge are valuable to Medical Records?
    A. Yes B. No

20. Do you feel that your participation in Quality Circles aids your department in achieving it's goals?
    A. Yes B. No

21. Do you have a greater sense of belonging to Medical Record Services and your hospital since participating in Quality Circles?
    A. Yes B. No

22. Since the implementation of Quality Circles have you seen an improvement in communications throughout your department?
    A. Yes B. No

23. Since the implementation of Quality Circles do you feel that the relationship between employer and employee is more cooperative and harmonious?
A. Yes B. No

24. What aspects of Quality Circles do you like the best?

25. What aspects of Quality Circles do you like the least?

26. Do you wish to make any additional comments?

27. Is there any aspect of the Quality Circle concept that you wish you could change?

Please return by: October 24, 1984

Return to: Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145

Your time and participation is greatly appreciated.

APPENDIX H

EMPLOYEE QUESTIONNAIRE--

PAST UTILIZATION

The Utilization of Quality Circles
In Medical Record Services

Directions:
1. In answering the multiple choice questions, circle the appropriate response.

2. Please feel free to add comments regarding any of the multiple choice questions.

3. In aswering the short answer questions, please feel free to use the back of the questionnaire.

1. What is your position title?

2. Into what age category would you fall?
   A. 18-23 years
   B. 24-29 years
   C. 30-35 years
   D. 36-41 years
   E. 42-47 years
   F. 48-53 years
   G. 54-59 years
   H. 60-65 years
   I. 66-71 years
   J. 72 years of over

3. What was your role in the Quality Circle concept?
   A. Facilitator
   B. Group leader
   C. Group member

4. On an average, how much time did you devote to the Quality Circle concept?
   A. 1 hour per month
   B. 2 hours per month
   C. 3 hours per month
   D. 4 hours per month
   E. 5 or more hours per month

5. How often did your Quality Circle meet?
   A. 1 time a month
   B. 2 times a month
   C. 3 times a month
   D. 4 times a month
   E. Other, please describe. _____

6. After the implementation of Quality Circles did you develop skills and abilities you didn't know you had?
   A. Yes
   B. No

7. After the implementation of Quality Circles did your ability to communicate improve?
   A. Yes
   B. No

8. After the implementation of Quality Circles did your quality of work improve?
   A. Yes
   B. No

9. After the implementation of Quality Circles did your quantity of work imcrease?
   A. Yes
   B. No

10. After the implementation of Quality Circles did your attendance improve?
    A. Yes B. No

11. After the implementation of Quality Circles were you more satisfied with your job?
    A. Yes B. No

12. Did you utilize the problem solving techniques you learned due to Quality Circles outside the Quality Circle meetings?
    A. Yes B. No

13. After the implementation of Quality Circles are you more conscientious with your job?
    A. Yes B. No

14. After the implementation of Quality Circles did you feel more motivated when you were at work?
    A. Yes B. No

15. During a Quality Circle meeting, did you feel free to express your opinion?
    A. Yes B. No

16. During a Quality Circle meeting, did you feel your opinion was respected by the other group members?
    A. Yes B. No

17. Did you feel that your participation in a Quality Circle gave you a real voice in deciding how the work would be done?
    A. Yes B. No

18. Did you feel that your participation in Quality Circles improved your work environment?
    A. Yes B. No

19. Did your participation in Quality Circles make you feel that your skills and knowledge were valuable to Medical Records?
    A. Yes B. No

20. Did you feel that your participation in Quality Circles aided your department in achieving it's goals?
    A. Yes B. No

21. Did you have a greater sense of belonging to Medical Record Services and your hospital after participating in Quality Circles?
    A. Yes B. No

22. After the implementation of Quality Circles did you see an improvement in communications throughout your department?
    A. Yes B. No

23. After the implementation of Quality Circles do you feel that the relationship between employer and employee is more cooperative and harmonious?
A. Yes B. No

24. What aspects of Quality Circles did you like the best?

25. What aspects of Quality Circles did you like the least?

26. Do you wish to make any additional comments?

27. Was there any aspect of the Quality Circle concept that you wished you could change?

28. What were the reason(s) for discontinuing the Quality Circle concept in your department?

Please return by: October 24, 1984

Return to: Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145

Your time and participation is greatly appreciated.

APPENDIX I

SECOND CONTACT LETTER

Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145
Telephone: 918-494-6201 (work)
918-627-5119 (home)

October 2, 1984

Dear Medical Record Administrator,

Approximately one year ago, I sent an inquiry letter to you concerning your department's use of Quality Circles. At that time, you indicated that your department was presently utilizing the concept of Quality Circles; and that you and your department would be willing to participate in my study.

Over the last year I have spent most of my "spare" time in assisting my facility with their preparation for DRGs and in training new personnel. Needless to say, this has given me very little time to pursue my study on the use of Quality Circles in Medical Records. I am now faced with a deadline and must complete my thesis by December of this year.

After meeting with my advisor, we have agreed on what my study will entail. Your involvement in the study will be the completion of a questionnaire. In addition, I will need four of your employees who are presently involved in a Quality Circle to complete a questionnaire. The questionnaires are composed of a series of multiple choice and short answer questions. The questionnaires will be sent to you and it will be necessary for you to distribute them to the employees. A self-addressed stamped return envelope and a letter of explanation will be attached to the employees questionnaires. Questionnaires will be mailed in the next week, and need to be returned as soon as possible.

If your situation has changed, and you find that your department will be unable to participate in my study, please feel free to contact me by telephone as soon as possible.

Your time and involvement is greatly appreciated.

Sincerely yours,

Nancy S. McKown, R.R.A.

APPENDIX J

CONTACT LETTER FOR THOSE HOSPITALS

THAT MIGHT PARTICIPATE

Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145
Work: (918) 494-6201
Home: (918) 627-5119

October 6, 1984

Dear

Approximately one year ago, I sent an inquiry letter to you concerning your department's use of Quality Circles. At that time, you indicated that your department was presently utilizing Quality Circles, but you were unable to make a commitment to participate in my study at that time.

During the last year, I have been unable to continue my study due to assisting my facility in it's preparation for DRG's and in training new personnel. However, the deadline for the completion of my thesis is fast approaching. I am to have it completed by December of 1984.

After meeting with my advisor, we have agreed on what my study will entail. Your involvement in the study would be the completion of a questionnaire. In addition, I will need four of your employees who are presently involved in a Quality Circle to complete a questionnaire. Both questionnaires are composed of multiple choice and short answer questions. The questionnaires would be mailed to you and it will be necessary for you to distribute the questionnaires to your employees. The employees' questionnaires will be accompanied with a letter of explanation and a self-addressed stamped return envelope. I would like to send the questionnaires within the next week.

If you do not wish to participate in my study, please contact me as soon as possible.

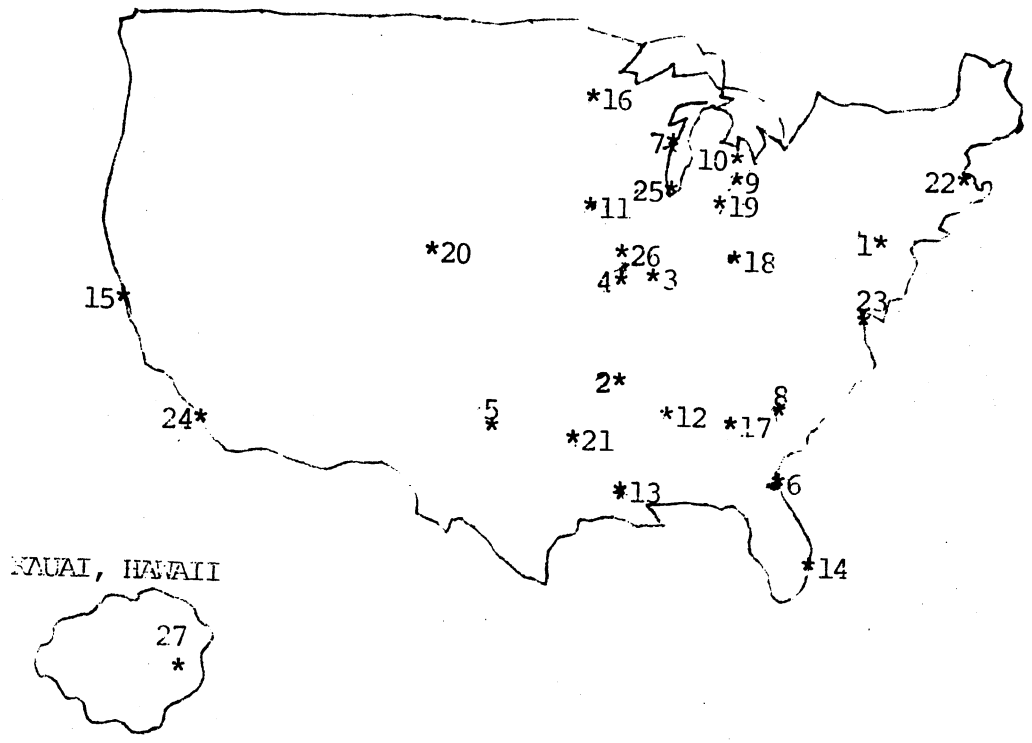
Your time and involvement is greatly appreciated.

Sincerely,

Nancy S. McKown, R.R.A.

APPENDIX K

GEOGRAPHICAL LOCATIONS OF FACILITIES WHO WERE SENT QUESTIONNAIRES



Legend

1	Allenton, Pennsylvania
2	Memphis, Tennessee
3	Bloomington, Indiana
4	St.Louis, Misouri
5	Abilene, Texas
6	Jacksonville, Florida
7	Milwaukee, Wisconsin
8	Greenwood, South Carolina
9	Detroit, Michigan
10	Pontiac, Michigan
11	Des Moines, Iowa
12	Tupelo, Mississippi
13	Baton Rouge, Louisiana
14	Ft. Lauderdale, Florida
15	San Francisco, California
16	St. Cloud, Minnesota
17	Atlanta, Georgia
18	Dayton, Ohio
19	Ft. Wayne, Indiana
20	Denver, Colorado
21	Texarkana, Texas
22	Fall River, Massachusetts
23	Washington, District of Columbia
24	VanNuys, California
25	Waukegan, Illinois
26	Granite City, Illinois
27	Ljhue, Honolulu

APPENDIX L

COVER LETTER FOR QUESTIONNAIRE--

MEDICAL RECORD ADMINISTRATOR

Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145

October 16, 1984

Dear Medical Record Administrator,

Enclosed you will find five questionnaires that ask specific questions regarding various aspects of Quality Circles. One questionnaire is labeled "Employer" and the other four are labeled "Employee". You will need to complete the questionnaire labeled "Employer". Please distribute the four questionnaires labeled "Employee" to four employees in your department that are presently involved in a Quality Circle. If your department is not presently utilizing the Quality Circle concept, please distribute the "Employee" questionnaires to those employees that have been involved with the concept in the past.

Attached to all the questionnaires is a self addressed stamped envelope in which to return the completed questionnaire. You will notice that the questionnaire asks that you return it no later than October 24, 1984. I apologize for not allowing you and your personnel more time in which to complete the questionnaires. Unfortunately, I am faced with a very stiff deadline and must have my entire thesis in Stillwater by October 26, 1984.

In the body of the thesis I will not refer to any hospital by name. All responses to the questionnaries will be kept confidential as well. Upon completion of my thesis, I will send you a copy for you and your personnel to review.

I appreciate the time that you have given me and your willingness to participate. If I can be of assistance to you in the future, please don't hesitate to contact me.

Nancy S. McKown, R.R.A.

Sincerely,
Nancy S. McKown, R.R.A.

APPENDIX M

COVER LETTER FOR QUESTIONNAIRE--

MEDICAL RECORD PROFESSIONAL

Nancy S. McKown, R.R.A.
9415 East 49th Street
Tulsa, Oklahoma 74145

October 9, 1984

Dear Medical Record Professional,

My name is Nancy McKown. I am the Assistant Director of Medical Records at Saint Francis Hospital in Tulsa, Oklahoma. In my spare time, I am pursuing a Masters in Adult and Occupational Education from Oklahoma State University. I completed all of my course work and am presently working on my thesis. I have chosen to study the Utilization of Quality Circles in Medical Records.

Approximately one year ago I contacted your facility and your supervisor consented to participate in my study. This study seeks to gain your opinion on your experience with Quality Circles.

In order to complete my study, I need your help. Attached to this letter is a questionnaire. This questionnaire contains multiple choice and short answer questions. Your answers will be kept confidential; so please be honest. Please complete the questionnaire as soon as possible; my deadline is fast approaching. For your convience, a self addressed stamped envelope in which to return the questionnaire is attached.

Upon completion of my study, I will send a copy of the results to your supervisor. Since you have been a participant in my study, I am sure you will find this of interest.

Your time and involvement is greatly appreciated.

Sincerely yours,

Nancy S. McKown, R.R.A.

Nancy S. McKown, R.R.A.

VITA

Nancy Slemp McKown

Candidate for the Degree of

Master of Science

Thesis: THE UTILIZATION OF QUALITY CIRCLES IN MEDICAL RECORD SERVICES

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Tulsa, Oklahoma, October 20, 1954, the daughter of Asa Harvey Slemp, Jr. and Charlotte Gibson Slemp.

Education: Graduated from Central High School, Tulsa Oklahoma, 1972; received a Bachelor of Science in Medical Records Administration from the University of Tulsa in 1979; completed requirements for the Master of Science degree in Occupational and Adult Education, with an emphasis in Human Resources Development, at Oklahoma State Univeristy, Stillwater, Oklahoma in July, 1985.

Professional Experience: Medical Records Clerk, Saint John Medical Center, Tulsa, Oklahoma, 1971-1977; Utilization Review Clerk, Saint John Medical Center, Tulsa, Oklahoma, 1977-1979; Assistant Director of Medical Record Services, Saint Francis Hospital, Tulsa, Oklahoma, 1979-1985.

Professional Organizations: American Medical Record Association, Oklahoma Medical Record Association, National Management Association.