

WOMEN'S HEALTH CARE SERVICE:
A MARKET NEED ANALYSIS

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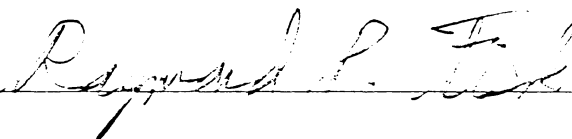
Scope and Method of Study:

The purpose of this report was to examine if women can be identified as a attractive market segment for the health care industry. Specifically this report examined if there is a need for a women's health care center in Tulsa, Oklahoma. A questionnaire was sent out to a random sample of residents in Tulsa and also to a focused group of business women. The Statistical Analysis System software package was used to statistically analyze the data.

Findings and Conclusions:

Women in Tulsa perceive a need for a health care center. Some of the services they requested were: nutrition and diet information, breast screening, health screening facility, physician referrals, osteoporosis, and educational programs/workshops. Health care topics of interest to many women were: stress management, fitness and keeping trim, women and cancer, nutrition and diet, osteoporosis, and weight control. The best time for scheduling programs on weekdays are evenings (5pm-8pm) and nights (8pm-10pm). During weekends programs could be scheduled in the mornings (8am-12pm). Direct mail/ newsletters, educational seminars/lectures were identified as good channels of providing information to women. Business women were identified as an attractive target among the female population in Tulsa. The report also provided feedback on the strength and weaknesses of the hospitals in Tulsa.

ADVISOR'S APPROVAL




WOMEN'S HEALTH CARE SERVICE

A MARKET NEED ANALYSIS

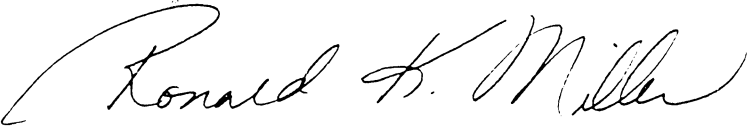
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INTRODUCTION

In the face of industrial pressures, hospitals have had to continually redefine the scope of the hospital business and its products. Traditionally, in-patient services have made a significant contribution towards hospital revenues and profits. However, there are indications that this trend will not continue into the future (Webber and Peters 1983). Hospitals, therefore, need to diversify or at least think of themselves as health care providers and not just in-patient acute care providers. The competitive and regulatory environment of the hospital industry suggests that effective marketing strategies will eventually have to be adopted and that both the institution and the consumer will benefit from a more responsive delivery system (Mistarz 1984).

Marketing strategy can be based on attracting specific market segments of the user population with desirable services. It is in this context that women can be identified as a clear market segment for hospital services. Women are an important market segment for two reasons. First, they have specific health care needs. Second, they are often the ones who make decisions about where to obtain health care services for the entire family (Hospitals 1984).

OBJECTIVE OF THE STUDY

The objective of this study is to determine if women can be identified as a market segment for specialized health care services. Specifically, this report attempts to identify whether there is a need for a women's health care center in Tulsa, Oklahoma. The study will

also attempt to find the ideal mix of services to be provided at such an outlet.

PLAN OF DEVELOPMENT

Chapter II reviews the current literature in hospital marketing. Chapter III explains the methodology, which includes the design of a questionnaire, the selection of the sample and the statistical methods used to analyze the results. Chapter IV contains a discussion of the results. Chapter V presents the implications and conclusions of the study.

LITERATURE REVIEW

It is widely believed that hospitals will move away from their traditional role and diversify into health care and other related activities. Kenneth Knieser, vice president of New York University Medical Center, explains that diversification is more than merely building health care facilities outside of the hospital walls. He says that hospitals will move into peripheral products and services in order to support the primary purpose of the organization (Mistarz 1984).

Hospitals have begun to take the view that the health of the population is a hospital responsibility. In this, motivating people to take better care of themselves and teaching them how, is as much a part of the hospital mission, as is repairing the damage when they do not (Cunningham 1979). With people believing that doctors are too busy or are too disinterested to provide such health care information, the opportunity for hospitals to step in is just right (White 1982).

HOSPITAL MARKETING PROGRAMS

Health care marketing has now been recognized as an essential function by most American hospitals (Steiber and Boscarino 1984). A recent survey (Steiber and Boscarino 1984) showed that the majority of the hospitals were market driven, but 34% of these hospitals claim that they are not responsive to market factors. Some of the obstacles to marketing were - perceptions that there is no competition, state or other agency restrictions, marketing's short history within the organization. The survey also reports some of the forms of resistance to marketing within the organization - resistance to advertising,

resistance to market research, budgetary constraints.

The total number of beds in hospitals have fallen 12% between 1972 and 1982 (Statistical Abstract of the United States 1985). The number of beds occupied have also dropped significantly over the last decade. The decreasing trend of hospital bed utilization can be explained by the dynamic behavior of market needs. The decrease in demand for in-patient care has been compensated by an increase in demand for alternate health care services like home health care services, birthing centers, fitness programs. Some of the factors that explain this market shift are (Louden 1984):

1. Consumers have increasingly become health conscious. The old adage that "prevention is better than cure" seems to have received a surge in popularity."
2. The health care insurance industry has tightened its belt, by imposing restrictions on the number of days a patient can be hospitalized.
3. Effective over-the-counter medication has eliminated the need for visits to the hospital for common ailments.
4. The rise in hospitalization costs have forced consumers to look at less expensive alternatives.

WOMEN AS A MARKET SEGMENT

Women have higher usage rates of health care services than men. The probability of seeing a physician, the number of visits per user, the probability of using hospital in-patient services and the use of prescription drugs are all higher for adult women than adult men (Wolfe and Haveman 1983). Even after downscaling for pregnancy related services, women use more health services than men. Beyond the age of 14, women have been found to visit the doctor 25% more often than men. Also they are hospitalized more frequently than men. In fact, of the

twenty most commonly performed surgeries, hysterectomies, cesarean sections and other surgeries for women, account for eleven (Deveny, Atchison and Flynn 1986). Wolfe and Haveman have identified the differential behavior of the female sex with respect to utilization of health services. In their study only 34% of the women worked 35 hours a week or greater as compared to 67% among men. This reduced the overall opportunity cost of a woman patient's time while waiting for service or while undergoing treatment. Yet women were more sensitive to time costs than men. It was also concluded that there was a significant negative relationship between the use of health care service and the price of the service. Women were more responsive to the price of the service than men. However, perceived need and not economic factors was the most important determinant of health care use. Having more education also increases the use of physician services for working women (Wilensky and Cafferata 1983).

CURRENT PRACTICE

In the past, women's health concerns have been overlooked and have been restricted to the narrow view that women's health care is only reproductive care. Sally Ryne, director of Women's Health Resource Center at Illinois Medical Center, has recognized that women's health care needs are much different than men's. Differences in psychology and physiology should be taken into account while planning weight loss, nutrition, psychological counseling and smoking cessation programs. On their part, women in the past decade have expressed the desire to become more active participants in their own health care and to assume more responsibility for their family well being (Hospitals 1985).

According to Jane White, senior editor of Medical Economics, a women's health care center needs to have a strong identity so that a woman really sees it as an alternative approach to obtaining health care services (White 1982). The center could also be an important source of revenue for the hospital. The center can bring increased referrals to members of the hospital staff, increased referrals for services needed by a woman's family members, increased use of hospital ancillary services, and increased in-patient care that results from a good primary care base. As Sally Rynne puts it: "It is obvious that women hold the purse strings in the health care management of their families Unless hospitals have their blinders on, they'll recognize that their major constituency is women" (Hospitals 1984).

Although the number of women presently using the services of feminist health care clinics constitutes only a small fraction of the American women, such clinics have grown steadily. One of the reasons cited for women using the services of such centers is that they like to be attended to by staff who take them seriously, provide them with information and make them feel they are in control of their own health care. While physicians tend to say "do this," the staff at such a clinic put forth the various alternatives and discuss the issue with their patients (White 1982).

Many hospitals across the country have researched the women's market segment and now offer a consolidated package of services for women. It is important to learn from their experience.

Women's Pavilion at Norton Hospital:

Women's Pavilion at Norton Hospital, Louisville, Kentucky, was started in January 1984, after extensive research on the issue of

women's health care services. Their research indicated that there was an opportunity in the area of Women's Health Care Services, because none of the existing health care centers in Louisville was associated with this kind of service. They maintained a good standard of services by responding to the feedback from their clients, obtained by continuous research. As a result of their efforts, Norton managed to achieve a 85% name recognition and association with women's services. Norton Hospital also managed to increase their overall market share with their marketing efforts (Profiles in Hospital Marketing 1986).

Methodist Hospital

Market research carried out by Methodist Hospital, Omaha, Nebraska, revealed that the real market is women and not obstetrics/neonatology. This created a new product group for the hospital - women's services. Methodist's strategy included providing extensive information about the range of programs they had to offer. Their campaign started with the idea of consolidating a package of existing services with plans of adding new services in the future. In promoting their strategy, they went for a high reach, high frequency approach. Results show that Methodist had a very high recall rate on name recognition after four months (Profiles in Hospital Marketing 1986).

Fort Myers Community Hospital

The women's pavilion at Fort Myers Community Hospital, Fort Myers, Florida, is different because it is a women's hospital that does not offer obstetrics. Their strategy was that they should avoid duplicating services that are already available in the market and instead develop a

new market position. Research conducted by this hospital showed that people perceived women's health care services mainly as obstetrics. Their research also indicated a need to project an image of being a responsive facility with quality health care for all ages. The hospital started with a focus on business women but now services are targeted to an older women's market also. In order to cater to the needs of business women, they have made arrangements to offer special services and facilities such as - personal computer, typewriters, secretarial help, etc. (Profiles in Hospital Marketing 1986).

Hillcrest Center for Women's Health

The Hillcrest Center for Women's Health, Tulsa, Oklahoma was started in January 1986, as one of the first health care centers in Tulsa whose services were devoted to women. They provide clinical examination, consultation services, exercise areas, a nursery, a resource library and educational seminars as part of their services. Membership is free and the hospital keeps its customers well informed with newsletters (Hillcrest Center for Women's Health 1986).

RESEARCH METHODOLOGY

This study is exploratory survey research. The method of study consisted of designing a questionnaire and a cover letter and mailing them to a sample of residents in Tulsa. This method was estimated to be the most cost effective for reaching a large sample of women.

RESEARCH QUESTIONS

This report addressed the following research questions:

1. What are the general attitudes of women towards health care services?
2. Is there a need for a women's health care center in Tulsa?
3. What kind of services should be offered at the health care center?
4. How should the health care center schedule their programs?
5. Which health care issues are of interest to women?
6. How should information be provided to women residents in Tulsa?

QUESTIONNAIRE DESIGN

The questionnaire was designed in blocks, to facilitate easy understanding. All respondents were expected to answer Sections I, II and V, but section III and section IV were only answered if the respondent was prequalified to do so (see questionnaire in Appendix I).

In Section I, attitudes and preferences were evaluated as nominal or interval scale questions. This section also provided a prelude to the questionnaire and introduced the issue of Women's Health Care

Services to the respondent. Section II elicits specific information on the use of health care services and is perhaps the most important section in the questionnaire. The interval scale questions in this section are important because they examine the process of selection of services. The question that measures the respondent's willingness to utilize specialized health care services is also crucial to the study.

Section III was answered only if the respondent had personally used the services of a hospital in the recent past. This gives feedback on the services currently offered by hospitals in Tulsa. Only those respondents who are of child bearing age answered section IV. All questions in Section IV are nominal or ordinal scaled and were designed to provide specific information on birthing room preference.

Lastly, Section V studied the demographic characteristics of the respondents, with the help of nominal or ordinal scaled questions. These questions provide a profile of prospective customers.

SAMPLING

Sampling design concerns both the methods used to select the sample from the population and the size of the sample necessary to make a generalization of the results possible. Two samples were chosen for the study. One was a randomly drawn sample of 800 residents in Greater Tulsa. A sample of all residents (and not specifically women residents), was taken because of the nonavailability of random mailing lists for the latter. The second sample was a convenience sample and comprised a specific target group - 500 business women in Tulsa.

TECHNIQUES FOR ANALYSIS

The responses were coded depending on the type of variables they represented (see Appendix I for coding instructions). There are 243 variables in the study. Data was entered into a data set on the IBM 3081K mainframe computer at Oklahoma State University. The Statistical Analysis System (SAS) program was used to analyze the data and to perform statistical analysis like univariate descriptive analysis, frequency analysis, correlational analysis, and statistical tests like Chi-Square tests and t tests.

RESULTS

The first part of this chapter contains a discussion of the results of the randomly drawn sample of residents in Tulsa, followed by a discussion of the sample of business women. The second part contains a discussion on the feedback on hospital services and birthing room preferences. Of the 800 questionnaires sent to a randomly drawn sample of residents in Tulsa, 103 responded and 53 were returned because the addresses could not be reached. This represents a response rate of 13.79%. Of the 500 questionnaires sent to a sample of business women in Tulsa, 87 responded and 29 were returned. This represents a response rate of 18.3%. The reasons for a low response rate may be:

1. In the case of the random sample of Tulsa residents, the mailing list did not comprise of women residents alone. This is corroborated by the fact that the sample of Tulsa business women provided a higher response rate.
2. The length of the questionnaire could have discouraged some women from replying.

Comparison of the two sample groups:

The two samples were tested over demographic characteristics and attitudinal questions, in order to examine if they exhibited sufficient differences to require separate analyses.

The distribution of age for the Tulsa residents was over a wider range than that for the sample of business women (Chi-square significance = .030) (Refer to Table 1). The maximum difference in the two samples was in the age group 26-35, with 36.78% of Tulsa business women represented in this category as against 25.49% in the random sample of Tulsa residents. Twenty-one percent of the random sample were

greater than 56 years while there were only 9.2% of business women in this age group.

The income levels of the sample of business women was greater than that of the random sample of Tulsa residents (Refer to Table 2). This was significant at the .046 level. Thirty-seven percent of the random sample of Tulsa residents had annual incomes less than \$30,000 while only 27% of the business women had an income less than \$30,000 and none had an annual income less than \$10,000. In fact almost 50% of the Tulsa business women had an annual income of greater than \$40,000.

Almost 60% of the sample of Tulsa business women were at least college graduates (with the entire sample being at least high school graduates), while only 45% of the random sample of Tulsa residents had a college degree (Refer to Table 3). The Chi-Square significance for this relationship is .001. Thirty-one percent of the Tulsa business women had graduate degrees while only 8.82% of the random sample had a graduate degree.

It is interesting to note that 37% of the random sample of Tulsa residents were homemakers, while only 3.45% of the sample of business women, reported homemaking as their occupation (Refer to Table 4). This relationship is very significant at the .000 level. The unclassified category among Tulsa business women was 16%, most of which accounted for positions such as Director, Proprietor or head of a business.

Only forty three percent of Tulsa business women worked full time (30-49 hours a week), while 58% of the random sample said that they had full time duties (Chi-Square significance = .044) (Refer to Table 5). However, 41% of the business women worked more than 50 hours a week while only 18% of Tulsa residents worked more than 50 hours a week.

The two groups also showed differences on some attitudinal questions (Refer to Table 6). The group of business women tended to disagree more strongly (2.84 vs. 2.48) that the quality of health care service presently available in Tulsa, is adequate (t test significance = .0118). As compared to the random sample of Tulsa residents, they are more concerned about personalized attention and care that is tended to them. The mean score for business women was 1.40 while that for the random sample was 1.64. This relationship was significant at .0123. While choosing health care providers, recommendation by a friend and the reputation of the health care provider seem to matter more for the group of business women than for the random sample of residents (t test significance = .0263). This is evident because the mean score for the random sample at 2.11 is much higher than the mean score of business women (1.55). The reputation of the health care provider is more important (1.55 vs. 1.81) to the group of business women than to the random sample of Tulsa residents (significance level = .0388).

In view of all the above mentioned significant differences, it was decided to analyze the two samples separately.

RANDOM SAMPLE OF RESIDENTS IN TULSA

Many respondents (63%) agreed or strongly agreed that there was a need for a specialized health care center for women (Refer to Table 7). They were also of the opinion that health care is important even when one is not sick (85%). Almost 81% of the respondents said that they would attend a health care center exclusively for women (Refer to Table 7). A small percentage of the sample (24.2%) were already using the services of a health care center. Although the quality of health care

centers in Tulsa was perceived to be adequate (52%), the respondents found that the cost of the service was high. Thus, there are clear indications that there is a need for a Women's health care center in Tulsa.

Table 8 gives a ranking of the important criteria when choosing a health care service. Reputation of the service is the most important factor (1.35). Personalized attention and care with a score of 1.64, was more important than the price of the service offered (1.76). In the process of selection of a health care service, the family physician had a very important role to play (Mean score = 1.53). The reputation of the institution providing the health care service could also influence the decision significantly since it had a score of 1.81. However, recommendations from friends and family were of less importance (Mean scores of 2.11 and 2.19 respectively).

It is important to examine the reasons cited for not using a health care service as it provides a guideline for future services. It is interesting to note that although 85% of the sample were aware that health care is of concern even when one is not sick (Refer to Table 7 and Table 9), the most frequently cited reason for not using a health care service is "No health problems." Another frequently cited reason for not using a health care service is the lack of time to do so (Refer to Table 9). Twenty one percent of this sample indicated that high price was one of the reasons for not using a health care service. In fact, 49.4% of all the women who responded, either disagreed or strongly disagreed that the price of health care service presently available is reasonable. A new health care center can also attract those people who do not like the present services being offered (8.8%) and those who are

not aware of existing facilities (15.4%).

The most requested services and the most sought after health related issues can be ranked by percentages (Refer to Tables 10 and 11). The services that were most frequently requested by the respondents included breast screening facilities, nutrition and diet information service, health screening facility, and physician referrals. Health issues on which more information was asked for were stress management, fitness and keeping trim, women and cancer, nutrition and diet, osteoporosis and weight control.

Time schedules of the programs is an important factor that the health care provider must consider. Respondents were asked to select time schedules during weekdays and weekends (Refer to Table 12). The most preferred time schedule during week days was in the evenings between 5 and 8 pm (40.8%). A good proportion of the respondents (32%) did not have any time preference. Twenty-four percent of the respondents were flexible with time schedules during week ends. Many women (27.5%) found weekend mornings (8 AM to 12 PM) convenient. Seventeen percent of the women did not want programs to be scheduled during weekends.

Presently, the most common source of information is the physician (64.7%) (Refer to Table 13). Magazines and books are also an important source of information. Forty-three percent of the respondents received information on television. While 30.4% of the people are presently receiving information through direct mail/newsletters, 54.9% expressed interest in receiving information by way of direct mail/newsletters.

Over thirty percent of this sample chose Saint Francis Hospital as their best health care provider (Refer to Table 14). St. John Medical

Center ranked second (27.5%) and Hillcrest Medical Center ranked third (18.6%). The other hospitals were lagging far behind.

There is a correlation between the belief that there is a need for a health care center in Tulsa exclusively for women (OPIN1) and price (IMPFACT2) and personalized attention and care (IMPFACT6) (Refer to Table 15). This relationship is not significant for the convenience sample of business women. The opinion on quality of health care services (OPIN3) is inversely related to schedule of programs indicating that this could be an area of dissatisfaction. There is also an inverse relationship between the opinion of the cost of the service being reasonable (OPIN4) and the importance of price in decision making (IMPFACT2). The family physician (RECOM3) is correlated to many important factors like affiliation to major hospital (IMPFACT3), personalized attention and care (IMPFACT6) and schedule of programs (IMPFACT7). The reputation of the health care provider (RECOM5) has an important influence since it has a correlation with affiliation to a major hospital (IMPFACT3) and personalized attention and care (IMPFACT6).

There is an inverse correlation between the opinions that there is a need for a health care center (OPIN1) and the opinion that the quality of health care service presently available is adequate (OPIN3) (Refer to Table 16). There is a direct correlation between the belief that there is a need for a health care center exclusively for women (OPIN1) and that the number of health care centers in Tulsa is inadequate (OPIN2). There is also a significant direct correlation between the various factors important in making a health care decision (IMPFACT1-IMPFACT6). Recommendation by family (RECOM2) is correlated to recommendation by a

friend (RECOM1). Influence from the family physician (RECOM3) is significantly correlated to reputation of the health care provider (RECOM5).

CONVENIENCE SAMPLE OF BUSINESS WOMEN

Over 86% of the women surveyed in this sample indicated their willingness to join a health care center for women (Refer to Table 7). This figure is 6% higher than that for the random sample of residents in Tulsa. A smaller percentage of the business women sample (13%) are presently using the services of a health care center. Only 22% of the women agreed or strongly agreed that the number of health care centers in Tulsa is adequate but a good percentage of the sample (25.3%) were dissatisfied with the quality of service presently available. Almost 30% of the business women sample agreed or strongly agreed that the cost of health care service is reasonable. At the same time, 51.2% of this sample either disagreed or strongly disagreed that the cost of the health care service is reasonable. This indicates that business women felt more strongly than the random sample on the issue of price.

Both reputation of the health care provider (1.34) and personalized attention and care (1.40) are important factors for business women (Refer to Table 8). The level of importance for business women on these two factors is considerably higher than that for the random sample and in fact there is a significant difference on the issue of personalized attention and care (significance = .012). The other important factors when choosing among health care providers are price (1.76) location (1.94), and the range of services offered (1.94). Affiliation to a major hospital (2.35) seems to matter little to this group of women. Although schedule of the programs offered is relatively less important

as compared to the other factors, it is more important to business women than it is to the random sample of residents.

The most important influence on business women when they choose among health care providers is the reputation of the service (Refer to Table 8). This is significantly greater than that for the random sample (significance = .0388). Recommendations from friends has a greater influence on the sample of business women than on the random sample of residents, and this relationship is significant at .0263 level. The results show that information from advertisements has the least influence on this group of women.

The most frequently cited reasons for not using the services of a health care provider was "no health problems" (43.5%) (Refer to Table 9). As compared to this only 28.6% of the random sample indicated no health problems as being the reason for not using a health care service. This difference is statistically significant at .050. In fact only 82.6% of the sample of business women disagreed or strongly disagreed that health care is of concern only when sick, while 85.1% of the random sample disagreed or strongly disagreed on the same issue (Refer to Table 7). The other commonly cited reason for not using a health care service was Too busy/lack of time (34.8%).

The sample of business women typically showed longer working hours (Refer to Table 5), and therefore it is logical that "too busy/lack of time" is a commonly cited reason for not using a health care service. This is further corroborated by the fact that schedule of programs is more important to Tulsa business women than it is to the random sample of Tulsa residents (Refer to Table 8). A very small percentage of this sample indicated that health care is not of interest to them (1.4%) as

compared to 7.7% of the random sample (Refer to Table 9).

Almost everybody in the sample of business women (94.2%) indicated their interests in having a service related to nutrition and diet (Refer to Table 10). The other frequently requested services by business women were breast screening (86%), health screening facility (81.4%), physician referrals (77.9%), osteoporosis (77.9%), Educational programs/lecture series/workshops on medical issues (75.6%). All of the above services were requested more by the sample of business women than the random sample of residents in Tulsa. The sample of business women also showed significantly higher requests than the random sample for the following services (Refer to Table 10) - Workout - one instructor one person, nutrition and diet information, osteoporosis, physician referrals/ periodic check up, educational programs/lecture series/workshops on medical issues, maternal/child care, adult day care center, and plastic surgery center. Some other services which were requested more by the business women are - physical fitness (60.5%), and marriage counseling (30.2%). However, these differences were not statistically significant. Overall the sample of business women requested more services (11.36) than the random sample of residents (8.98) (Refer to Table 17). This difference was significant at .0019. The biggest demand for health related issues was in the areas of stress management (62.8%), fitness and keeping trim (58.1%), women and depression (50%), nutrition and diet (47.7%), weight control (46.5%), osteoporosis (45.3%) (Refer to Table 11). The sample of business women seemed less interested in knowing about cancer (39.5%) as compared to the random sample of residents in Tulsa (51%). In the areas of interpersonal relations like dealing with your husband (27.9%) and

women's relations with their parents (18.6%), business women were more eager to have information than the random sample of residents. The demand for information on health related issues seemed identical in both the sample groups and no significant differences were seen.

The most preferred time on weekdays for business women was in the evenings between 5 pm and 8 pm (58.1%). This was significantly different from the preference of the random sample of residents (significance = .020) (Refer to Table 12). Business women also indicated their preference for programs to be scheduled at nights, between 8 pm and 10 pm (31.4%). As against this only 17.6% of the random sample had indicated their preference for this time schedule. This difference was significant at the .028 level. The most significant difference was seen in the lunch hour schedule during weekdays. While only 4.9% of the random sample wanted to have programs at this hour, a good proportion of the business women (22%) welcomed programs to be scheduled at this time of the day (significance = .000). In general, business women were more open to having programs scheduled during weekends (Anytime on weekends = 43%) as compared to the random sample of residents. This was statistically significant at .007. Also, fewer business women were opposed to having programs on weekends (5.8%) as compared to the random sample of residents (17.6%). This difference was also significant at .014.

Almost 75% of the business women surveyed indicated that magazines were one of their sources of information (Refer to Table 13). This was significantly higher than the corresponding percentage among the random sample of residents in Tulsa (Significance = .048). The other common sources of information are physicians (64%) and books (50%). A greater

percentage of the sample of business women receive information about health care from books than among the random sample of residents in Tulsa (42.2%). Information from pamphlets (46.5%) and from direct mail/newsletters (41.9%) were also higher than those for the random sample. Business women prefer to receive information from direct mail/newsletters (61.6%) and educational seminars/lectures (59.3%). Their preferences for these forms of information is much higher than the preferences expressed by the random sample group (54.9% and 47.1% respectively). Although the next preferred sources of information were pamphlets (38.4%) and physicians (36%), results show that these figures are lesser than those in the random sample. The random sample showed a greater preference for pamphlets (44.1%) and physicians (41.2%). The business women sample also showed a higher interest in magazines (30.2% vs. 24.5%) and friends (9.3% vs. 7.8%) and a lower inclination to receive information from newspapers (17.4% vs. 24.5%).

Saint Francis Hospital ranked as the best health care provider among the sample of business women (30.2%) (Refer to Table 14). Business women ranked Hillcrest Medical Center (23.3%) over St. John Medical Center (20.9%). The random sample perceived St. John Medical Center as better than Hillcrest Medical Center.

There was no significant relationship between the two sample groups and the use of services of a hospital (USED) or the respondent being of a child bearing age (CHILD). Also from Table 1, it can be seen that the percentage of women between the ages 18 to 45 in the random sample of residents is 59% and that among the business women is quite close at 66%. A problem encountered with analyzing these variables separately for the two sample groups is that the cell counts in each group were not

sufficient to provide reasonably accurate descriptions of the population. Thus, it can be concluded that the section on the feedback on hospital services (Section III of the questionnaire, refer to Appendix I) and the section on birthing room preferences (Section IV of the questionnaire, refer to Appendix I), need not be analyzed separately for the two sample groups.

The sample of business women showed a high correlation between their opinion that there is a need for a health care center exclusively for women (OPIN1), the number of health care centers in Tulsa is adequate (OPIN2), and the importance of schedule of programs (IMPFACT7) (Refer to Table 15). There was also a correlation between the influence from advertisements (RECOM4) and the importance of location (IMPFACT1), and price (IMPFACT2) in choosing a health care center. Business women seem to be more responsive to information from advertisements since the sample showed a correlation between information from advertisements (RECOM4) and the importance of location (IMPFACT1) and price (IMPFACT2). The random sample of residents in Tulsa did not show significant correlations in these issues. Business women showed a significant correlation between their beliefs on the quality of the services (OPIN3) and the price of the service (OPIN4), while the random sample did not show this relationship. This indicates that business women seem to associate better service with higher price. The sample of business women showed a high correlation between the range of services offered (IMPFACT4) and the reputation of the service (IMPFACT5). This relationship was higher and more significant among business women than in the random sample of residents in Tulsa.

FEEDBACK ON HOSPITAL SERVICE

Of all the women surveyed in this study, 41.5% had personally used the services of a hospital within the last twelve months. Of the hospitals, St. John was visited most often (26.3%) (Refer to Table 18). Twenty-five percent of those who used the services of a hospital had visited Saint Francis Hospital and 16.9% had visited Hillcrest Medical Center. The most important influence with respect to the choice of hospital was from physicians (62%) (Refer to Table 19). The respondent's personal opinion was also important (38.9%). However spouse or friends had little influence and neither did the employer or insurance company exert any significant influence on the decision of choosing a hospital.

The awareness of the respondent to the various services available in their hospitals they visited was also measured in this section. The most commonly found service was nutrition and diet information (56%) (Refer to Table 20). Almost 50% of the women surveyed indicated that educational programs/lectures/workshops on medical issues were available at the hospital they had visited. Other services which many of the respondents were aware of were - health screening facility (44%), reference material on health care (40.7%) and physician referrals/periodic check up (38.5%). Of the three major hospitals in Tulsa, most women were aware of the services offered, by Hillcrest. In fact all the women who had been hospitalized at Hillcrest were aware of their breast clinic.

Almost 91% of the women who had used the services of a hospital believed that cleanliness and sanitation at the hospital they were staying in, was either very good or good (Refer to Table 21). There was

a reasonable level of satisfaction with respect to the facilities provided (87.8%) and the location of the hospital (86.8%). The most important reason for dissatisfaction was price of the service. Fifty-five percent felt that the price of the service was either poor or very poor or at best fair. Some other services about which the respondents were unhappy about are time schedules (29.7%), in-house physician/medical care (22.4%) and ratio of staff to patients (22.6%).

The mean scores on the respondents evaluations of the services offered by the hospital are listed in Table 22. Comparative analysis is restricted to St. John Medical Center, Saint Francis Hospital and Hillcrest Medical Center because the cell counts for the other hospitals are too low (less than 10). St. John Medical Center was rated highest in terms of facilities provided (1.516). In terms of sanitation, Saint Francis was ranked as the best of the three with Hillcrest ranking as the poorest in this respect (1.818). St. John Medical Center scored over the other two hospital in "range of services provided" (1.679), "cost of the service" (2.111), "convenient time (1.840)" and "convenient location" (1.4333). In the areas of "in-house physician/medical care" (1.833) and "ratio of staff to patients" (1.889), Saint Francis Hospital was ranked best of the three. Hillcrest Medical Center was not rated above the other two hospitals in any of the factors.

The random sample of residents in Tulsa showed an inverse relationship between their opinion that the cost the cost of health care service is adequate and the following questions evaluating the hospitals they had visited (Refer to Table 23) - cleanliness and sanitation (RATE2), range of services provided (RATE3), ratio of staff to patients (RATE4), convenient location (RATE6), and cost of the service

(RATE7). There was no such relationship in the sample of business women.

BIRTHING ROOM PREFERENCES

Of all the women surveyed in this study, 41.49% of the women answered section IV of the questionnaire (Refer to questionnaire in appendix I). Fifty-nine percent of the women who were in child bearing age indicated that they would like their child to remain with them and 39.2% wanted their child to be taken to the nursery. Eighty-two percent of the women who wanted their babies to remain with them wanted to stay in a private room and only 12.9% indicated they would like to stay in a semi-private room. A high percentage of the women (84.4%) who wanted their babies to stay with them preferred to have one nurse attending to both themselves and the baby. Forty-seven percent of these women wanted to have their babies taken to the nursery at night and an equal number wanted their babies to remain with them at nights as well.

Of the women who were in child bearing age, almost 52% preferred to remain in the same room for delivery and post partum care. The average time these women wanted to stay in the hospital for delivery was 2.3 days. Sixty-seven percent indicated they would like to stay in the hospital for two or three days. Fifty-one percent of the women who answered this section did not want a nurse to call on them at home after delivery for a health checkup while 46.3% wished to have a nurse visit for a checkup.

IMPLICATIONS

Women residing in Tulsa expressed a need for a health care center exclusively for women. Most of the women are aware of the wellness concept and that health care is of concern even when one is not sick. Yet less than 20% of the women were using the services of a health care center. More than 83% percent of the women surveyed indicated that they would attend a health care center for women and hence it can be concluded that there is a need for a health care center with an adequate quality of services made available at a reasonable price.

Business women can be advantageously identified as a target market within the broad group of women in Tulsa since a greater percentage of business women were interested in attending a women's health care center. Added to this, fewer business women, as compared to the random sample, were currently using the service of a women's health care center. Also many of them agreed or strongly agreed that there is a need for a health care center exclusively for women.

Based on the services requested by the women surveyed in this study it can be concluded that the following services, would be in demand: nutrition and diet center, health screening facility and specifically breast screening facility, physician referrals and periodic check up, osteoporosis treatment center, educational programs/lecture series/workshops on medical issues, maternal/child care facility, psychiatric services, counseling services, physical fitness services. These services are recommended since around 50% or greater of the women surveyed had requested these services.

The health care center should choose a convenient time schedule for their programs and indicate to people how they can fit a health care program in their busy lives. From table 12 the following can be concluded:

- * Services during week day should be offered during evenings (5pm to 8pm) and during nights (8pm to 10pm).
- * Services during week ends should be offered in the mornings (8am to 12am).

With these time schedules the health care center can expect to attract a good portion of the female population in Tulsa. Other time schedules to attract specific target markets could also be planned.

Clearly, women residing in Tulsa are interested in information on health related topics. Some of the common areas of interest are: stress management, fitness and keeping trim, women and cancer, nutrition and diet, osteoporosis, weight control, women and depression, and normal stages in a woman's life. More than 40% of the woman surveyed had requested information on these health care related issues. The health care center could therefore start providing information on these issues through information channels which are discussed below.

Magazines, physicians, books, television, newspapers seem to be the most common sources of information for women residents in Tulsa. However, these are not necessarily the preferred sources of information. The survey suggests that direct mail/newsletters, educational seminars /lectures, and participative workshops be used as information channels.

	Expected	Present	Difference
Direct mail/Newsletters	54.4%	30.1%	24.3%
Educational Seminars/Lectures	46.6%	14.6%	32.0%
Physicians	40.8%	64.1%	-23.3%
Participative workshops	33.0%	5.8%	27.2%

These are areas where the preferred sources of information show a big difference over present sources of information. Interestingly, women would like to receive information directly and not through physicians. This could mean that they would like to rid themselves of the dependence on the physician as a source of information. Information from advertisements did not seem to matter to both groups of women and hence the health care center need not emphasize television, radio or other public broadcast systems as the only channels to provide specific information. Mass media could be used for building awareness and developing a corporate image. Another reason for this is that information gathered from advertisements does not seem to be vital to women for making health care decisions. However, business women seem to be more responsive to information from advertisements than the random sample of residents in Tulsa.

In order to anticipate the buying process, it is necessary to respond to the factors and influences that are important to woman residents in their selection decisions and also to comprehend the reasons for not using a health care service. The ideal profile of a health care service would be one that has a high quality reputation, and one that assures personal attention and care at a reasonable price. The center should also provide a wide variety of services offered from a convenient location. The family physician is the chief influencer in the buying process and the health care center would do well to have physicians support their services and recommend them to their female

patients. The health care center should also tackle resistance to the use of health care services. Although many women residents are aware of the wellness concept, they have cited "no health problems" as the main reason for not using a health care facility. This could mean that there is a portion of the female population in whom the wellness concept should be inculcated. Also, there seems to be some impediments to translating their beliefs on health care to actually using a service. One of these impediments is the difficulty associated with finding time for health care activities in busy work schedules. Cost of the service is also a serious deterrent. What is important to a new health care center is the section of people who are unaware of health care facilities and those who do not like the existing services. By choosing the right time schedules for their programs, by making the female population aware of their services, and by providing the right package of services at an attractive price, a health care center should be able to reduce the resistance to the use of health care services and gain a decent market share.

In the past, the physician and the subject herself have been the main influencers in choosing a hospital. This indicates the importance of the physician in health care decisions. Among the hospitals and medical centers in Tulsa, Saint Francis has been perceived as the best health care provider. St. John Medical Center ranked second followed by Hillcrest Medical Center in a close third position. In order to establish a high ranking image, the health care center can use feedback on hospital services as a guideline. It is obvious that the health care center should attend to those areas where women have expressed dissatisfaction with present services. This implies providing

competitively priced service, at a convenient time. Also the ratio of staff to patients and in-house physician/medical care should be improved. This would mean better personal attention and care, an important factor for women choosing a health care center.

From the feedback received, (Refer to Table 22) the following strong and weak points (relative to one another) in three major hospitals in Tulsa, can be identified:

	Strong points	Weak points
Saint Francis Hospital	Cleanliness and Sanitation Ratio of staff to patients In house physician /medical care	Facilities provided Range of services Location Cost of service Time schedules
St. John Medical Center	Facilities provided Range of services Location Cost of service Time schedules	Cleanliness and Sanitation Ratio of staff to patients In house physician/ medical care
Hillcrest Medical Center		Facilities provided Cleanliness and sanitation Range of services Ratio of staff to patients In house physician/ medical care Location Cost of service Time schedules

A health care center providing maternity care as one of their services should consider having a nursery for new borns. This is because almost 40% of the women in child bearing age wanted their babies taken to the nursery and of those who wanted their babies to remain with them, almost 50% wanted their babies to be taken to the nursery at

night. The health care center should provide private rooms and also a few semi-private rooms. For those women wanting their babies to stay with them the same nurse could take care of both the mother and the new born. The health care center could also make arrangements for nurses to visit mothers at home after they are discharged for health check up. This could be an optional service. The duration of stay in a health care maternity center could be between two to three days since over 60% of the women surveyed indicated this as their preferred duration of stay.

The group of business women had distinctly different characteristics as compared to other residents in Tulsa and hence they need to be addressed separately.

Business women were largely in the age group 26-55 while the age distribution of the random sample was spread more widely over all age groups. Therefore, the needs of business women would be more similar than that of the random sample of residents. The higher income levels of business women suggests that they might be in a position to afford services which might not be in the reach of the average resident of Tulsa. A higher percentage of business women believed that the cost of health care service is reasonable. This is concurrent with the belief that business women can usually afford more expensive services. The fact that business women are typically more educated than the random sample of women suggests that business women would be looking for more information on health related issues. It is likely that they might explore their options more carefully and that they might be more involved in the buying process. It also means that they should be addressed separately as a knowledgeable audience. They might already

possess knowledge on several issues the common woman has not heard of and therefore programs designed for an average woman might seem trite and boring to the business woman. The business woman held high positions like director, proprietor or heads of organization. This makes their expectations from a health care service different from those women who held lower positions. For example, along with health care facilities, business women might also be looking at the center as a place for meetings and developing business contacts. It is also possible that women holding such high positions would be very conscious about their time and might be less tolerant to delays or uninformed changes in schedules. They might also be more concerned about the prestige and image associated with the health care center they visit.

Business women seem to have stricter standards than other residents since a greater percentage of their group was dissatisfied with the health care service presently available. This means that to capture the business women's market segment, the health care center should ensure a good quality of services and convey such an impression to business women.

In order to appeal to the business woman the health care service should build a good reputation for itself. This might be rather difficult for an institution that is being set up for the first time in the community. In this regard, hospitals that already have a good reputation have an advantage since the women's health care center would be extension of the hospital services. However affiliation to a major hospital is not directly an important criterion. Price of the service as a selection criterion seemed to be equally important to both the sample groups. Overall, the business women would be less sensitive to

price than the random sample of residents in Tulsa. The health care center should make sure that they provide personal attention and care to business women although it might mean a marginal increase in the cost of the service. Apparently "word-of-mouth" bears an important influence among business women. It is therefore important for the health care center to build a good reputation and keep their patrons happy.

It would also be advantageous to choose a strategic location and attract customers who are geographically located nearer to the health care center.

CONCLUSIONS

From the study the following conclusions can be drawn:

- * Most of the women residents in Tulsa are aware of the wellness concept and have expressed interest in attending a health care center.
- * There is evidence for a need for another women's health care center in Tulsa.
- * Business women are an attractive target market.
- * Certain areas of interest, with respect to health care services are: nutrition and diet information, breast screening, health screening facility, physician referrals, osteoporosis, and educational programs.
- * Convenient time schedules during weekdays are in the evenings (5pm-8pm) and nights (8pm-10pm). Convenient time schedules during weekends are mornings (8am-12pm).
- * Effective channels of information were: direct mail/newsletters, educational seminars/lectures and pamphlets.
- * Feedback on hospital services could be helpful in designing a new health care center.

Marketing health care services to women is a challenge which only some health care centers have managed to deal with successfully. Their success is a consequence of their ability to pin point the needs of the

female population (Deveny, Atchison, Flynn 1986). It is therefore anticipated that a women's health care center, which meets the specific needs of women that were discussed in this report, would be able to secure a fair market share of the Tulsa market.

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APPENDIX A

TABLES

TABLE 1
 CHI-SQUARE TESTS FOR DIFFERENCES
 BETWEEN THE RANDOM SAMPLE OF RESIDENTS
 AND THE SAMPLE OF BUSINESS WOMEN

TABLE OF AGE BY GROUP			
AGE	GROUP(SAMPLE GROUPS)		
FREQUENCY PERCENT ROW PCT COL PCT	RANDOM SAMPLE OF	CONVENIE NCE SAMPLE	TOTAL
18-25	9 4.76 75.00 8.82	3 1.59 25.00 3.45	12 6.35
26-35	26 13.76 44.83 25.49	32 16.93 55.17 36.78	58 30.69
36-45	25 13.23 52.08 24.51	23 12.17 47.92 26.44	48 25.40
46-55	21 11.11 50.00 20.59	21 11.11 50.00 24.14	42 22.22
56-65	12 6.35 60.00 11.76	8 4.23 40.00 9.20	20 10.58
OVER 65	9 4.76 100.00 8.82	0 0.00 0.00 0.00	9 4.76
TOTAL	102 53.97	87 46.03	189 100.00

STATISTICS FOR TABLE OF AGE BY GROUP

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	12.392	0.030

TABLE 2

CHI-SQUARE TESTS FOR DIFFERENCES
BETWEEN THE RANDOM SAMPLE OF RESIDENTS
AND THE SAMPLE OF BUSINESS WOMEN

INCOME	TABLE OF INCOME BY GROUP		
	GROUP(SAMPLE GROUPS)		
FREQUENCY PERCENT ROW PCT COL PCT	RANDOM SAMPLE	CONVENIEN CE SAMPLE	TOTAL
LESS THAN \$10,000	5 2.78 100.00 5.15	0 0.00 0.00 0.00	5 2.78
\$10,001-20,000	18 10.00 75.00 18.56	6 3.33 25.00 7.23	24 13.33
\$20,001-30,000	13 7.22 43.33 13.40	17 9.44 56.67 20.48	30 16.67
\$30,001-40,000	21 11.67 52.50 21.65	19 10.56 47.50 22.89	40 22.22
\$40,001-50,000	13 7.22 56.52 13.40	10 5.56 43.48 12.05	23 12.78
MORE THAN \$50,000	27 15.00 46.55 27.84	31 17.22 53.45 37.35	58 32.22
TOTAL	97 53.89	83 46.11	180 100.00

STATISTICS FOR TABLE OF AGE BY GROUP

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	11.280	0.046

TABLE 3

CHI-SQUARE TESTS FOR DIFFERENCES
BETWEEN THE RANDOM SAMPLE OF RESIDENTS
AND THE SAMPLE OF BUSINESS WOMEN

EDUCATE	TABLE OF EDUCATE BY GROUP		
	GROUP(SAMPLE GROUPS)		
FREQUENCY PERCENT ROW PCT COL PCT	RANDOM SAMPLE OF	CONVENIE NCE SAMPL	TOTAL
SOME HIGH SCHOOL	9 4.76 100.00 8.82	0 0.00 0.00 0.00	9 4.76
HIGH SCHOOL	17 8.99 65.38 16.67	9 4.76 34.62 10.34	26 13.76
SOME COLG EDCN	30 15.87 53.57 29.41	26 13.76 46.43 29.89	56 29.63
COLLEGE GRAD	22 11.64 61.11 21.57	14 7.41 38.89 16.09	36 19.05
SOME POST GRAD	15 7.94 57.69 14.71	11 5.82 42.31 12.64	26 13.76
POST GRADUATE	9 4.76 25.00 8.82	27 14.29 75.00 31.03	36 19.05
TOTAL	102 53.97	87 46.03	189 100.00

STATISTICS FOR TABLE OF AGE BY GROUP

STATISTIC	DE	VALUE	PROB
CHI-SQUARE	5	22.089	0.001

TABLE 4

CHI-SQUARE TESTS FOR DIFFERENCES
BETWEEN THE RANDOM SAMPLE OF RESIDENTS
AND THE SAMPLE OF BUSINESS WOMEN

TABLE OF POSITION BY GROUP

POSITION	GROUP(SAMPLE GROUPS)		TOTAL
	RANDOM SAMPLE OF	CONVENIE NCE SAMPL	
FREQUENCY			
PERCENT			
ROW PCT			
COL PCT			
SALES/RETAIL	9	13	22
	4.81	6.95	11.76
	40.91	59.09	
	9.00	14.94	
ADMINISTRATIVE	14	18	32
	7.49	9.63	17.11
	43.75	56.25	
	14.00	20.69	
HOMEMAKER	37	3	40
	19.79	1.60	21.39
	92.50	7.50	
	37.00	3.45	
PROFES/TECHNI	24	31	55
	12.83	16.58	29.41
	43.64	56.36	
	24.00	35.63	
SECRETARIAL	6	8	14
	3.21	4.28	7.49
	42.86	57.14	
	6.00	9.20	
OTHER	10	14	24
	5.35	7.49	12.83
	41.67	58.33	
	10.00	16.09	
TOTAL	100	87	187
	53.48	46.52	100.00

STATISTICS FOR TABLE OF AGE BY GROUP

STATISTIC	DF	VALUE	PROB
CHI-SQUARE	5	31.218	0.000

TABLE 5

CHI-SQUARE TESTS FOR DIFFERENCES
BETWEEN THE RANDOM SAMPLE OF RESIDENTS
AND THE SAMPLE OF BUSINESS WOMEN

TABLE OF WORKHRS BY GROUP

<u>WORKHRS</u>	<u>GROUP(SAMPLE GROUPS)</u>		
<u>FREQUENCY</u>	<u>RANDOM</u>	<u>CONVENIE</u>	
<u>PERCENT</u>	<u>SAMPLE OF</u>	<u>NCE SAMPL</u>	<u>TOTAL</u>
<u>ROW PCT</u>			
<u>COL PCT</u>			
1-9	10	4	14
	5.52	2.21	7.73
	71.43	28.57	
	10.64	4.60	
10-19	4	3	7
	2.21	1.66	3.87
	57.14	42.86	
	4.26	3.45	
20-29	8	5	13
	4.42	2.76	7.18
	61.54	38.46	
	8.51	5.75	
30-39	14	11	25
	7.73	6.08	13.81
	56.00	44.00	
	14.89	12.64	
40-49	41	27	68
	22.65	14.92	37.57
	60.29	39.71	
	43.62	31.03	
50-59	9	24	33
	4.97	13.26	18.23
	27.27	72.73	
	9.57	27.59	
60-69	4	7	11
	2.21	3.87	6.08
	36.36	63.64	
	4.26	8.05	
70-79	4	6	10
	2.21	3.31	5.52
	40.00	60.00	
	4.26	6.90	
TOTAL	94	87	181
	51.93	48.07	100.00

STATISTICS FOR TABLE OF AGE BY GROUP

<u>STATISTIC</u>	<u>DF</u>	<u>VALUE</u>	<u>PROB</u>
CHI-SQUARE	7	14.436	0.044

TABLE 6

1. TESTS FOR SIGNIFICANT DIFFERENCES BETWEEN
 THE CONVENIENCE SAMPLE OF BUSINESS WOMEN
 AND
 THE RANDOM SAMPLE OF TULSA RESIDENTS

	Group 1	Group 2	Significance
Quality of Health Care Service is Adequate (OPIN3)	2.48	2.84	.0118
Personalized attention and care (IMPFACT6)	1.64	1.40	.0123
Recommendation by a friend (RECOM1)	2.11	1.89	.0263
Reputation of the health care provider (RECOM5)	1.81	1.55	.0388
Ratio of staff to patients (RATE4)	2.16	1.84	.0528

1 = Strongly Agree
 5 = Strongly Disagree

Group 1 - Random Sample of Residents in Tulsa
 Group 2 - Convenience sample of business women in Tulsa

TABLE 7
 PERCENTAGE RESPONSES OF ATTITUDINAL VARIABLES

	Group 1 %	Group 2 %	Combined %
Will attend Women's Health Care Center	80.4	86.3	83.1
Already using health care service	24.2	13.0	19.4
Agree or strongly agree that there is a need for a women's health care center in Tulsa	63.0	61.4	62.3
Agree or strongly agree that the number of health care centers in Tulsa is adequate	32.3	22.0	27.6
Agree or strongly agree that the quality of health care service in Tulsa is adequate	52.0	47.0	49.7
Disagree or strongly disagree that the quality of health care service in Tulsa is adequate	9.2	25.3	16.6
Agree or strongly agree that the cost of health care service is reasonable	18.8	29.8	23.9
Disagree or strongly disagree that the cost of health care service is reasonable	47.9	51.2	49.4
Disagree or strongly disagree that health care is of concern only when sick	85.1	82.6	84.0

Group 1 - Random Sample of Residents in Tulsa

Group 2 - Convenience sample of business women in Tulsa

TABLE 8
 MEAN SCORES ON ATTITUDINAL VARIABLES

Important factors when choosing among health care providers *

	Group 1	Group 2	Signif. Diff.	Combined
The reputation of the service	1.35	1.34	No	1.35
Personalized attention and care	1.64	1.40	.012	1.53
Price	1.76	1.76	No	1.76
Location	1.76	1.94	No	1.85
The range of services offered	1.84	1.94	No	1.89
Schedule of Programs	2.09	2.04	No	2.07
Affiliation to major hospital	2.16	2.35	No	2.25

Important influences when making a health care decision *

	Group 1	Group 2	Signif. Diff.	Combined
Family physician	1.53	1.40	No	1.47
Reputation of health care provide	1.81	1.55	.0388	1.68
Recommendation by a friend	2.11	1.89	.0263	2.00
Recommendation by family	2.19	2.01	No	2.10
Insurance company	2.94	3.10	No	3.01
Information from advertisement	3.49	3.36	No	3.42

Group 1 - Random Sample of Residents in Tulsa
 Group 2 - Convenience sample of business women in Tulsa

1 = Very Important
 5 = Very Unimportant

TABLE 9

REASONS FOR NOT USING A HEALTH CARE FACILITY

	Group 1	Group 2	Signif. Diff.	Combined %
No health problems	28.6	43.5	.050	35.0
Too busy/lack of time	25.3	34.8	-	29.4
Too expensive	20.9	15.9	-	18.8
Unaware of facilities	15.4	13.0	-	14.4
Do not like present services	8.8	5.8	-	7.5
Does not interest me	7.7	1.4	-	5.0
Inconvenient location	5.5	5.8	-	5.6

Group 1 - Random Sample of Residents in Tulsa
 Group 2 - Convenience sample of business women in Tulsa

TABLE 10

PERCENTAGE DEMAND FOR SERVICES

	Group 1 %	Group 2 %	Signif. Diff.	Combined %
Nutrition and diet information	74.3	94.2	.000	83.4
Breast screening	78.2	86.0	No	81.8
Health screening facility	72.3	81.4	No	76.5
Physician referrals/periodic check up	61.4	77.9	.015	69.0
Osteoporosis	60.4	77.9	.010	68.4
Educational programs/lecture series /workshops on medical issues	56.4	75.6	.006	65.2
Maternal/Child care	54.5	69.8	.032	54.5
Psychiatric services	50.5	59.3	No	54.5
Counseling service	48.5	61.6	No	54.5
Physical fitness	48.5	60.5	No	54.0
Workout-group classes	31.7	39.5	No	35.3
Library facilities	28.7	39.5	No	33.7
Plastic surgery center	23.8	59.3	.008	32.1
Marriage counseling	21.8	30.2	No	25.7
Children's day care center	20.8	31.4	No	25.7
Swimming pool/sauna	23.8	25.6	No	24.6
Aerobics	20.8	26.7	No	23.5
Adult day care center	14.9	31.4	.007	22.5
Swimnastics	22.8	20.9	No	21.9
Career planning	13.9	17.4	No	15.5
Jazzercise	13.9	16.3	No	15.0
Workout-one instructor to one person	8.9	18.6	.052	13.4

Group 1 - Random Sample of Residents in Tulsa

Group 2 - Convenience sample of business women in Tulsa

TABLE 11

DEMAND FOR INFORMATION ON HEALTH RELATED ISSUES

	Group 1 %	Group 2 %	Combined %
Stress management	55.2	62.8	58.8
Fitness & keeping trim	54.9	58.1	54.9
Women & cancer	51.0	39.5	50.5
Nutrition and diet	50.0	47.7	48.9
Osteoporosis	49.0	45.3	47.3
Weight control	44.8	46.5	45.6
Women and depression	38.5	50.0	44.0
Normal stages in a women's life	41.7	44.2	42.9
Nutrition	36.5	43.0	39.6
Women and self esteem	30.2	31.4	30.8
Menopause	27.1	27.9	27.5
Mid life crisis	25.0	30.2	27.5
Pre menstrual syndrome	25.0	23.3	24.2
Vaginal infections	21.9	26.7	24.2
Women and loneliness	20.8	26.7	23.6
Child development	25.0	20.9	23.1
Dealing with your husband	17.7	27.9	20.3
Women's careers	17.7	23.3	20.3
Sexually transmitted disease	13.5	18.6	15.9
After hysterectomy	11.5	19.8	15.4
Toxic shock syndrome	17.7	11.6	14.8
Women's relations with parents	10.4	18.6	14.3
Acquired immune deficiency syndrome	16.7	10.5	13.7
Cystitis	11.5	15.1	13.2
Pelvic inflammatory disease	10.4	15.1	12.6
Marriage	10.4	14.0	12.1
Birth control options	12.5	10.5	11.5
Veneral disease: the herpes epidemic	7.3	15.1	11.0
Infant development	13.5	5.8	9.9
Infertility: One in six	9.4	10.5	9.9
Rise in Caesarean sections: reasons why	8.3	10.5	9.3
Dealing with sexual harrasment	8.3	11.6	9.3
Sex education	6.3	12.8	9.3
Natural family planning	5.2	11.6	8.2
Sex after the baby	10.4	5.8	8.2
Fetal monitoring: benefits vs. risk	7.3	8.1	7.7
Post-partum blues	8.3	7.0	7.7

Group 1 - Random Sample of Residents in Tulsa
Group 2 - Convenience sample of business women in Tulsa

TABLE 12
 MOST REQUESTED TIME SCHEDULES

<u>WEEKDAYS:</u>				
	Group 1 %	Group 2 %	Signif. Diff.	Combined %
Mornings 8-12	19.6	11.6	-	16.0
Lunch 12-1	4.9	22.1	.000	12.8
Afternoons 1-5	6.9	8.9	-	7.4
Evenings 5-8	41.2	58.1	.020	48.9
Nights 8-10	17.6	31.4	.028	23.9
Any time	32.4	30.2	-	31.4
Not on week days	2.7	1.2	-	2.1
<u>WEEKENDS:</u>				
	Group 1 %	Group 2 %	Signif. Diff.	Combined %
Mornings 8-12	27.5	31.4	-	29.3
Lunch 12-1	2.9	3.5	-	3.2
Afternoons 1-5	12.7	14.0	-	13.3
Evenings 5-8	7.8	4.7	-	6.4
Nights 8-10	5.9	3.5	-	4.8
Any time	24.5	43.0	.007	33.0
Not on week ends	17.6	5.8	.014	12.2

Group 1 - Random Sample of Residents in Tulsa
 Group 2 - Convenience sample of business women in Tulsa

TABLE 13

RANKING OF SOURCES OF INFORMATION ON HEALTH CARE

<u>Ranking of present sources of information</u>				
	Group 1 %	Group 2 %	Signif. Diff.	Combined %
Magazines	60.8	74.4	.048	67.0
Physician	64.7	64.0	-	64.4
Books	42.2	50.0	-	45.7
Television	43.1	46.5	-	44.7
Pamphlets	37.3	46.5	-	41.5
Newspapers	39.2	40.7	-	39.9
Direct Mail/Newsletters	30.4	41.9	-	35.6
Friends	22.5	29.1	-	25.5
Educational seminars/lectures	14.7	19.8	-	17.0
Radio	13.7	16.3	-	14.9
Participative workshops	5.9	5.8	-	5.9
Classroom series	3.9	5.8	-	4.8
No information	2.0	4.7	-	3.2
 <u>Ranking of preferred sources of information</u>				
	Group 1 %	Group 2 %	Signif. Diff.	Combined %
Direct mail/newsletter	54.9	61.6	-	58.0
Educational seminars/Lectures	47.1	59.3	-	52.7
Pamphlets	44.1	38.4	-	41.5
Physicians	41.2	36.0	-	38.8
Participative workshops	33.3	32.6	-	33.0
Television	30.4	31.4	-	30.9
Magazines	24.5	30.2	-	27.1
Books	27.5	25.6	-	26.6
Newspapers	24.5	17.4	-	21.3
Classroom sessions	15.7	15.1	-	15.4
Friends	7.8	9.3	-	8.5
Radio	8.8	5.8	-	7.4

Group 1 - Random Sample of Residents in Tulsa
Group 2 - Convenience sample of business women in Tulsa

TABLE 14

RANKING OF PERCEPTIONS OF BEST HEALTH CARE FACILITY

	Group 1 %	Group 2 %	Combined %
Saint Francis Hospital	31.4	30.2	30.9
St. John Medical Center	27.5	20.9	24.5
Hillcrest Medical Center	18.6	23.3	20.7
Oklahoma Osteopathic Hospital	4.9	3.5	4.3
Doctor's Medical Center	2.0	2.3	2.1
City of Faith Medical Center	2.9	1.2	2.1
Tulsa Psychiatric Center	1.0	0.0	0.5
Shadow Mountain Institute	0.0	0.0	0.0
None	6.9	9.3	8.0

Group 1 - Random Sample of Residents in Tulsa
 Group 2 - Convenience sample of business women in Tulsa

TABLE 15
CORRELATION COEFFICIENTS

	GROUP 1		GROUP 2	
	Coef.	Signif.	Coef.	Signif.
OPIN1 * IMPFACT2	.329	.0011	-	-
OPIN1 * IMPFACT6	.369	.0005	-	-
OPIN1 * IMPFACT7	.461	.0001	.224	.0449
OPIN2 * IMPFACT7	.258	.0085	.221	.0158
OPIN3 * IMPFACT7	-.279	.0064	-	-
OPIN4 * IMPFACT2	-.220	.0352	-	-
OPIN4 * IMPFACT5	-.209	.0497	-	-
IMPFACT1 * RECOM4	-	-	.368	.0008
IMPFACT2 * RECOM4	-	-	.408	.0002
IMPFACT3 * RECOM3	.358	.0006	-	-
IMPFACT3 * RECOM5	.222	.0436	-	-
IMPFACT4 * RECOM5	-	-	.273	.0145
IMPFACT5 * RECOM5	-	-	.505	.0001
IMPFACT6 * RECOM3	.366	.0332	.247	.0233
IMPFACT6 * RECOM5	.242	.0257	-	-
IMPFACT7 * RECOM3	.233	.0332	-	-
IMPFACT7 * RECOM4	.417	.0001	-	-
IMPFACT7 * RECOM6	-	-	.323	.0033

Group 1 - Random sample of residents in Tulsa

Group 2 - Convenience sample of business women in Tulsa

TABLE 16

CORRELATIONS WITHIN GROUPS OF VARIABLES

	GROUP 1		GROUP 2	
	Coef.	Signif.	Coef.	Signif.
OPIN1 * OPIN2	.372	.0001	-	-
OPIN1 * OPIN3	-.203	.0451	-	-
OPIN3 * OPIN4	.249	.0232	-	-
IMPFACT1 * IMPFACT2	.423	.0001	.551	.0001
IMPFACT1 * IMPFACT4	.372	.0003	-	-
IMPFACT1 * IMPFACT5	.225	.0003	-	-
IMPFACT1 * IMPFACT7	.322	.0026	-	-
IMPFACT2 * IMPFACT6	.417	.0001	-	-
IMPFACT2 * IMPFACT7	.455	.0001	-	-
IMPFACT3 * IMPFACT5	.237	.0256	-	-
IMPFACT3 * IMPFACT6	.306	.0040	-	-
IMPFACT4 * IMPFACT5	.246	.0195	.375	.0005
IMPFACT4 * IMPFACT7	.233	.0333	-	-
IMPFACT5 * IMPFACT6	.415	.0001	.375	.0004
IMPFACT6 * IMPFACT7	.491	.0001	-	-
RECOM1 * RECOM2	.610	.0001	.549	.0001
RECOM3 * RECOM5	.350	.0011	-	-
RECOM4 * RECOM6	-	-	.396	.0003
RATE1 * RATE2	.611	.0001	.702	.0001
RATE1 * RATE3	.615	.0001	.696	.0001
RATE1 * RATE4	.375	.0052	.706	.0001
RATE1 * RATE5	.371	.0086	.644	.0001
RATE1 * RATE6	-	-	.305	.0440
RATE1 * RATE7	-	-	.337	.0308
RATE1 * RATE8	.407	.0008	.341	.0360
RATE2 * RATE3	.618	.0001	.560	.0001
RATE2 * RATE4	.517	.0001	.694	.0001
RATE2 * RATE5	.389	.0058	.657	.0001
RATE2 * RATE7	-	-	.401	.0084
RATE2 * RATE8	.454	.0008	.394	.0131
RATE3 * RATE4	.573	.0001	.584	.0001
RATE3 * RATE5	.570	.0001	.668	.0001
RATE3 * RATE6	-	-	.448	.0026
RATE3 * RATE7	-	-	.389	.0118
RATE3 * RATE8	.570	.0001	.325	.0459
RATE4 * RATE5	.684	.0001	.848	.0001
RATE4 * RATE6	-	-	.300	.0475
RATE4 * RATE7	.311	.0233	.427	.0048
RATE4 * RATE8	-	-	.492	.0014
RATE5 * RATE6	.299	.0366	.416	.0055
RATE5 * RATE7	.583	.0001	.416	.0068
RATE5 * RATE8	.436	.0035	.607	.0001
RATE6 * RATE7	.349	.0072	.471	.0016
RATE7 * RATE8	-	-	.625	.0001

Group 1 - Random sample of residents in Tulsa

Group 2 - Convenience sample of business women in Tulsa

TABLE 17

A COUNT OF THE SERVICES REQUESTED BY
THE WOMEN IN THE TWO SAMPLE GROUPS

	Group 1	Group 2	Signif. Diff.	Combined
Mean number of services requested	8.98	11.36	.0019	10.07
Mean number of health care topics on which information was sought	7.83	-	8.99	8.32
Mean number of services available at the institutions where the respondents were hospitalized	-	-	..	1.84

Group 1 - Random Sample of Residents in Tulsa
Group 2 - Convenience sample of business women in Tulsa

TABLE 18

PERCENTAGE UTILIZATION OF HOSPITALS IN TULSA

St. John's Medical Center	26.3%
Saint Francis Hospital	25.4%
Hillcrest Medical Center	9.3%
Oklahoma Osteopathic Hospital	7.6%
City of Faith Medical Center	5.1%
Doctor's Medical Center	5.1%
Other	4.2%

TABLE 19.

INFLUENCES IN THE CHOICE OF HOSPITALS

Physicians	62.0%
Self	38.9%
Spouse	9.3%
Insurance firm	5.6%
Friend	3.7%
Employer	0.9%

TABLE 20

AWARENESS OF
SERVICES AVAILABLE AT THE HOSPITAL
WHERE THE RESPONDENT WAS HOSPITALIZED

	1 %	2 %	3 %	Combined %
Nutrition and diet information	51.9	60.9	50	56.0
Educational programs / lectures / workshops on medical issues	51.9	56.5	70	49.5
Health screening facility	44.4	39.1	50	44.0
Reference material on health care	44.4	47.8	40	40.7
Physician referrals / periodic check up	32.0	26.1	40	38.5
Maternal / child care	25.9	34.8	60	37.4
Support groups	25.9	34.8	30	29.7
Intensive care for mothers and/or newborns	14.8	43.5	40	29.7
Counseling service	25.9	17.4	20	20.9
Breast clinic	25.9	13.0	100	18.7
Day care center (children/adult)	7.4	17.4	10	17.6

1 -- St. John Medical Center
 2 -- Saint Francis Hospital
 3 -- Hillcrest Medical Center
 Combined -- All Hospitals in Tulsa

TABLE 21

OVERALL FEEDBACK ON SERVICES OFFERED BY HOSPITALS

	Very Good / Good	Fair / Poor / Very Poor
Cleanliness and sanitation	90.7%	8.4%
Facilities provided	87.8%	10.4%
Convenient location	86.8%	12.2%
Range of services provided	82.1%	15.9%
Ratio of staff to patients	75.5%	22.6%
In house physician/medical care	75.5%	22.4%
Convenient time	69.3%	29.7%
Cost of the service	43.6%	55.5%

TABLE 22

COMPARATIVE EVALUATION OF HOSPITALS IN TULSA

<u>Factors</u>	<u>Saint John</u>	<u>Saint Francis</u>	<u>Hillcrest</u>	<u>Oklahoma Osteopathic</u>	<u>City of Faith</u>	<u>Doctor's Medical</u>
Facilities Provided	1.516	1.630	1.545	1.667	2.000	1.833
Cleanliness and Sanitation	1.613	1.536	1.888	1.667	1.600	1.333
Range of Services	1.679	1.704	1.700	1.667	2.000	1.667
Ratio of Staff to Patients	2.000	1.889	1.900	1.857	2.000	2.400
In-house Physician/Medical Care	1.857	1.833	1.889	1.833	2.250	1.833
Convenient Location	1.433	1.679	1.636	2.167	2.200	1.500
Cost of the Service	2.111	2.893	2.300	2.833	2.500	2.000
Convenient Time	1.840	2.000	2.143	2.200	1.500	2.000

1 = Very good
5 = Very poor

TABLE 23
CORRELATION COEFFICIENTS

	GROUP 1		GROUP 2	
	Coef	Signif	Coef	Signif
OPIN1 * RATE1	-.287	.0291	-	-
OPIN3 * RATE4	-	-	.387	.0114
OPIN4 * RATE2	-.272	.0409	-	-
OPIN4 * RATE3	-.339	.0139	-	-
OPIN4 * RATE4	-.329	.0171	-	-
OPIN4 * RATE6	-	-	.334	.0268
OPIN4 * RATE7	.410	.0021	.575	.0001
OPIN5 * RATE6	.313	.0157	-	-
IMPFACT3 * RATE4	-	-	.362	.0171
IMPFACT4 * RATE6	-.308	.0186	-	-
IMPFACT4 * RATE7	-.303	.0232	-	-
IMPFACT6 * RATE2	-	-	.302	.0466
RECOM3 * RATE4	-	-	.350	.0197
RECOM3 * RATE5	.404	.0041	.357	.0188
RECOM3 * RATE6	.390	.0025	-	-
RECOM4 * RATE5	.455	.0022	-	-
RECOM5 * RATE6	.370	.0054	-	-
RECOM6 * RATE6	.317	.0249	-.361	.0188

Group 1 - Random sample of residents in Tulsa

Group 2 - Convenience sample of business women in Tulsa

APPENDIX B
QUESTIONNAIRE



Oklahoma State University

COLLEGE OF BUSINESS ADMINISTRATION

STILLWATER, OKLAHOMA 74078
(405) 624-5064

July 3, 1986

For the Woman of the House

Dear Madam:

Attached is an important survey concerning women's health care services in Tulsa. The survey was prepared by T.V. Ramesh, a Masters of Business Administration student here at Oklahoma State University.

Your health care opinions are very important to us and we would appreciate your taking a few minutes out of your busy schedule to complete this survey. The success of T.V.'s research and the completion of his degree depends on your assistance.

Your responses to this survey are completely anonymous and will be held in the strictest confidence.

Thank you very much for your gracious assistance.

Sincerely,

Raymond P. Fisk
Associate Professor of Marketing

Attachment



The following are questions concerning women's health care. Your assistance in this survey is of great importance since it may help the development and improvement of women's health care services in Tulsa.

In this survey we make reference to a "hospital" and a "health care center". A hospital refers to an institution providing medical services of all kinds. A health care center is a wellness center providing preventive medical services such as fitness programs and educational programs.

The questions are easy to answer and require minimal recall. We urge you to answer all the questions and make comments wherever you feel necessary.

SECTION I.

1. Please respond to the following statements by indicating your personal agreement or disagreement with the opinions expressed.

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
	1	2	3	4	5
OPIN1 There is a need for a health care center exclusively for women	___	___	___	___	___
OPIN2 The number of health care centers in Tulsa is inadequate	___	___	___	___	___
OPIN3 The quality of the services at health care centers is adequate	___	___	___	___	___
OPIN4 The cost of the health care service available is reasonable	___	___	___	___	___
OPIN5 Health care is of concern only when one is sick	___	___	___	___	___

2. Which of the following woman's services do you think should be available at a hospital or a health care center in Tulsa? (You may choose more than one response)

SERV1 ___ Physical fitness	SERV13 ___ Maternal/Child care
2 ___ Aerobics	14 ___ Library facilities
3 ___ Jazzercise	15 ___ Swimming pool/sauna
4 ___ Swimnastics	16 ___ Day care center
5 ___ Workout - one instructor to one person	17 ___ Children's day care center
6 ___ Workout - group classes	18 ___ Adult day care center
7 ___ Nutrition and diet information	19 ___ Counseling service
8 ___ Health screening facilities	20 ___ Career planning
9 ___ Breast screening	21 ___ Marriage counseling
10 ___ Osteoporosis	22 ___ Plastic surgery center
11 ___ Physician referrals/periodic check up	23 ___ Psychiatric services
12 ___ Educational programs/lecture series/workshops on medical issues	
24 ___ Other (Please specify) _____	



3. If women's services were offered by a hospital or health care center, when would you like to have these activities scheduled? (You may choose more than one response)

Week daysWeek ends

- WKDAY1 ___ Any time during the weekday
 2 ___ Mornings 8 - 12
 3 ___ Lunch 12 - 1
 4 ___ Afternoons 1 - 5
 5 ___ Evenings 5 - 8
 6 ___ Nights 8 - 10
 7 ___ Not on week days

- WKEND1 ___ Any time during the weekend
 2 ___ Mornings 8 - 12
 3 ___ Lunch 12 - 1
 4 ___ Afternoons 1 - 5
 5 ___ Evenings 5 - 8
 6 ___ Nights 8 - 10
 7 ___ Not on week ends

4. Which of the following health related issues would you like to know more about? (you may choose more than one response)

- | | |
|------------------------------------------------|--------------------------------------------|
| ISSUE1 ___ Osteoporosis | ISSUE20 ___ Sexually transmitted disease |
| 2 ___ Stress management | 21 ___ Toxic Shock syndrome |
| 3 ___ Fitness & keeping trim | 22 ___ Acquired Immune deficiency syndrome |
| 4 ___ Child development | 23 ___ Mid life crisis |
| 5 ___ Nutrition | 24 ___ Nutrition & Diet |
| 6 ___ Pre Menstrual Syndrome | 25 ___ Cystitis |
| 7 ___ Menopause | 26 ___ Vaginal infections |
| 8 ___ Dealing with your husband | 27 ___ Pelvic inflammatory disease |
| 9 ___ Marriage | 28 ___ Sex education |
| 10 ___ Birth control options | 29 ___ Infant development |
| 11 ___ Natural family planning | 30 ___ Dealing with sexual harassment |
| 12 ___ Fetal monitoring: benefits vs risk | 31 ___ Women & cancer |
| 13 ___ Rise in Caesarean sections: reasons why | 32 ___ Normal stages in a women's life |
| 14 ___ Infertility: One in six | 33 ___ Women and depression |
| 15 ___ Post Partum blues | 34 ___ Women and loneliness |
| 16 ___ Sex after the baby | 35 ___ Women's relations with parents |
| 17 ___ After hysterectomy | 36 ___ Women and self esteem |
| 18 ___ Venereal Disease: the Herpes epidemic | 37 ___ Women's careers |
| 19 ___ Weight control | 38 ___ Other (Please specify) _____ |

SECTION II.

1. Would you choose to attend a health care center whose services are devoted to women?

ATTEND 1 Yes 2 No

2. How would you like to receive health care information? (You may choose more than one response)

- | | |
|-------------------------------------------|-------------------|
| FTINFO1 ___ Educational seminars/lectures | FTINFO7 ___ Books |
| 2 ___ Participative workshops | 8 ___ Newspapers |
| 3 ___ Direct mail/newsletters | 9 ___ Pamphlets |
| 4 ___ Classroom sessions | 10 ___ Physicians |
| 5 ___ Television | 11 ___ Friends |
| 6 ___ Radio | 12 ___ Magazines |

3. From what sources do you presently receive health care information? (You may choose more than one response)

- | | |
|-------------------------------------------|-----------------------|
| PRINFO1 ___ Educational seminars/lectures | PRINFO8 ___ Books |
| 2 ___ Participative workshops | 9 ___ Newspapers |
| 3 ___ Direct mail/newsletters | 10 ___ Magazines |
| 4 ___ Classroom sessions | 11 ___ Pamphlets |
| 5 ___ Television | 12 ___ Friends |
| 6 ___ Radio | 13 ___ No information |
| 7 ___ Physician | |

4. Which of the following factors are important to you when choosing from among health care services. Please indicate the degree of importance from very important to very unimportant.

	Very Important	Important	Indifferent	Unimportant	Very Unimportant
	1	2	3	4	5
ACT1 Location	___	___	___	___	___
2 Price	___	___	___	___	___
3 Affiliation to major hospital	___	___	___	___	___
4 The range of services offered	___	___	___	___	___
5 The reputation of the service	___	___	___	___	___
6 Personalized attention and care	___	___	___	___	___
7 Schedule of programs	___	___	___	___	___

5. Given a choice of health care providers, which of the following would be important in your making a decision? Please indicate the degree of importance from very important to very unimportant.

	Very Important	Important	Indifferent	Unimportant	Very Unimportant
	1	2	3	4	5
M1 Recommendation by a friend	___	___	___	___	___
2 Recommendation by family	___	___	___	___	___
3 Your family physician	___	___	___	___	___
4 Information from advertisement	___	___	___	___	___
5 Reputation of health care provider	___	___	___	___	___
6 Insurance company	___	___	___	___	___

6. Which one of the following local facilities do you perceive as your best health care provider?

- 1 Doctor's Medical Center
- 2 Oklahoma Osteopathic Hospital
- 3 Shadow Mountain Institute
- 4 Tulsa Psychiatric Center
- 9 None
- 10 Other (Please specify) _____
- 5 Hillcrest Medical Center
- 6 Saint Francis Hospital
- 7 St. John's Medical Center
- 8 City of Faith Medical Center

7. If you are not using the services of a health care provider, which of the following describes your reasons?

- NOTUSE1 ___ unaware of facilities
- 2 ___ too busy/lack of time
- 3 ___ does not interest me
- 4 ___ inconvenient location
- 5 ___ do not like present services
- 6 ___ no health problems
- 7 ___ too expensive
- NOTUSE8 ___ check here if you are using such a service

Have you personally used the services of a hospital in the past twelve months?

- 1 Yes
 - 2 No
- If No, please skip to section IV on page 4

SECTION III.

1. Which of the following hospitals did you use last?

- 1 Doctor's Medical Center
- 2 Hillcrest Medical Center
- 3 Oklahoma Osteopathic Hospital
- 4 Saint Francis Hospital
- 5 Shadow Mountain Institute
- 6 St. John's Medical Center
- 7 Tulsa Psychiatric Center
- 8 City of Faith Medical Center
- 9 Other (Please specify) _____

2. When you were last hospitalized, who influenced your choice of hospital? (Please check all that apply)

- | | | | |
|--------|----------------------------------|--------|---------------|
| INFLN1 | ___ Self | INFLN4 | ___ Physician |
| 2 | ___ Insurance Firm | 5 | ___ Spouse |
| 3 | ___ Employer | 6 | ___ Friend |
| 7 | ___ Other (please specify) _____ | | |

3. Which of the following services are presently being offered at the hospital you visited? (You may choose more than one response)

- | | | | |
|--------|---------------------------------------------------------------|--------|------------------------------------------------|
| OFSEV1 | ___ Nutrition and diet information | OFSEV7 | ___ Reference material on health care |
| 2 | ___ Health screening facilities | 8 | ___ Day care center (Children/Adult) |
| 3 | ___ Physician referrals/periodic check up | 9 | ___ Counseling service |
| 4 | ___ Support groups | 10 | ___ Breast clinic |
| 5 | ___ Maternal/Child care | 11 | ___ Intensive care for mothers and/or newborns |
| 6 | ___ Educational programs/Lectures/workshops on medical issues | | |

4. How would you rate the services of your hospital with respect to the criteria listed below? Please indicate your response by checking the appropriate level in the scale alongside each criteria.

		Very Good	Good	Fair	Poor	Very Poor
		1	2	3	4	5
RATE1	Facilities provided	___	___	___	___	___
2	Cleanliness and sanitation	___	___	___	___	___
3	Range of services provided	___	___	___	___	___
4	Ratio of staff to patients	___	___	___	___	___
5	In house physician/medical care	___	___	___	___	___
6	Convenient Location	___	___	___	___	___
7	Cost of the service	___	___	___	___	___
8	Convenient time	___	___	___	___	___

ILD If you are in a child bearing age (18 to 45 years) please answer Section IV. If not, please skip to section V.

SECTION IV.

1. If you visited a hospital for delivery of a baby would you want your baby: (a) 1 To remain with you (b) 2 Be taken to the nursery

If you chose (b) then please skip to question 5.

2. Please indicate your preference on the type of room you would like to have? 1 Private room 2 Semi-private room

3. In the post partum room would you like the nurse attending to you, to take care of your baby too in the same room? 1 Yes 2 No

4. Would you want your baby returned to the nursery during the nights? 1 Yes 2 No

5. Would you prefer to remain in the same room for your delivery, post partum care, and to be discharged from the same room? 1 Yes 2 No

6. For how long would you prefer to stay in the hospital, when you are admitted for delivering a baby? 1 24 hours 2 48 hours 3 3 days 4 over 3 days

7. Would you like a nurse to visit you and your baby at home for a health checkup after discharge? 1 Yes 2 No

SECTION V. (Please answer this section last)

1. How much do you and your family spend on medical expenses each month? (including: Medical insurance, prescriptions, hospital fees, etc.)

MEDICAL	<u>1</u> \$ 1 - \$ 25	<u>5</u> \$ 201 - \$ 301
	<u>2</u> \$ 26 - \$ 50	<u>6</u> \$ 301 - \$ 400
	<u>3</u> \$ 51 - \$ 100	<u>7</u> \$ 401 - \$ 500
	<u>4</u> \$ 101 - \$ 200	<u>8</u> Greater than \$ 500

2. How much do you and your family spend on preventive health care expenses each month? (including: Fitness programs, educational programs, etc.)

CARE	<u>1</u> \$ 1 - \$ 25	<u>5</u> \$ 201 - \$ 301
	<u>2</u> \$ 26 - \$ 50	<u>6</u> \$ 301 - \$ 400
	<u>3</u> \$ 51 - \$ 100	<u>7</u> \$ 401 - \$ 500
	<u>4</u> \$ 101 - \$ 200	<u>8</u> Greater than \$ 500

3. Do you have a regular family physician?

PHYSIC	<u>1</u> Yes	<u>2</u> No
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4. Do you have a regular gynecologist/obstetrician?

GYNEC	<u>1</u> Yes	<u>2</u> No
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5. What is your marital status?

MARITAL	<u>1</u> Married	<u>3</u> Divorced
	<u>2</u> Widowed	<u>4</u> Single

6. What is your age?

AGE	<u>1</u> Under 18 years	<u>5</u> 46 - 55 years
	<u>2</u> 18 - 25 years	<u>6</u> 56 - 65 years
	<u>3</u> 26 - 35 years	<u>7</u> Over 65 years
	<u>4</u> 36 - 45 years	

7. How long have you lived in Tulsa?

RESIDE	<u>1</u> Less than 1 year	<u>4</u> 11 to 20 years
	<u>2</u> 1 to 5 years	<u>5</u> Over 20 years
	<u>3</u> 6 to 10 years	

8. Which of the following describes your weekly work pattern?

WORKHRS	<u>1</u> 1 - 9 hours	<u>5</u> 40 - 49 hours
	<u>2</u> 10 - 19 hours	<u>6</u> 50 - 59 hours
	<u>3</u> 20 - 29 hours	<u>7</u> 60 - 69 hours
	<u>4</u> 30 - 39 hours	<u>8</u> 70 - 79 hours

9. Which of the following best describes your work?

POSITION	<u>1</u> Sales/Retail	<u>4</u> Professional/Technical
	<u>2</u> Administrative	<u>5</u> Secretarial
	<u>3</u> Homemaker	
	<u>6</u> Other (Please specify) _____	

10. What is your total annual household income?

INCOME	<u>1</u> Less than \$ 10,000	<u>4</u> \$ 30,001 - \$ 40,000
	<u>2</u> \$ 10,001 - \$ 20,000	<u>5</u> \$ 40,001 - \$ 50,000
	<u>3</u> \$ 20,001 - \$ 30,000	<u>6</u> Greater than \$ 50,000

11. What is the highest level of education that you have completed?

EDUCATE	<u>1</u> Some high school or less	<u>4</u> College graduate
	<u>2</u> High school graduate	<u>5</u> Some post graduate
	<u>3</u> Some college education	<u>6</u> Post graduate

PLEASE MAIL THIS QUESTIONNAIRE IN THE PROVIDED POSTAGE PAID ENVELOPE.

THANK YOU VERY MUCH FOR YOUR GENEROUS ASSISTANCE.

THIS SURVEY DOES NOT REFLECT ANY OFFICIAL POLICY OR STATEMENT OF OKLAHOMA STATE UNIVERSITY.

VITA

T. V. RAMESH

Candidate for the degree of
Master of Business Administration

Report: WOMEN'S HEALTH CARE SERVICE:
A MARKET NEED ANALYSIS

Personal Data: Born in Bombay, India, March 6, 1959.

Education: Graduated from Little Angels' High School, Bombay,
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Graduated from Indian Institute of Technology, Bombay,
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Professional

Experience: Worked as a Sales Engineer for Greaves Foseco Ltd.,
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Worked as a Sales Engineer for Thermax Private Limited,
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