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THE DEVELOPMENT AND IMPLEMENTATION  
OF AN IMPROVED INFORMATION FEEDBACK SYSTEM  
AT USAF MEDICAL CENTER WRIGHT-PATTERSON  
WRIGHT-PATTERSON AFB, OHIO

"REPRODUCED AT GOVERNMENT EXPENSE"

A Graduate Management Project  
Submitted to the Faculty of  
Baylor University  
In Partial Fulfillment of the  
Requirements for the Degree  
of  
Master of Health Administration  
by  
Captain James P. Morgan, USAF, MSC  
December 1990

91-03804



DISSEMINATION STATEMENT A  
Approved for public release;  
Distribution Unlimited

**REPORT DOCUMENTATION PAGE**

Form Approved  
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION  
N/A

1b. RESTRICTIVE MARKINGS  
N/A

2a. SECURITY CLASSIFICATION AUTHORITY  
N/A

2b. DECLASSIFICATION/DOWNGRADING SCHEDULE  
N/A

3. DISTRIBUTION/AVAILABILITY OF REPORT  
UCLASSIFIES/UNLIMITED

4. PERFORMING ORGANIZATION REPORT NUMBER(S)  
1-87

5. MONITORING ORGANIZATION REPORT NUMBER(S)

6a. NAME OF PERFORMING ORGANIZATION  
U.S. Army Medical Center

6b. OFFICE SYMBOL (If applicable)

7a. NAME OF MONITORING ORGANIZATION  
U S .ARMY - BAYLOR UNIVERSITY GRADUATE PROGRAM IN HEALTH CARE ADMINISTRATION

6c. ADDRESS (City, State, and ZIP Code)  
U.S. Medical Center  
Wright - Patterson AFB, OHIO 45433-5300

7b. ADDRESS (City, State, and ZIP Code)  
AHS  
SAN ANTONIO, TEXAS 78234-6100

8a. NAME OF FUNDING/SPONSORING ORGANIZATION

8b. OFFICE SYMBOL (If applicable)

9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER

8c. ADDRESS (City, State, and ZIP Code)

10. SOURCE OF FUNDING NUMBERS

|                     |             |          |                         |
|---------------------|-------------|----------|-------------------------|
| PROGRAM ELEMENT NO. | PROJECT NO. | TASK NO. | WORK UNIT ACCESSION NO. |
|---------------------|-------------|----------|-------------------------|

11. TITLE (Include Security Classification)  
THE DEVELOPMENT AND IMPLEMENTATION OF AN IMPROVED INFORMATION FEEDBACK SYSTEM AT USAF MEDICAL CENTER WRIGHT-PATTERSON AFB, OHIO

12. PERSONAL AUTHOR(S)  
James P. Morgan

13a. TYPE OF REPORT  
Final

13b. TIME COVERED  
FROM 12-89 TO 12-90

14. DATE OF REPORT (Year, Month, Day)  
December 1990

15. PAGE COUNT  
73

16. SUPPLEMENTARY NOTATION

| 17. COSATI CODES |       |           | 18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) |
|------------------|-------|-----------|---|
| FIELD            | GROUP | SUB-GROUP |   |
|                  |       |           |   |
|                  |       |           |   |

Customer Perceptions, PAT,

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

See Attached

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT  
 UNCLASSIFIED/UNLIMITED  SAME AS RPT  DTIC USERS

21. ABSTRACT SECURITY CLASSIFICATION  
N/A

22a. NAME OF RESPONSIBLE INDIVIDUAL  
CPT James P. Morgan

22b. TELEPHONE (Include Area Code)

22c. OFFICE SYMBOL

ABSTRACT

Much time and effort was being expended to collect information pertaining to customer perceptions of the quality of service provided at USAF Medical Center Wright-Patterson. Unfortunately, the information gathered was not always analyzed, interpreted, and used to improve the services being provided. In most cases, the information was neither used effectively at the department level to make operational decisions, nor was it being forwarded to executive management so that they could use it to make strategic management decisions.

The author of this paper served as a member of and recorder for a process action team (PAT) tasked by the medical center commander to develop a facility-wide system to gather and report customer perception information in a manner that facilitates decision making. The PAT used statistical process control principles to develop and implement this new system.

The previous system of information collection and reporting was compared to the new system using a questionnaire designed to measure managers' satisfaction with each system. The questionnaires were sent to 58 managers throughout the medical center. The managers selected to participate in this study were chosen because they held positions of enough importance to be included on the medical center organization chart. A t-test was used to compare the mean scores from each survey.

The results of the comparison between the two systems found that the managers' level of satisfaction with the new system was significantly higher than was their level of satisfaction with the old system. Extrapolation of these findings indicate that the new system for gathering and reporting patient perception information may be superior to the previous system.

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| By _____           |                                     |
| Distribution _____ |                                     |
| Availability Codes |                                     |
| Dist               | Avail and/or Special                |
| A-1                |                                     |

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SGHI, Infection Control Officer  
SGHO, Quality Assurance Coordinator  
SGP, Director, Aeromedical Services  
SGPH, Chief, Hyperbaric Medicine  
SGPF, Chief, Flight Medicine  
SGPM, Chief, Environmental Health  
SGPO, Chief, Occupational Medicine  
SGT, Director, Physiological Training  
SGB, Director, Bioenvironmental Engineering  
SGD, Director, Dental Services  
SGE, Director, Medical Education

TABLE OF CONTENTS

|   | PAGES |
|---|-------|
| ACKNOWLEDGMENTS.....                      | iv    |
| ABSTRACT.....                             | vi    |
| CHAPTER                                   |       |
| I. INTRODUCTION.....                      | 1     |
| Conditions Which Prompted the Study.....  | 1     |
| Statement of the Management Question..... | 2     |
| Review of the Literature.....             | 3     |
| Purpose Statement.....                    | 17    |
| II. METHODS AND PROCEDURES.....           | 19    |
| Subjects.....                             | 19    |
| Study Design.....                         | 19    |
| Data Collection.....                      | 20    |
| Statistical Analysis.....                 | 21    |
| III. RESULTS.....                         | 23    |
| Response to the Survey.....               | 23    |
| Demographic Data.....                     | 24    |
| Results of Statistical Analysis.....      | 27    |
| Results of Open-Ended Questions.....      | 32    |
| IV. DISCUSSION.....                       | 34    |
| Discussion of Response Rates.....         | 34    |
| Discussion of Demographic Results.....    | 34    |
| Discussion of Statistical Analysis.....   | 38    |
| Discussion of Open-Ended Questions.....   | 39    |
| Utility of the Results.....               | 41    |
| V. CONCLUSIONS AND RECOMMENDATIONS.....   | 44    |
| Conclusions.....                          | 44    |
| Recommendations.....                      | 45    |
| VI. REFERENCES.....                       | 47    |
| DEFINITIONS.....                          | 50    |

TABLE OF CONTENTS

PAGES

LIST OF TABLES

Table 1: Survey Response Rates.....23  
Table 2: Rank Category of Respondents.....25  
Table 3: Organizational Position of Respondents.....26  
Table 4: Professional Affiliation of Respondents.....26  
Table 5: Job Category of the Respondents' Subordinates.....27  
Table 6: Analysis of Question 5.....28  
Table 7: Analysis of Question 6.....29  
Table 8: Analysis of Question 7.....29  
Table 9: Analysis of Question 8.....30  
Table 10: Analysis of Question 9.....30  
Table 11: Analysis of Question 10.....31  
Table 12: Analysis of Combined Responses.....31

APPENDIX

A. Survey Instrument.....53  
B. Process Action Team Recommendations to the Executive  
Committee.....54  
C. New Inpatient and Outpatient Questionnaires.....58  
D. List of Study Participants.....59

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## ACKNOWLEDGMENTS

Many people were responsible for making my administrative residency a success. Their support, encouragement, and assistance made this program both educational and enjoyable.

I am very grateful to Colonel Terence T. Cunningham III, my preceptor. Colonel Cunningham provided the leadership, guidance and insight that is vital for any young Medical Service Corps officer. Observing his actions as the medical center administrator was an education in itself.

I must also thank Major Donald W. Shields, the Associate Administrator for Resources, for serving as my co-preceptor. Major Shields was always there to answer my questions, provide additional advice and guidance, and to serve as the initial sounding board off of whom I could bounce thoughts and ideas.

Key to any Baylor student's success is the advisor. I was fortunate in having Lt Colonel David G. Bodenbender as my advisor. His help this past two years is much appreciated.

I owe much to the staff of the USAF Medical Center Wright-Patterson library. Their timely response in obtaining the books and articles I requested made my research efforts almost easy.

I am also deeply indebted to the members of the Feedback Loop Process Action Team. It was a real pleasure working with this

dedicated group of professionals on a project that will have such a positive impact on the entire medical center.

Most of all, I would like to thank my wife, Vicki. Without her support and belief in me, this past two years would have been much more difficult than it already was. Her patience, understanding, and encouragement allowed me to concentrate on the job at hand while she managed the rest of our lives.



ABSTRACT

Much time and effort was being expended to collect information pertaining to customer perceptions of the quality of service provided at USAF Medical Center Wright-Patterson. Unfortunately, the information gathered was not always analyzed, interpreted, and used to improve the services being provided. In most cases, the information was neither used effectively at the department level to make operational decisions, nor was it being forwarded to executive management so that they could use it to make strategic management decisions.

The author of this paper served as a member of and recorder for a process action team (PAT) tasked by the medical center commander to develop a facility-wide system to gather and report customer perception information in a manner that facilitates decision making. The PAT used statistical process control principles to develop and implement this new system.

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## CHAPTER I

INTRODUCTIONConditions Which Prompted the Study

It is most important that managers possess a clear understanding of their customers' perceptions of the services being offered by the organization. This knowledge must include an understanding of how the customer perceives the services currently being offered, and what services the customer would like to be offered in the future. Without this understanding, the organization will lose sight of its goals, drifting aimlessly, until it is eliminated by the competition.

Members of the Executive Committee of USAF Medical Center Wright-Patterson became concerned that they were not being provided this critical information. The truth was, many sections and departments were collecting information, as evidenced by the fact that there were more than a dozen different questionnaires being circulated throughout the facility. Unfortunately, these questionnaires were not standardized, had not been tested for validity and reliability, and were not routinely used by department managers to monitor and improve service. To make matters worse, no mechanism existed to consolidate the information being gathered by the various departments and report findings to executive management so that strategic management decisions could be made based upon customer input.

In July 1989, the medical center commander established a process action team (PAT) to examine the current system of gathering customer feedback and to make improvements in the system. The purpose statement ultimately adopted by the PAT was to "create a facility-wide system to elicit and collect perceptions of services from external customers, and to create a system that would report, in a timely manner and in a usable format, that feedback to appropriate persons/functions/departments."

Not to be forgotten by the members of the PAT was that they too had a customer; the members of the medical center management team. For the PAT's efforts to be considered successful, the new system would have to be better than the old system. This determination had to be made objectively, and had to be made by those whose opinions counted; the PAT's customers. The fact that the members of the PAT thought that the new system was superior to the old system was irrelevant. A device to objectively measure managers' level of satisfaction with both the old and new systems had to be developed and used, and the findings had to be compared to see if the new system was superior to the old.

Statement of the Management Question

This study addresses the question "Is the new customer perception feedback system, as developed and implemented by the Feedback Loop Process Action Team, superior to the system which it replaced". In other words, did the Feedback Loop PAT succeed in its

efforts to design and implement a better system for gathering and reporting customer perceptions to the members of the medical center's management team?

#### Review of the Literature

Lew Young, the Editor-in-Chief of Business Week, stated that "Probably the most important management fundamental that is being ignored today is staying close to the customer to satisfy his needs and anticipate his wants" (Peters and Waterman, 1982, p. 156). In an attempt to avoid this mistake, the health care industry began studying patient satisfaction in the late 1950s. Terms such as "patient advocacy," "guest relations," and "service quality" appeared in the literature and were discussed in medical facilities (Rempusheski, Chamberlain, Picard, Ruzanski, & Collier, 1988).

This intense interest over the past three decades generated a better understanding of the needs and desires of the medical industry's customers. This better understanding has been beneficial for both the patients and the industry. The literature suggests that these benefits fall into five broad categories: quality of care, personnel management, operational management, strategic planning, and marketing/public relations.

#### Quality of Care

The first category, quality of care, can be further subdivided into three smaller categories. These include: defining quality,

assessing the level of quality being provided, and enhancing the ability of the patient to recover.

Few patients have the ability to judge the quality of care they receive based upon the technical component of nursing and medical interventions. This, however, does not stop them from making judgments on the level of quality provided. Instead, the patient's perception, and therefore his definition, of the quality of care received is based upon other factors.

The proxy values upon which patients primarily focus usually relate to satisfaction of their basic physiologic needs. The patient frequently defines quality care as care which meets his need for a comfortable, safe and clean environment, good food, and pleasant interactions with health care workers (Strasen, 1988).

David Garvin, Associate Professor of Business Administration at the Harvard Business School, elaborates on this definition. He believes that consumers evaluate quality in "eight dimensions: performance, features, reliability, conformance, durability, serviceability, esthetics, and perceived quality" (Gross & Schaffer, 1988, p. 60). While not all of these dimensions may apply to the delivery of health care services, the majority do. Organizations seeking to define quality health care would be wise to structure their definition taking these dimensions into consideration.

Once the medical facility has defined quality, hopefully incorporating the patients' input into that definition, information

gathered from the patient population can be used to monitor adherence to quality standards. Dr. Avadis Donabedian, author of several books on quality in health care, stated that "achieving and producing health and satisfaction, as defined for its individual members by a particular society or subculture, is the ultimate validator of the quality of care" (Cleary & McNeil, 1988, p. 25).

One way of including patient perceptions in the evaluation of quality care would be to include patient satisfaction standards in departmental quality assurance standards. Patient satisfaction ratings could then be brought to the attention of the facility's Quality Assurance Committee. Another method would be to develop specific indicators related to activities such as response time to call lights, provision of a clean and restful environment, serving appetizing food, and conveyance of a courteous, caring attitude by the health care staff. Failure to attain an acceptable level of performance in these areas may signal a decrease in the quality of care (Strasen, 1988).

An actual example of applying patient research to develop measures of quality occurred at the 518-bed Norton Hospital in Louisville, Kentucky. Using input gathered from its patients, the emergency department developed "four measures of quality: prompt registration, minimal time in the waiting room, caring nurses and physicians, and constant reports to family members about the patient's condition" (Perry, 1988, p. 33). Standards were developed

for each of these measures, and performance was rated against these standards.

Dr. Martin D. Merry, a private consultant for quality assurance, prefers an integrated approach. He recommends that subjective perceptions of quality be combined with the objective evidence of quality provided by outcome data "into a single, comprehensive conceptual framework for assessing the quality of care provided by health care organizations" (Merry, 1987, p. 298). He says that although individual perceptions of care are based upon opinion rather than objective fact, they nevertheless "represent one of the essential building blocks of a comprehensive model of excellence" (Merry, p. 298).

Dr. Merry combined objective and subjective data to develop a four-quadrant grid to assess the quality of care. The upper left hand quadrant, where both objective and subjective ratings of quality are high, is the quadrant into which health care providers should strive to fall. Falling into any of the other three quadrants, by scoring low in either subjective perceptions or objective measures, or both, indicates failure to provide high quality care (Merry, 1987).

Taking patient perceptions into consideration is important, not only to define and measure quality, but also to maximize the patient's physical and emotional reaction to treatment. "Service must be viewed as a therapeutic intervention which helps patients

return to an optimal state of health" (Strasen, p. 5). There is evidence to support the theory that a satisfied patient recovers more quickly than does an unsatisfied patient.

There are two possible reasons that patient satisfaction may affect the patient's ability to recover. First, studies have demonstrated that "patients who experience powerlessness, helplessness, and loss of personal control tend to refrain from disclosing information to staff members, often to the detriment of patient care" (Fine, 1988, p. 69). Providing the patient an avenue through which they may exert some control over their surroundings, as happens in an active patient relations program, may enhance the patients' feelings of control. This, in turn, may improve their ability to cope with their illness.

The second reason that satisfaction with the delivery of care may speed recovery is that patients who are more involved in their care are "more likely to comply with treatment regimens and return for care, and, as a consequence, have better outcomes" (Cleary & McNeil, p. 31). This argument appeals to one's common sense. When something as potentially complex as medical care is involved, even slight dissatisfaction may reduce, consciously or unconsciously, compliance with instructions. Failure to strictly comply with medical instructions may have an adverse impact on the speed and completeness of recovery.



Personnel Management

The second category of benefits to be derived from a strong knowledge of patients' opinions includes insight into the personnel management function of the medical facility. This category also has several subdivisions, to include: the development of performance standards, measurement of performance against those standards, and development of training programs to improve performance in areas that have been identified as needing improvement.

Customer satisfaction is now recognized as an integral factor in achieving a successful business outcome. Because of this, managers are focusing more on the employee-customer relationship for achieving better service through enhanced employee attitudes and behavior (Speedling, McDermott, Eichhorn, & Rosenberg, 1987).

Strasen recommends that specific and measurable patient satisfaction standards be incorporated into manager and employee job descriptions (Strasen, 1988). Speedling et al. (1987) takes this idea one step further, stating that where possible, it may be advisable to establish "explicit behavioral objectives for given situations" (Speedling et al., 1987, p. 82).

Customer input is valuable in establishing work performance standards. However, it may be even more valuable as a tool to measure performance once these standards have been established. Patient questionnaires allow patients to report their observations of staff behavior. This input can be used by supervisors when

reviewing employee performance (Nelson-Wernick, Currey, Taylor, Woodbury, & Cantor, 1981).

When customer input is used to monitor performance in a multi-facility organization, this input allows executive managers to compare the performance of entire facilities against each other, or to compare units from one facility against similar units in other facilities (Casarreal, Mills, & Plant, 1986). This information can be invaluable in determining the performance level of managerial personnel, and can assist in identifying both strong and weak performers. However, caution must be used. Patient satisfaction, although extremely important, is only one aspect to consider when rating people, units, and entire organizations (Carey & Posavac, 1982).

Once performance has been evaluated, customer input should be used to develop training programs to help overcome weaknesses. This is true for the individual, the unit, and the organization. Every person on the hospital staff can use feedback to strengthen their commitment to excellent patient service.

One hospital used feedback from questionnaires to develop two new training programs for nurses; one that taught the art of answering patients' questions, and one that taught Spanish phrases to use when interacting with the largely Hispanic patient population. In one hospital chain, regional hospital administrators advise the local administrators on areas that need improving, and

then work with them to improve upon their shortcomings using the services of an organizational research consultant (Casarreal et al., 1986).

#### Operational Management

Gathering information necessary to conduct the day-to-day business of the medical facility is the third major category of benefits derived from staying close to the customer. "To the extent that judgments about the quality of care are determined exclusively by the providers of care, the health care system has limited knowledge about its overall performance" (Taylor, Nelson-Wernick, Currey, Woodbury, & Conley, 1981, p. 90). Customer feedback can yield valuable information about the functioning of the organization.

As long ago as 1962, C. G. Roswell, in his paper Indicators of Patient Opinion: A Special Report Based on a Survey of Patient Opinions, recommended a program that uses patient opinions as a managerial tool. Data gathered from questionnaires readily lends itself to a program of management by objectives. Managers can set objectives for their operation, develop standards to meet those objectives, and use feedback from customers to monitor their progress (Taylor et al., 1981).

Perry recommends an approach more in line with the Total Quality Management concept. "Each department must determine who its customers are and what they want. Then, the departments develop

systems to meet those needs, and they compile statistical measures to monitor performance" (Perry, 1988, p. 32).

Nelson-Wernick et al. (1981) support the use of questionnaires as a trend analysis tool. Questionnaires should be distributed routinely, and data compiled on a regular basis. By comparing scores for the same service over different time periods, managers can spot potential problems and take corrective action before disaster strikes. Even if the questionnaires do not identify the exact nature of the problem, they can reveal the need for further investigation (Spitzer, 1988).

#### Strategic Planning

"The patient is becoming an active participant in program development, hospital design, and determinants of patient care delivery styles" (Spitzer, p. 31). It is in this arena, strategic planning, that the fourth major category of benefits falls.

The literature is filled with examples of managers using customer input as a strategic planning tool. One example, highlighting the use of patient feedback as an aid in hospital design, involves the 852-bed University of Michigan Hospital, Ann Arbor. After surveys pointed out that patients found the old facility very confusing, they studied consumer attitudes for two years to develop the layout of a new \$300 million physical plant. Surveys taken after the opening of the new hospital indicated that patients are much more pleased with the new design (Perry, 1988).

The Lutheran Hospital of Fort Wayne found that what young mothers value in obstetrical care is different from what is often offered to them. They used this information to design a package of services that gives them what they want. Robin Kinslow-Evans, the vice president of marketing for Lutheran, said that hospitals that tailor their services to what their patients want "will become the leader in the marketplace" (Perry, p. 34).

#### Marketing and Public Relations

Using patient feedback as a marketing and public relations tool is the last category of benefits to be discussed, though it may very well be one of the most important. "Patients are perhaps the greatest potential contributors of marketing intelligence" and "can be one of the best sources of ideas on new products and services" (MacStravic, 1988, p. 19).

Teri Loudon, president of Loudon and Company, a healthcare marketing and strategy consulting firm, incorporates information gathered from patients into a total marketing plan. Her marketing basics include: identifying every possible customer segment, listing the benefits of programs and services for each of these market segments, comparing the benefits and drawbacks of your programs and services with those of your competitors, and capitalizing on your strengths and improving areas that are weak. Most importantly, these marketing basics must be used to develop programs and services directed at the needs of each customer (Loudon, 1989) Patient

surveys are one of the best ways to determine customer needs, and therefore, should be part of every marketing plan.

Patient satisfaction surveys and questionnaires also play a major role in the organization's public relations efforts. This statement is true for two reasons. First, as discovered by a hospital in suburban New York state, "simply mailing the questionnaire has a positive impact on public opinion. People perceived the hospital as interested and concerned enough about them to want their ideas and opinions" (Hunter, 1987, p. 213). It is important therefore, to "plan carefully to get as much positive publicity from the survey and the hospital's motivations as possible" (Hunter, P. 214).

The second reason that feedback gathering efforts are a good public relations tool is because satisfied patients "function as goodwill ambassadors in the community. When they engage in positive word-of-mouth advertising, they will automatically contribute to attracting new patients" (MacStravic, p. 19). The enhancement of patient satisfaction, by meeting the wants and needs of the patient as determined in patient surveys and questionnaires, can only have a positive impact on the hospital's operations and image.

#### The Feedback Loop Process Action Team Proposal

The literature clearly points out the need to stay close to the customer. With this in mind, the members of the PAT developed a program to provide managers with this information.

This program was presented to the Executive Committee in March 1990 (see Appendix B). It consisted of four parts: 1) new regulations to more clearly delineate responsibility for the various aspects of the Patient Relations program, 2) new questionnaires and surveys, 3) greater emphasis on Patient Assistance Team Members (PATMs) as the initial problem solving agency, and 4) increased emphasis on marketing.

Though there was already a regulation in effect that covered some aspects of the Patient Relations program, it was not as comprehensive or as detailed as it needed to be. The Patient Relations regulation developed by the PAT more clearly outlined responsibilities for each part of the program. It also provided detailed guidance on the use of patient questionnaires and focused surveys.

New inpatient and outpatient questionnaires were a must for the medical center. As previously mentioned, more than a dozen different patient questionnaires were being used in this facility. Unfortunately, there were good reasons for this.

The standard inpatient and outpatient questionnaires that were being used were not developed locally. As a result, they did not provide the detailed information needed to make sound management decisions. Also, because there was no central agency responsible for analyzing data and preparing reports, very little information was ever recovered from these questionnaires. What information was

being gathered was not provided to the appropriate departments. To obtain useful information from their patients, most departments were using locally developed departmental questionnaires.

These departmental questionnaires served the purpose for which they were designed; to give patient feedback to the managers for that particular department. What they did not do was feed that information up the management chain to the medical center's executive management team. Because of this shortcoming, executive managers did not have the information they needed concerning patient perceptions of the services being offered in the medical center.

To eliminate the weaknesses of both types of questionnaires, the PAT developed new inpatient and outpatient questionnaires (Appendix C). Because these were developed locally, and with substantial input from the departments, they asked the questions local managers wanted answered. Because they used forms which could be read by an optical character reader and analyzed by computer software, department-specific reports could be provided to department managers and a facility-wide report could be given to the executive management team. Tasking the Patient Relations Coordinator with responsibility for preparing these reports resolved the problem of not having someone clearly identified as the "owner" of the questionnaire program.

The third category of recommendations presented by the PAT affected the Patient Assistance Team Member program. PATMs are



those members of each section or department that have been appointed to assist patients with their questions, concerns, or complaints. In the past, PATMs did little other than referring patients to the Patient Relations Coordinator. The PAT recommended strengthening this position so that problems were addressed at the lowest possible level.

To strengthen the program, PATMs were provided with additional training and given a continuity book. The training focused on the reasons for resolving problems as quickly as possible, and on the proper way to handle patient complaints. The continuity book served as a quick reference guide when the PATM faced a situation that was out of the ordinary. Additionally, signs were placed throughout the facility identifying the PATMs and directing the patients to the PATM when they had a question or complaint.

Greater emphasis on the PATM program gave the Patient Relations Coordinator more time to devote to part four of the new program; the marketing effort.

One of the primary duties of the Patient Relations Coordinator had become marketing. The PRC needed to spend a significant amount of time talking to various organizations in the military community about the Patient Relations program. Additionally, at least one article should have been submitted each month to the base newspaper discussing some aspect of the medical center operation. It was the belief of the PAT that fewer problems would arise if the patient

population understood the services offered by the medical center, how to access those services, and how to voice comments concerning those services.

Following the presentation, the Executive Committee voted to accept all of the recommendations of the PAT. Implementation of these recommendations began in early April. Because of the time and expense involved in implementing this program, it was decided that a study would be conducted to determine whether or not this new program was superior to the method previously used.

#### Purpose Statement

The purpose of this study is to determine if a statistically significant difference existed between managers' level of satisfaction with the old customer perception feedback system and their level of satisfaction with the new feedback system. If a statistically significant difference did exist, there would be evidence to support the contention that the members of the Feedback Loop PAT were successful in designing and implementing an improved system for soliciting and reporting customer perceptions.

A secondary objective of this study was to design a valid and reliable questionnaire that other medical treatment facilities could use to measure and compare managerial satisfaction with various programs. This questionnaire should serve as a template, allowing for some adaptation without markedly decreasing its validity or reliability.

The third and final objective of this study was to develop a feedback loop system that other medical treatment facilities could use. Like the satisfaction questionnaire, the feedback loop system should be a template that other facilities could alter to meet their needs. Because this system would be designed with input from virtually every section in the medical center, and would be tested for its ability to provide managers with useful information, it could serve as an advanced starting point for others to use when custom-building their own customer perception measurement and reporting system.

## CHAPTER II

METHODS AND PROCEDURESSubjects

The managers selected to participate in this study consisted of the managers listed on the United States Air Force Medical Center Wright-Patterson Organization and Directory Chart, dated 31 July 1989 (Appendix D). The incumbent of each position listed on this chart was surveyed twice; once during November and December of 1989 to determine their level of satisfaction with the old customer perception feedback system, and once during April and May 1990 to determine their level of satisfaction with the new feedback system.

The ethical and legal rights of the subjects were stringently protected throughout the course of the study. First, the purpose of the study was clearly explained to each respondent. Second, the survey was mailed to each respondent so they could complete the survey in the privacy of their own office. Third, the respondents were not required to provide any information which could be used to trace the answers back to them. And lastly, the completed surveys were seen by no one except the author.

Study Design

The survey instrument used in this research project was developed by the author. The reliability of the instrument was

tested using a Chronbach alpha test. The r-value of .62, while not as high as desired, did indicate that the instrument achieved an acceptable level of reliability for the purposes of this study.

Validity of the survey instrument was enhanced in two ways. First, the survey instrument was designed using the techniques described in the reference book Organizational Surveys: Development and Application, developed by the Organizational Effectiveness Center and School (OECS), Fort Ord, California. Secondly, a pretest was conducted and the survey instrument was modified based upon the results of this pretest.

The final survey instrument consisted of three major sections. The first section contained four demographic questions. These questions primarily related to the respondent's position in the managerial chain. Next were six questions, answered using a five point Likert scale, designed to assess levels of satisfaction with the feedback method being studied. Finally, there were two open-ended questions for respondents to make comments and/or suggestions pertaining to the feedback system. A copy of the survey instrument can be found at Appendix A.

#### Data Collection

As previously discussed, each respondent was surveyed twice; once during November and December 1989, and once during April and May 1990. The surveys were mailed to each respondent. This method was selected to take advantage of the benefits discussed in the OECS

reference book. These benefits include: 1) more information at less cost per respondent; 2) less time expended per respondent to complete the survey; 3) the ability of the respondents to complete the survey at their convenience; 4) the guarantee of anonymity for the respondent; and 5) the elimination of interviewer bias. Though mail surveys are not without drawbacks, it was determined by the author to be the best method of obtaining the necessary feedback from managerial personnel.

#### Statistical Analysis

Both descriptive and inferential statistics were calculated using data gathered by the survey instrument. Descriptive statistics were calculated for each of the demographic questions. These statistics included: the total number of respondents that answered each question; the total number of respondents that fell into each category within each individual question; and the percentage of respondents that fell into each category for each demographic question. For example, question one asked whether the respondent was a field grade officer, a company grade officer, an enlisted member, or a civilian. The total number of respondents answering this question was fifty. Twenty one (42%) were field grade officers, seven (14%) were company grade officers, fifteen (30%) were enlisted, and 7 (14%) were civilian.

Additional descriptive statistics included the mean and standard deviation for each of the six attitudinal questions, and

the number of comments that fell into each of the broad categories developed from responses to each of the open-ended questions.

The inferential statistics calculated consisted of t-tests, comparing the means for questions five through ten on the first survey to the means for those questions on the second survey. An alpha .05 level was selected as the test level to determine the existence of statistically significant differences.

## CHAPTER III

RESULTSResponse to the Surveys

Fifty eight questionnaires were sent to study participants during each survey. Table 1 shows the response rates for both surveys. Each survey had questionnaires that were discarded because the respondents answered questions five through ten with a "Not Applicable" response.

Table 1

Survey Response Rates

|  | Survey 1 | Survey 2 |
|--|----------|----------|
| Number Questionnaires Distributed      | 58       | 58       |
| Number Questionnaires Returned         | 50       | 51       |
| Percent Questionnaires Returned        | 86.21    | 87.93    |
| Number Questionnaires Discarded        | 6        | 4        |
| Number Questionnaires Used in Study    | 44       | 47       |
| Percent Used Versus Number Distributed | 75.86    | 81.03    |



Demographic Data

Demographic data was collected using four questions. Question one asked each respondent to specify their rank category. There were four possible answers to this question; either field grade officer, company grade officer, enlisted, or civilian.

The second demographic question asked the respondents to identify the level which best describes their current position within the organizations. The respondent could choose from the following levels: 1) a member of the executive committee, 2) their immediate supervisor is a member of the executive committee, 3) their immediate supervisor reports to a member of the executive committee, or 4) other.

Question three had the respondents identify their professional affiliation. Possible answers included health care provider, administration, nursing, ancillary support, or other.

The last demographic question concerned the personnel that the respondent supervised. The respondents were asked to identify the job category into which most of their subordinates fell. Available responses were: 1) inpatient health care delivery, 2) outpatient health care delivery, 3) both inpatient and outpatient health care delivery, or 4) administration.

The purpose for asking these demographic questions was to determine if the respondents were representative of the managerial population within the medical center. It was hoped that the

demographic makeup of the sample would approximate the demographic makeup of the medical center as a whole. In general, the sample was determined to be fairly successful in representing this population. The two exceptions, evident in tables 4 and 5, are the under-representation of nursing managers and managers of inpatient functions. This will be discussed in greater detail in chapters IV and V.

Tables two through five provide a breakdown of the demographic responses. Detailed discussion of these tables can be found in chapter IV.

Table 2

Rank Category of Respondents

|  | Survey 1 | Survey 2 |
|--|----------|----------|
| Field Grade Officer (Major - Colonel)        | 21       | 21       |
| Company Grade Officer (Lieutenant - Captain) | 7        | 8        |
| Enlisted                                     | 10       | 11       |
| Civilian                                     | <u>6</u> | <u>7</u> |
| Total Respondents                            | 44       | 47       |

Table 3

Organizational Position of Respondents

|  | Survey 1 | Survey 2 |
|--|----------|----------|
| Member of Executive Committee            | 10       | 11       |
| Supervisor on Executive Committee        | 21       | 22       |
| Supervisor's Boss on Executive Committee | 9        | 10       |
| Other                                    | <u>4</u> | <u>4</u> |
| Total Respondents                        | 44       | 47       |

Table 4

Professional Affiliation of Respondents

|                      | Survey 1 | Survey 2 |
|----------------------|----------|----------|
| Health Care Provider | 9        | 9        |
| Administration       | 20       | 21       |
| Nursing              | 3        | 4        |
| Ancillary Support    | 7        | 7        |
| Other                | <u>5</u> | <u>6</u> |
| Total Respondents    | 44       | 47       |

Table 5

Job Category of the Respondents' Subordinates

|                                    | Survey 1 | Survey 2 |
|------------------------------------|----------|----------|
| Inpatient Health Care Delivery     | 2        | 2        |
| Outpatient Health Care Delivery    | 6        | 6        |
| Both Inpatient and Outpatient Care | 14       | 15       |
| Administration                     | 21       | 21       |
| Supervised No One                  | <u>1</u> | <u>3</u> |
| Total Respondents                  | 44       | 47       |

Results of Statistical Analysis

To determine if there was a statistically significant difference between the responses from the first and second surveys, the mean and standard deviation for questions five through ten were calculated. The result for each question on the first survey was compared to the result for the same question on the second survey. For example, the mean and standard deviation were calculated for question number five on the first survey. Then, the mean and standard deviation for question number five on the second survey

were calculated. These results were compared using Microstat software. The particular test performed was the Difference Between Two Group Means: Pooled Estimate of Variance.

Statistically significant differences were found to exist for each of the individual questions. Not surprisingly, when the scores for questions five through ten were added together for each of the surveys and the results for the first survey were compared to the results of the second survey using the same test, a statistically significant difference was found to exist for the grouped questions. Tables six through twelve show the results of the statistical analysis.

Table 6

Analysis of Question 5: How customers feel about my service

|                     | <u>Survey 1</u> | <u>Survey 2</u> |
|---------------------|-----------------|-----------------|
| Number of Responses | 42              | 47              |
| Mean                | 2.7381          | 3.4043          |
| Standard Deviation  | 1.1906          | 0.7984          |

Critical Values for D.F. = 90: Alpha .05 = 1.987; Alpha .01 = 2.632  
 $t(87) = 3.1294, p \leq .01$

Table 7

Analysis of Question 6: Information gathered is understandable


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|                     | <u>Survey 1</u> | <u>Survey 2</u> |
|---------------------|-----------------|-----------------|
| Number of Responses | 41              | 46              |
| Mean                | 3.0244          | 3.5000          |
| Standard Deviation  | 1.2142          | 0.7817          |

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Critical Values for D.F. = 90: Alpha .05 = 1.987; Alpha .01 = 2.632

$t(85) = 2.1955, p \leq .05$

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Table 8

Analysis of Question 7: Information is reported in a timely manner


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|                     | <u>Survey 1</u> | <u>Survey 2</u> |
|---------------------|-----------------|-----------------|
| Number of Responses | 43              | 47              |
| Mean                | 2.5349          | 3.4043          |
| Standard Deviation  | 1.0987          | 0.7419          |

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Critical Values for D.F. = 90: Alpha .05 = 1.987; Alpha .01 = 2.632

$t(88) = 4.4326, p \leq .01$

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Table 9

Analysis of Question 8: Special reports are easily generated


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|                     | <u>Survey 1</u> | <u>Survey 2</u> |
|---------------------|-----------------|-----------------|
| Number of Responses | 41              | 46              |
| Mean                | 2.3415          | 3.3913          |
| Standard Deviation  | 1.0865          | 0.8022          |

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Critical Values for D.F. = 90: Alpha .05 = 1.987; Alpha .01 = 2.632  
 $t(85) = 5.1634, p \leq .01$

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Table 10

Analysis of Question 9: The system enhances decision making


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|                     | <u>Survey 1</u> | <u>Survey 2</u> |
|---------------------|-----------------|-----------------|
| Number of Responses | 42              | 46              |
| Mean                | 2.6190          | 3.7391          |
| Standard Deviation  | 1.2288          | 0.9052          |

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Critical Values for D.F. = 90: Alpha .05 = 1.987; Alpha .01 = 2.632  
 $t(86) = 4.8971, p \leq .01$

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Table 11

Analysis of Question 10: I frequently use this feedback system


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|                     | <u>Survey 1</u> | <u>Survey 2</u> |
|---------------------|-----------------|-----------------|
| Number of Responses | 42              | 46              |
| Mean                | 2.5714          | 3.4565          |
| Standard Deviation  | 1.3460          | 0.8355          |

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Critical Values for D.F. = 90: Alpha .05 = 1.987; Alpha .01 = 2.632  
 $t(86) = 3.7408, p \leq .01$

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Table 12

Analysis of Combined Responses: Questions Five through Ten


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|                     | <u>Survey 1</u> | <u>Survey 2</u> |
|---------------------|-----------------|-----------------|
| Number of Responses | 46              | 46              |
| Mean                | 14.3913         | 20.9348         |
| Standard Deviation  | 6.5370          | 3.2139          |

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Critical Values for D.F. = 90: Alpha .05 = 1.987; Alpha .01 = 2.632  
 $t(90) = 6.0925, p \leq .01$

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### Results of Open-Ended Questions

The final two questions on the questionnaire were open-ended questions. Question 11 asked if the respondents used any of a variety of feedback systems to collect information and make managerial decisions. The options offered included: suggestion boxes, questionnaires, other (with the respondents specifying what other mechanisms were used), and "I do not use any feedback mechanisms." Question 12 gave the respondents an opportunity to comment on any aspect of the feedback system.

On the first survey, twenty four respondents provided answers to question 11. Twelve of the twenty four (50%) wrote that they used the results from questionnaires. Five (21%) responded with "other". The "other" responses fell into two categories. Two of the five said they used face-to-face discussions with their customers to gather feedback. The other three said they used the Executive Management Summary to aid in decision making. Seven respondents (29%) stated that they did not use any feedback mechanism to make managerial decisions.

Only ten respondents from the first survey answered the last question. Of these ten, eight (80%) made comments indicating that the questionnaires, in their current format, did not provide them information that could help their particular section. The other two comments (20%) indicated that the respondents did not feel that questionnaires were ever helpful in providing useful information.

The second survey had a slightly higher response rate for both questions 11 and 12. Twenty nine provided answers to question 11. Fifteen (52%) used questionnaires to collect information and make decisions. Six (21%) chose the "other" response. Two of these six used face-to-face discussions with customers to help make decisions. The other four used input from the Executive Management Summary. Eight (27%) said they did not use any feedback to aid in the decision making process.

Twenty one respondents from the second survey provided additional comments. Fifteen (71%) made positive comments about the changes in the feedback system. Four (19%) said that the system was better, but offered comments on how the system could still be improved. The other two (10%) did not believe that questionnaires were very helpful.

## CHAPTER IV

DISCUSSIONDiscussion of Response Rates

The response to these surveys was excellent considering the fact that they were mail out surveys. The gross response rates of 86.21% for the first survey and 87.93% for the second survey were considerably higher than the twenty five to forty percent return rate that the literature suggests is acceptable for a single mailing (Press and Ganey, 1989, p. 67). In fact, even the net response rates of 75.86 and 81.03 percent exceeded the range of acceptable return rates.

This response rate was high enough to allow for the generalization of results to the entire sample. Press and Ganey stated in their commentary that "a 30% return rate yields statistically valid results" (Press and Ganey, p. 67). Because of this, it is possible to conclude with a high degree of certainty that the results of the study accurately reflected the opinions of the study population.

Discussion of Demographic ResultsRank Categories

The sample population was heavily weighted in favor of officers. Twenty eight of the forty four respondents (63.6%) to the

first survey were officers. The second survey saw a similar, though slightly lower proportion of officers; twenty nine of forty seven respondents (61.7%) were officers.

Such a high proportion of officers was appropriate for this study. Virtually all of the members of the executive management team and all of the department heads at the time of the study were officers. To be able to make inferences about how senior management felt about the new system, it was important that this group was well represented in the study.

It was important, however, to have representation from among the civilian and enlisted personnel. They are frequently in charge of sections, and have a need for input from their customers. As front-line managers, they are in the position of implementing the policy decisions made by executive management. They need input on how the customers perceive the new policies and programs so that they can feed this information back to the executive management team. If these front-line managers were not satisfied with the new feedback system, it is unlikely that meaningful information would be sent forward to those that directly affect medical center policy.

#### Organizational Position

As was the case with rank categories, it was equally important to weight the sample population in favor of those holding positions

of great influence within the medical center. Because these people are the ones that actually develop policy, they must be satisfied with the system which gathers and reports feedback.

Analysis of the sample population by their organizational position revealed that the study was successful in weighting the sample in this manner. The first survey had thirty one of the forty four respondents (70.5%) either as members of the Executive Committee or working directly for a member of the Executive Committee. The second survey was equally successful, with thirty three of the forty seven respondents (70.2%) falling into these categories.

Again, it was important that lower level managers not be completely ignored. As the ones responsible for implementing policy, they must believe that the feedback system is effective in gathering and reporting the feelings and beliefs of the customers.

#### Professional Affiliation

Analysis by professional affiliation revealed the first flaw in the makeup of the sample population. While the number of health care providers, ancillary support personnel, and those in the "other" categories appeared to be appropriate, there was an underrepresentation of nursing personnel and a concurrent overrepresentation of administrative personnel.

It is probable that some of those who identified themselves as administrative personnel may have been nursing services personnel

holding administrative positions. This does not diminish the fact that there needed to be more representation from "pure" nursing managers. Nursing personnel make up approximately thirty percent of the medical center's manpower resources, yet made up only seven to eight percent of the sample population. Clearly, there needed to be more nursing service personnel in the sample.

The shortfall in nursing personnel was matched by an over-representation of administrative personnel. Approximately forty five percent of the sample population identified themselves as filling an administrative position. While this may have been appropriate if the opinions of executive managers were all that was desired, it was not appropriate for this study. Because the sample population does not accurately reflect the makeup of the managers within the medical center, it was not possible to generalize the results of the study beyond the population studied. Having too many administrators and/or too few nursing personnel may have skewed the results so that they were different than they would have been had all of the managers within the medical center been surveyed.

#### Job Category

Having an inappropriate mix of nursing personnel and administrators contributed to the other flaw in the sample population; a shortage of managers of inpatient and outpatient health care units. Because most of these units are managed by nursing personnel, the managers of these units had a limited

opportunity to participate in the study. As was already mentioned, this limits the ability to generalize the results to the managerial population of the entire medical center.

#### Discussion of the Statistical Analysis

The fact that there were statistically significant differences between the scores for each of the six questions and for the sum total of all the six questions supported the conclusion that the managers participating in the study felt that the new feedback system was superior to the old system. That the differences were statistically significant at the .01 level for all but question six was particularly encouraging. This indicated that a great deal of confidence could be placed in the results of this study.

While all six questions did show a statistically significant difference, further analysis showed that two of the questions had mean scores which increased by more than one full point on the Likert scale. These were questions eight and nine.

Question eight asked the respondent to rate how easily special reports could be generated on data gathered by each of the two feedback systems. Respondents to the second survey had a mean score of 3.39; a 1.05 point increase over the first survey.

Question nine went more to the heart of the study, asking how well the feedback system enhanced the ability to make management decisions. The mean score of 3.74 for the second survey was 1.12 points higher than was the mean score for the first survey. Because

the purpose of the feedback system is to gather and report patient/customer perceptions so that this information could be considered when making management decisions, the results from this question were very gratifying. More than any other individual question, the results from question nine support the conclusion that the PAT's efforts were successful.

#### Discussion of the Open-Ended Questions

The results of the open-ended questions also helped support the conclusion that the new feedback system was an improvement over the old system. While there was little difference between the responses for question 11, there was a dramatic change in the tone of the responses to question 12.

Question 11 asked the respondents what systems they used to collect information and make managerial decisions. That there was virtually no change in the answers from the first survey to the second is not really surprising.

Those that were using the questionnaires before continued to use information gathered from the new questionnaires. The slight increase from fifty percent of the respondents on the first survey to fifty two percent on the second survey does not appear to be significant.

Statistically, there was no change in the number of managers that used some other method to gather information. This figure remained constant at twenty one percent of the respondents. There



was a slight decrease in the percent of respondents who stated that they did not use any feedback mechanism. The two percent drop, from twenty nine percent to twenty seven percent, coincides with the increase in those that used questionnaires to gather information. However, this difference may have been attributable to the larger sample size for the second survey since the number of respondents using no feedback mechanism actually increased from seven to eight.

Question 12 gave the respondents an opportunity to comment on the two feedback systems. The response to this question was overwhelmingly in favor of the new feedback system.

On the first survey, only ten of the respondents made comments concerning the feedback system. Essentially, all of the responses were negative in nature. While eight of the ten respondents were not openly critical of the system, they did state that in its current format, it was not much help to them in the decision making process. The other two respondents did not believe that questionnaires were ever of much value.

The second survey found the comments to be much more favorable. Seventy one percent of the respondents commented that the new feedback system was very helpful. Nineteen percent said that the new system was better, but still needed more work. The remaining ten percent said that questionnaires were not a good management tool.

This shift, from virtually no positive comments on the first survey to a ninety percent positive rate, was a remarkable turnaround for the new system. While it is difficult to draw statistically valid conclusions from a "comment" question, this change in tone was indicative of improvement in the feedback system.

#### Utility of the Results

The results of this study may be used in several different ways. First, they lend evidence to support the conclusion that the new system is indeed better than the old system. Because of the large investment in time and money to develop the new system, these findings may indicate that the investment was an appropriate use of resources.

Second, this study can be repeated to test the benefit of any potential changes to the new system prior to making a long term commitment to the proposed changes. By instituting a proposed change on a trial basis, and then surveying the same respondents, it can be determined whether the change significantly benefits the managerial staff by providing better information. Again, this is important because the change may require substantial investment in time and money. Scientifically testing for the benefits of the change would allow management to make a better informed decision as to the appropriateness of the change.

Third, comparing the results of this study to those of future studies may indicate whether more changes to the feedback program

need to take place, and may indicate to whom attention must be addressed. For example, if the new system does not benefit departmental managers as much as it does executive managers, then something must be done to provide more feedback to the departmental managers.

Another benefit would be realized by analyzing the responses to the open-ended questions on future surveys. The comments and suggestions provided could be used to further refine the feedback program. The comments may also indicate what portions of the program work exceptionally well so that time spent on those areas could be put to better use elsewhere.

If repeated on an annual basis, the results of this survey would allow executive management to analyze any trends occurring in the feedback program. For instance, if a particular segment of the management team showed a three year downward trend in their scores, action could be taken to improve the feedback process for those managers. This proactive step would help ensure that all levels of management get the feedback they must have to function effectively.

Lastly, if the program developed for this medical center is significantly better than the system previously used, the mechanics of the new program can be shared with other medical treatment facilities. This could lead the way to a standardized system that would allow headquarters personnel to compare the performance of different organizations under their control. Those organizations

not doing as well as desired could be directed to strong performers for advice on how to improve their operation.

CHAPTER VCONCLUSION AND RECOMMENDATIONSConclusions

Statistical analysis and analysis of the open-ended questions did lend evidence to support the conclusion that the new customer perception feedback system, as developed and implemented by the Feedback Loop Process Action Team, was superior to the system which it replaced. There are, however, two factors which may have affected the results of this study, and these must be addressed.

First, the demographic makeup of the sample population may have affected the results. Because of the underrepresentation of certain managerial categories, it is not possible to generalize the results to the entire medical center. While the improvement was statistically significant for the sample population, this may not be the case if all the managers within the medical center are surveyed.

The second factor which may have affected the results is one which is similar to the Hawthorne Effect. As is frequently the case when attention is paid to any problem area, some positive impact may occur simply because of the attention. The results from this study may have benefited from the fact that attention was being paid to a program which many managers felt needed attention. Even taking these two factors into account, it does appear that the new system was an improvement over the old system. It also appears that the effort to design a valid and reliable questionnaire program was successful.

The new questionnaires were, without a doubt, better than the old questionnaires.

Further testing and refinement may be necessary before this program is offered as a model to other medical facilities, but USAF Medical Center Wright-Patterson now has a system which has been scientifically tested and found to be both valid and reliable. It will now be up to the managers themselves to make use of the information becoming available.

#### Recommendations

The new feedback loop system is a program still in its infancy. While the results of this study were encouraging, it is a program which will need further refinement. This refinement must be based upon scientific study. Fortunately, because of this study, future researchers have a valid and reliable survey form which they may use. Use of this form will allow for trend analysis, which will minimize any "halo" effects attributable to the Hawthorne Effect.

The first recommendation is that the sample population be changed to allow for greater representation by nursing personnel, and managers of the inpatient and outpatient health care units. This additional representation may come either in addition to the current sample population, or at the expense of the administrative personnel.

Once the sample population has been refined, a third survey, conducted by the Patient Relations Coordinator, should take place.

This survey should occur no sooner than November 1990 and should be completed by March 1991. After this survey, additional surveys should be conducted on an annual basis.

Close attention should be paid to the results of these future surveys. One of the fundamental principles of Total Quality Management is continuous process improvement. To be effective, the feedback loop system must use the results of these future surveys to make continuous improvements to the feedback loop system. This is not a program that will ever be "complete."

The last recommendation is that the feedback loop system be proliferated throughout the Department of Defense medical system if the results from future surveys continue to be positive. However, at least two more surveys should take place before consideration is given to this recommendation.

## CHAPTER VI

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DEFINITIONS

**Customer:** One who receives goods or services from an employee and/or an agent of the medical center. Customers can be internal (an employee or agent of the medical center) or external (someone not affiliated with the medical center).

**Executive Committee:** A group of fifteen persons who have been appointed to this committee because of their position in the medical center or because of their special expertise. This committee is responsible for assuring: compliance with directives; rational and efficient use of resources; appropriate identification and prioritization of current and future programs; and organizational strategic planning.

**Executive Management:** Those managers who are members of the Executive Committee, plus those who manage at the department or directorate level.

**Executive Management Summary:** A rating system in which each member of the Executive Committee rates the performance of each of the departments within the medical center. The results are tabulated and a report is prepared and provided to the department managers.

**Feedback Loops:** Any of a variety of systems used to solicit input from medical center customers and report that input to medical center managers. These systems may include questionnaires, suggestion boxes, or any other system deemed appropriate by those managers.

**Management Team:** The sum total of all managers within the medical center. Anyone who is a supervisor of personnel or other resources is considered a member of the management team.

**Patient Relations Coordinator (PRC):** The person responsible for all aspects of the Patient Relations Program. This person also functions as the patient advocate.

**Patient Relations Program:** A program designed to quickly and efficiently assist a patient who encounters problems within the health care system.

**Process Action Team (PAT):** A multidisciplinary team formed to examine a particular situation or problem. In most cases, the PAT will prepare a list of recommendations to resolve the situation or problem being studied, and will present the recommendations to either the Executive Committee, the process owner, or both. In some cases,

APPENDIX B  
PROCESS ACTION TEAM RECOMMENDATIONS  
TO THE EXECUTIVE COMMITTEE

PROCESS ACTION TEAM RECOMMENDATIONS  
TO THE EXECUTIVE COMMITTEE

- Recommendation 1: Publish a medical center regulation which specifies the processes and process owners involved in an effective questionnaire program.
- Recommendation 2: Adopt new inpatient and outpatient questionnaires.
- Recommendation 3: Have the new inpatient and outpatient questionnaires printed on forms which can be read by an optical character reader.
- Recommendation 4: Purchase an optical character reader for the Patient Relations Office.
- Recommendation 5: The Patient Relations Coordinator will analyze inpatient and outpatient questionnaires and will provide monthly reports to the Executive Committee and to appropriate department, clinic, and ward managers.
- Recommendation 6: New questionnaire collection boxes will be purchased and placed in strategic locations in waiting areas and on each ward.
- Recommendation 7: "STOP" signs will be designed to encourage patients not to leave the facility until they are satisfied with the care they received. These STOP

signs will identify PATMs for each clinical area and ward.

Recommendation 8: A customer satisfaction survey will be conducted at the Main Exchange once each year.

Recommendation 9: A mail-in customer satisfaction survey will be conducted once each year. The results from the Main Exchange survey and the mail-in survey will be compared, and trends will be tracked and reported to the Executive Committee and other appropriate managers.

Recommendation 10: The Patient Relations Coordinator will brief at Commander's Calls and at other military and social organizations in the Wright-Patterson AFB community to pass on pertinent patient relations information.

Recommendation 11: At least one article will be submitted each month to the base newspaper concerning some aspect of our medical center operation. At least twice each year these articles will discuss a topic appropriate to patient relations.

Recommendation 12: Initial and quarterly training programs will be developed and presented to Patient Assistance Team Members. A continuity book will be given to each PATM for their use.

Recommendation 13: Initial and annual patient relations training will be given to receptionists, appointment clerks and others coming in frequent contact with patients.

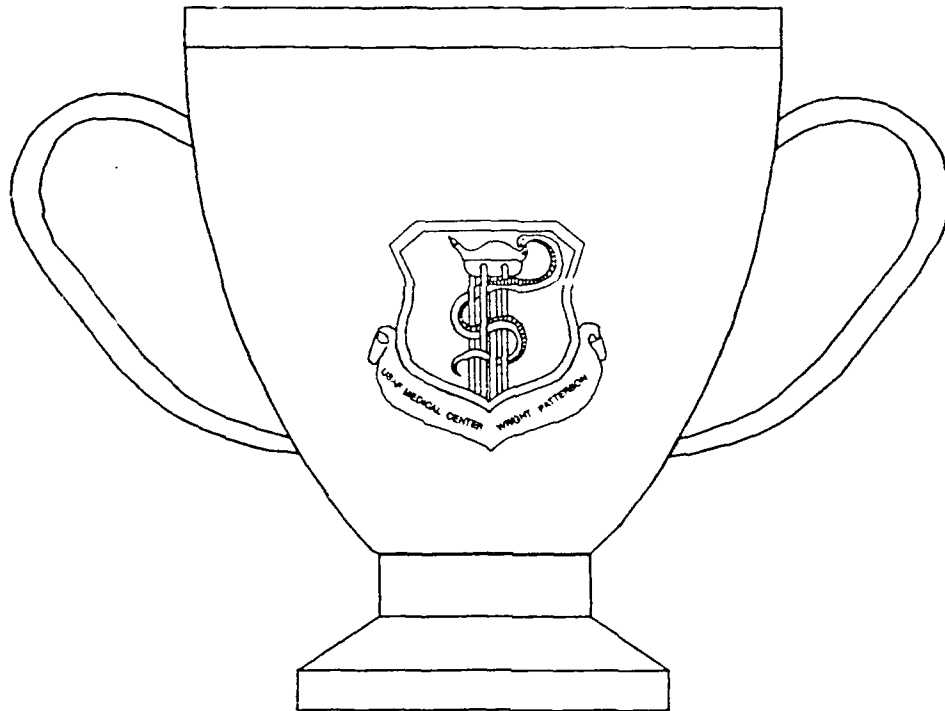


APPENDIX C

NEW INPATIENT AND OUTPATIENT QUESTIONNAIRES

# USAF MEDICAL CENTER WRIGHT-PATTERSON

## INPATIENT QUESTIONNAIRE



Our goal is to provide high quality medical care and outstanding customer service. To do this, we need to know how you feel about the care and treatment you received while in the Medical Center. Please take a few minutes to tell us what we have done right, and what we can do to improve.

If you have any concerns about the service you received while in our Medical Center, please tell the unit clerk you would like to see the Patient Assistance Team Member (PATM) for the nursing unit from which you received service.

Thank you for your time and effort.

PLEASE USE A NUMBER 2 PENCIL TO COMPLETE THIS QUESTIONNAIRE. FILL IN THE APPROPRIATE CIRCLES COMPLETELY, BEING CAREFUL NOT TO MARK OUTSIDE THE CIRCLES.

| TODAYS DATE |   |   |   |   |   |
|-------------|---|---|---|---|---|
| Y           | Y | M | M | D | D |
| 0           | 0 | 0 | 0 | 0 | 0 |
| 1           | 1 | 1 | 1 | 1 | 1 |
| 2           | 2 | 2 | 2 | 2 | 2 |
| 3           | 3 | 3 | 3 | 3 | 3 |
| 4           | 4 | 4 | 4 | 4 | 4 |
| 5           | 5 | 5 | 5 | 5 | 5 |
| 6           | 6 | 6 | 6 | 6 | 6 |
| 7           | 7 | 7 | 7 | 7 | 7 |
| 8           | 8 | 8 | 8 | 8 | 8 |
| 9           | 9 | 9 | 9 | 9 | 9 |

| YOUR STATUS   |                       |
|---------------|-----------------------|
| AIR FORCE     | <input type="radio"/> |
| ARMY          | <input type="radio"/> |
| NAVY          | <input type="radio"/> |
| OTHER         | <input type="radio"/> |
| <hr/>         |                       |
| ACTIVE DUTY   | <input type="radio"/> |
| DEPENDENT AD  | <input type="radio"/> |
| RETIRED       | <input type="radio"/> |
| DEPENDENT RET | <input type="radio"/> |
| OTHER         | <input type="radio"/> |

Unit To Which You Were Admitted

- |                               |                               |                               |                                      |
|-------------------------------|-------------------------------|-------------------------------|--------------------------------------|
| <input type="radio"/> 1 North | <input type="radio"/> 2 South | <input type="radio"/> 4 South | <input type="radio"/> MICU           |
| <input type="radio"/> 1 East  | <input type="radio"/> 2 West  | <input type="radio"/> 4 West  | <input type="radio"/> Labor/Delivery |
| <input type="radio"/> 2 North | <input type="radio"/> 3 South | <input type="radio"/> CCU     |                                      |
| <input type="radio"/> 2 East  | <input type="radio"/> 3 West  | <input type="radio"/> SICU    |                                      |

Please fill in the circle that corresponds to the rating that best describes your opinion about the following issues. If you rate any of the areas "Poor", please provide a brief explanation why you did so on the back of the questionnaire.

|  | EXCELLENT<br>1 | GOOD<br>2 | FAIR<br>3 | POOR<br>4 | N/A<br>0 |
|--|----------------|-----------|-----------|-----------|----------|
| <b>A. ADMISSIONS OFFICE</b>                |                |           |           |           |          |
| 1. Courtesy of admissions clerk            | (1)            | (2)       | (3)       | (4)       | (5)      |
| 2. Quality of answers to your questions    | (1)            | (2)       | (3)       | (4)       | (5)      |
| <b>B. ROOM ACCOMODATIONS</b>               |                |           |           |           |          |
| 3. Comfort of your room                    | (1)            | (2)       | (3)       | (4)       | (5)      |
| 4. Lighting within your room               | (1)            | (2)       | (3)       | (4)       | (5)      |
| 5. Temperature in your room                | (1)            | (2)       | (3)       | (4)       | (5)      |
| 6. Noise in/near your room                 | (1)            | (2)       | (3)       | (4)       | (5)      |
| 7. Cleanliness of your room                | (1)            | (2)       | (3)       | (4)       | (5)      |
| 8. Cleanliness of your bathroom            | (1)            | (2)       | (3)       | (4)       | (5)      |
| <b>C. NURSING PERSONNEL</b>                |                |           |           |           |          |
| 9. Professionalism of nurses               | (1)            | (2)       | (3)       | (4)       | (5)      |
| 10. Professionalism of medical technicians | (1)            | (2)       | (3)       | (4)       | (5)      |
| 11. Explanations of your care              | (1)            | (2)       | (3)       | (4)       | (5)      |
| 12. Promptness of response to your needs   |                |           |           |           |          |
| a. Days (7AM-3PM)                          | (1)            | (2)       | (3)       | (4)       | (5)      |
| b. Evenings (3PM-11PM)                     | (1)            | (2)       | (3)       | (4)       | (5)      |
| c. Nights (11PM-7AM)                       | (1)            | (2)       | (3)       | (4)       | (5)      |
| 13. Availability of escort personnel       | (1)            | (2)       | (3)       | (4)       | (5)      |
| 14. Home care instructions                 | (1)            | (2)       | (3)       | (4)       | (5)      |

|   | EXCELLENT<br>1 | GOOD<br>2             | FAIR<br>3                               | POOR<br>4 | N/A<br>0              |
|---|----------------|-----------------------|---|-----------|-----------------------|
| <b>D. PHYSICIAN STAFF</b>   |                |                       |   |           |                       |
| 15. Professionalism of physician staff  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 16. Explanation of care   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 17. Responsiveness to your questions  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| <b>E. SERVICES ON THE NURSING UNIT</b>  |                |                       |   |           |                       |
| 18. Telephone services  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 19. Mail delivery   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| <b>F. OTHER PATIENT SERVICES</b>  |                |                       |   |           |                       |
| 20. Pre-Admission Clinic  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 21. Laboratory (blood collection)   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 22. Radiology (X-Ray)   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 23. Physical Therapy  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 24. Occupational Therapy  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 25. Pharmacy  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 26. Unit Clerks   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 27. Medical Center Base Exchange  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 28. Vending Machine Area  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 29. Post Office   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| <b>G. CASHIER'S OFFICE</b>  |                |                       |   |           |                       |
| 30. Courtesy of personnel   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 31. Explanation of charges  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| <b>H. FACILITY QUESTIONS</b>  |                |                       |   |           |                       |
| 32. Overall appearance of Medical Center  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 33. Availability of parking   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| 34. Signs and directional guidance  | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| <b>I. OVERALL QUALITY</b>   |                |                       |   |           |                       |
| 35. Overall quality of the Medical Center   | (1)            | (2)                   | (3)                                     | (4)       | (5)                   |
| <b>J. GENERAL QUESTIONS</b>   |                |                       |   |           |                       |
| 36. From the time you arrived at the Admissions Office, how long did it take for you to get into your room on the nursing unit (Not applicable for emergency admissions)? |                |                       |   |           |                       |
| One hour or less  |                | <input type="radio"/> | More than two hours, but less than four |           | <input type="radio"/> |
| More than one hour, but less than two   |                | <input type="radio"/> | Four hours or more                      |           | <input type="radio"/> |
| 37. Were you given a Patient Information Brochure?  |                |                       |   |           |                       |
| YES   |                | <input type="radio"/> | NO                                      |           | <input type="radio"/> |
| 38. Is there someone you would like to specifically mention, for either positive or negative comments? (If yes, please comment on the back of the questionnaire)          |                |                       |   |           |                       |
| YES   |                | <input type="radio"/> | NO                                      |           | <input type="radio"/> |
| 39. Do you have other comments? (Please use the back of the questionnaire)  |                |                       |   |           |                       |
| YES   |                | <input type="radio"/> | NO                                      |           | <input type="radio"/> |

Explanations for questions 1-35 (If you rated any area "Poor", please explain):

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Please provide additional information to question 38 below (Is there someone you would like to specifically mention, for either or positive or negative comments?):

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Please provide other comments below:

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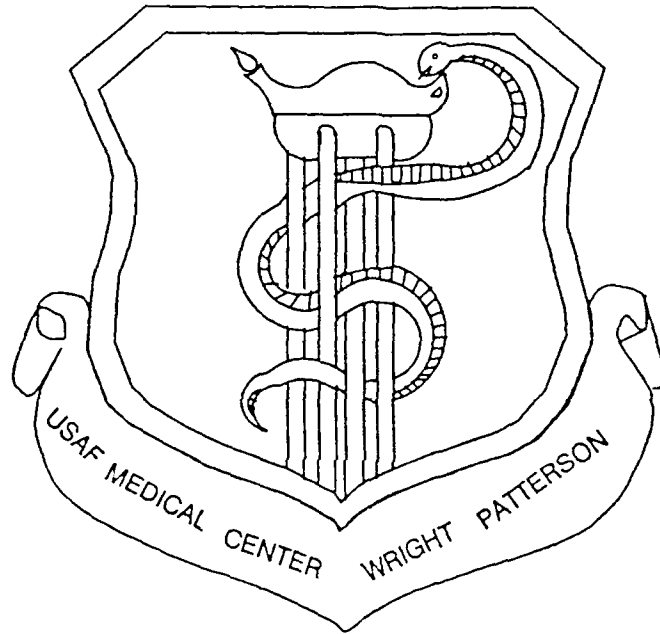
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Name (Optional): \_\_\_\_\_

Phone: \_\_\_\_\_

# USAF MEDICAL CENTER WRIGHT-PATTERSON

## OUTPATIENT QUESTIONNAIRE



Our goal is to provide high quality medical care and outstanding customer service. To do this, we need to know how you feel about the care and treatment you received while in the Medical Center. Please take a few minutes to tell us what we have done right, and what we can do to improve.

If you have any concerns about the service you received while in our Medical Center, please tell the receptionist you would like to see the Patient Assistance Team Member (PATM) for the section from which you received service.

Thank you for your time and effort.

PLEASE USE A NUMBER 2 PENCIL TO COMPLETE THIS QUESTIONNAIRE. FILL IN THE APPROPRIATE CIRCLES COMPLETELY, BEING CAREFUL NOT TO MARK OUTSIDE THE CIRCLES.

| TODAYS DATE |   |   |   |   |   |
|-------------|---|---|---|---|---|
| Y           | Y | M | M | D | D |
| 0           | 0 | 0 | 0 | 0 | 0 |
| 1           | 1 | 1 | 1 | 1 | 1 |
| 2           | 2 | 2 | 2 | 2 | 2 |
| 3           | 3 | 3 | 3 | 3 | 3 |
| 4           | 4 | 4 | 4 | 4 | 4 |
| 5           | 5 | 5 | 5 | 5 | 5 |
| 6           | 6 | 6 | 6 | 6 | 6 |
| 7           | 7 | 7 | 7 | 7 | 7 |
| 8           | 8 | 8 | 8 | 8 | 8 |
| 9           | 9 | 9 | 9 | 9 | 9 |

| YOUR STATUS   |                       |
|---------------|-----------------------|
| AIR FORCE     | <input type="radio"/> |
| ARMY          | <input type="radio"/> |
| NAVY          | <input type="radio"/> |
| OTHER         | <input type="radio"/> |
|               |                       |
| ACTIVE DUTY   | <input type="radio"/> |
| DEPENDENT AD  | <input type="radio"/> |
| RETIRED       | <input type="radio"/> |
| DEPENDENT RET | <input type="radio"/> |
| OTHER         | <input type="radio"/> |

CLINIC VISITED

- |  |   |  |  |
|--|---|--|--|
| <input type="radio"/> Allergy/Immunization | <input type="radio"/> Hematology/Oncology   | <input type="radio"/> Occupational Therapy | <input type="radio"/> Pediatrics       |
| <input type="radio"/> Dental               | <input type="radio"/> Internal Medicine "A" | <input type="radio"/> Obstetrics           | <input type="radio"/> Physical Therapy |
| <input type="radio"/> Dermatology          | <input type="radio"/> Internal Medicine "B" | <input type="radio"/> Ophthalmology        | <input type="radio"/> Plastic Surgery  |
| <input type="radio"/> EENT                 | <input type="radio"/> Mental Health         | <input type="radio"/> Optometry            | <input type="radio"/> Primary Care     |
| <input type="radio"/> Emergency Room       | <input type="radio"/> Neurology             | <input type="radio"/> Orthopedics          | <input type="radio"/> Surgery          |
| <input type="radio"/> Flight Medicine      | <input type="radio"/> Neurosurgery          | <input type="radio"/> Partnership          | <input type="radio"/> Urology          |
| <input type="radio"/> GYN                  |   |  |  |

OTHER (Please specify on the back of the questionnaire)

Please fill in the circle that corresponds to the rating that best describes your opinion about the following issues. If you rate any of the areas "Poor", please provide a brief explanation why you did so on the back of the questionnaire.

|   | EXCELLENT<br>1          | GOOD<br>2               | FAIR<br>3               | POOR<br>4               | N/A<br>0                |
|---|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <b>A. APPOINTMENT SYSTEM</b>              |                         |                         |                         |                         |                         |
| 1. Courtesy of appointment clerk          | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 2. Ease in reaching appointment clerk     | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 3. Ability to get follow-up appointment   | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| <b>B. RECORD SECTION</b>                  |                         |                         |                         |                         |                         |
| 4. Courtesy of record section personnel   | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 5. Explanation of delays                  | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| <b>C. OUTPATIENT CLINIC</b>               |                         |                         |                         |                         |                         |
| 6. Courtesy of receptionist               | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 7. Appearance of waiting area             | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 8. Waiting time to be seen                | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 9. Professionalism of medical technicians | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 10. Professionalism of nurses             | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 11. Professionalism of doctor             | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 12. Explanation of care/treatment         | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |
| 13. Explanation of home care instructions | <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 5 |

EXCELLENT 1 GOOD 2 FAIR 3 POOR 4 N/A 0

D. QUALITY OF OTHER SERVICES

- 14. Laboratory (blood collection)
15. Laboratory (other than blood collect)
16. X-Ray
17. Pharmacy
18. Refill Pharmacy
19. Physical Therapy
20. Occupational Therapy
21. Volunteers
22. Information Desk
23. Vending Machine Area
24. Hospital BX
25. Hospital Post Office

E. FACILITY ISSUES

- 26. Availability of parking
27. Directional signs in medical center
28. Overall appearance of medical center

F. OVERALL VISIT

- 29. Please rate your overall visit

G. SPECIFIC QUESTIONS

30. Did the doctor (or other healthcare provider) have your medical record at the time of your visit?

YES NO

31. Within how many minutes of your scheduled appointment time were you seen?

Within 15 minutes 15 to 30 minutes
31 to 60 minutes more than an hour

32. If the delay exceeded 15 minutes, were you given a satisfactory explanation of the reason for the delay?

YES NO

H. OTHER COMMENTS

33. Is there someone you would like to specifically mention, for either positive or negative comments? (If so, please mark the "YES" answer, and comment on the back side of the form.)

YES NO

34. Do you have other comments? (If so, please mark the "YES" answer and comment on the back side of this form.)

YES NO



Other clinic visited (from page 1): \_\_\_\_\_

Explanations for questions 1-29 (if you rated any area "Poor"):

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Please provide additional information to question 33 below (is there someone you would like to specifically mention, for either positive or negative comments?):

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Please provide other comments below:

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Name (Optional): \_\_\_\_\_ Phone: \_\_\_\_\_

APPENDIX D

LIST OF STUDY PARTICIPANTS

LIST OF STUDY PARTICIPANTS

SG, Commander  
SGO, Executive Officer  
SGA, Administrator  
SGAA, Associate Administrator  
SGAB, Associate Administrator, Resources  
SGR, Patient Administration  
SGRA, Admissions Officer  
SGRO, Outpatient Records  
SGRC, Inpatient Administration  
SGC, Managed Health Care  
SGAC, Associate Administrator, Medical Logistics  
SGLS, Medical Supply  
SGLM, Medical Equipment Management  
SGLR, Medical Equipment Maintenance  
SGLC, Central Processing and Distribution  
SGLF, Facilities Management  
SGLZ, Safety and Security  
SGLV, Transportation Operations  
SGQ, Associate Administrator, Personnel and Administration  
SGQF, First Sergeant  
SGQA, Chief of Administration  
SGQP, Personnel Services

SGQT, Training  
SGAX, Medical Readiness  
SGAX, Mobility  
SGM, Medical Resource Management  
SGMA, Management Analysis  
SGMS, Medical Service Account  
SGMB, Fiscal Management  
SGMM, Manpower and Organizational Development  
SGF, Nutritional Medicine Service  
SGID, Civilian Advisor to the Executive Committee  
SGH, Director of Hospital Services  
SGHN, Chief Nurse  
SGHH, Chief, Nuclear Medicine  
SGHC, Chief, Pediatrics  
SGHT, Chief, Orthopedic Surgery  
SGHG, Chief, Primary Care  
SGHP, Chief, Pharmacy  
SGHE, Chief, Emergency Medicine  
SGHR, Chief, Radiology  
SGHY, Chief, Physical Therapy  
SGHS, Chief, Surgery  
SGHL, Chief, Pathology  
SGHO, Chief, Obstetrics and Gynecology  
SGHM, Chief, Medicine