

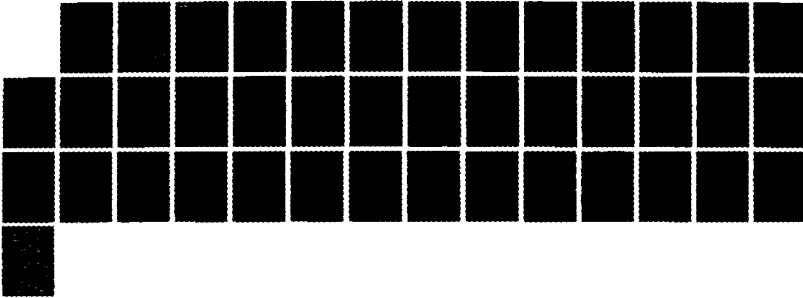
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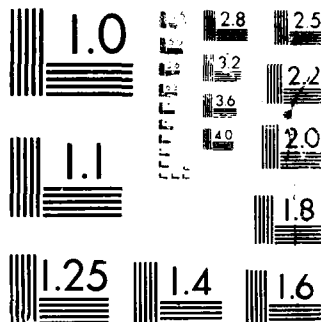
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CLINICAL INVESTIGATION ACTIVITY F. R. DANIEL AUG 83  
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A STUDY TO DETERMINE THE ACTUAL COST  
OF OPERATING THE AMBULATORY HEALTH CLINIC  
97TH GENERAL HOSPITAL, FRANKFURT, GERMANY

A Graduate Research Project  
Submitted to the Faculty of  
Baylor University  
In Partial Fulfillment of the  
Requirements for the Degree  
of  
Master of Health Administration

by

Captain (P) Ronnie M. Daniel, MSC

August 1983

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TABLE OF CONTENTS

LIST OF TABLES . . . . . ii

CHAPTER

I. INTRODUCTION . . . . .

Development of the Problem . . . . . 1

Review of the Literature . . . . . 4

Research Methodology . . . . . 7

II. DISCUSSION . . . . . 9

Study and Analysis of the Ambulatory Health Clinic . . . . . 9

Staffing . . . . . 10

Review and Analysis of Cost Data . . . . . 13

Comparison of Cost/Expense Data with the Civilian  
Health Care Sector . . . . . 19

Evaluation and Analysis of the Comparison Data . . . . . 22

III. CONCLUSIONS AND RECOMMENDATIONS . . . . . 24

Conclusions . . . . . 24

Recommendations . . . . . 25

APPENDIX

A. AMBULATORY HEALTH CLINIC UCA EXPENSE ASSIGNMENTS . . . . . 26

B. EXCHANGE RATE CONVERSION FOR CUSTODIAL CONTRACT . . . . . 29

C. CONVERSION OF LOCAL NATIONAL SALARIES EXPENSE . . . . . 31

BIBLIOGRAPHY . . . . . 33



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LIST OF TABLES

1. Ambulatory Health Clinic Authorized Staffing . . . . .	11
2. Ambulatory Health Clinic Actual Staffing . . . . .	12
3. Ambulatory Health Clinic Workload Data (Fiscal Year 1982) . .	14
4. Average Monthly Exchange Rate (Fiscal Year 1982) . . . . .	16
5. Local National Salaries (Fiscal Year 1982) . . . . .	18

## I. INTRODUCTION

### Development of the Problem

Health care institutions are currently facing a volatile economic environment which is characterized by a reduction in government spending and attempts to contain health care costs through a competitive approach. In discussing this competitive approach, it must be kept in mind that competition in health care means different things to different people. There appears, however, to be a common thread providing for similarity - less money for health care and a tougher time for providers. This is in fact a reality as the health care industry faces a decade of constrained dollars, increased pressure, a large expansion in the physician supply, and local health planning. One might predict that this would result in a multitude of changes in the manner in which health care is financed, produced, delivered and consumed.

This changing economic environment has indeed given rise to new forms of competition in the health care industry to include the growth of alternate forms of care, the growth of aftercare, and competition from micro-institutions such as health maintenance organizations, surgi-centers, emergi-centers, and other similar care methodologies.

New forms of competition have, in the past, been subjected to negative responses. Recent responses in the health care industry, however, appear to be positive in nature, resulting in attempts to improve both the quality and efficiency of care. Even though the existence of this trend is apparent, it must be noted that the overall success of this

competitive approach is, without a doubt, still in question. There are, however, strong indications that this increase in competition can be related to a definite nationwide slowdown in physician fee increases.<sup>1</sup>

Health care institutions and providers must, then, become increasingly cognizant of the business aspect of health care delivery. This fact is further fueled by the rapid growth of the corporate-owned multi-institutional hospital chains. Widespread contention indicates that through efficient management these investor-owned hospital corporations are able to keep their prices competitive to nonprofit institutions and still make a profit without sacrificing quality of care. This has had a positive effect in that it has resulted in the nonprofit hospitals having to concentrate more and more on efficient management in order to stay competitive.

Business, then, implies profit, which, in turn, requires effective and efficient management of resources at minimal cost to insure maximization of profit. Given this concept, how can we relate the business aspect of health care delivery to the military health care manager? In keeping with this, military health care managers must continuously strive to keep costs under budget as opposed to profit maximization. In this sense, military health care institutions are also functioning as businesses. Additionally, the growing trend toward competition and private enterprise in the civilian sector is definitely going to have an impact on the military health care manager. Given these trends, more and more emphasis will be placed on effective and efficient management, cost reduction, and profit maximization. This is going to cause those that control the purse

strings for the military health care sector to take an even closer look.

With this in mind, there is no question that health care costs will continue to be the target of much scrutiny. This is further fueled by the fact that the costs of illness and disease have been on a dramatic upward trend that is projected to continue. In fact, the most recent estimates of national health expenditures indicate a 400 percent increase since 1965.<sup>2</sup> The magnitude of literature on these costs should, then, not be surprising.

Given this scenario of increasing interest in health care costs, it would be extremely beneficial to the military health care manager to have some idea of how he/she stands in relation to the civilian sector. This is particularly true as justification of increased funding for the military health care sector becomes more and more difficult each year. Can a military health care clinic actually be competitive with civilian counterparts given that recipients have virtually free access to care? One mechanism of providing a measurement indicator is comparison of cost data associated with the operation of similar practices in the military and civilian sectors. Before this can be accomplished, however, the actual cost of operating a particular military clinic for a given period of time must be determined. Therein, then, lies the nature of the problem.

The problem thus becomes to determine the actual cost of operating the Ambulatory Health Clinic, 97th General Hospital, for a given period of time.

The scope of this problem has been limited to the Ambulatory Health Clinic as an appropriate clinic for evaluation. The population supported

and case mix variation in this particular clinic are appropriate for comparison with General Practices/Practitioners in the civilian sector, thus providing a mechanism for adding validity and significance to the study. Additionally, the study will also be limited, to a certain degree, by the availability of comparison data from the civilian sector. The sources will be limited to current literature review and personal contacts by the researcher. It is, however, felt that sufficient data can be obtained for the analysis.

In order to insure a comprehensive and accurate solution, both direct and indirect costs must be included in the actual cost associated with operation of the clinic. The solution must also be based on actual staffing and workload data. Additionally, costs have to be adjusted to compensate for the exchange rate established by the Department of the Army for the period under study to facilitate an accurate comparison with the civilian sector.

#### Review of the Literature

The problem of cost determination is a common one which is important to the survival of all health care institutions. With the mandate of case-mix reimbursement and a prospective payment system, this fact becomes even more significant in the civilian sector. The military health care manager must, however, continuously be aware that as the reins tighten in the civilian sector, the military will follow close behind. The significance of the problem is well documented given the magnitude of literature and texts dedicated to elaborate cost finding and rate setting techniques. It is also important to note that the significance

of the problem of cost determination can be expanded well beyond the local level.

From the national perspective, Thomas Hodgson and Mark Meiners have suggested two basic methodologies for estimating the cost of illness -- the Human Capital Approach and the Willingness-to-Pay Approach.<sup>3</sup> Briefly, the human capital approach requires estimating the direct costs of illness (i.e., the costs of prevention, detection, treatment, and rehabilitation) as well as the indirect costs to society due to lost earnings resulting from morbidity and premature mortality. Willingness-to-pay estimates, on the other hand, are based on the amounts persons would be willing to pay to reduce their risk of incurring, or dying from, a given disease or diseases. Anne Scitovsky has further commented on the topic with regards to estimating the direct costs of illness.<sup>4</sup> She basically proposes two methodologies, incidence-based and prevalence-based estimates, with regards to estimating direct costs of illness by diagnosis or diagnostic group.

Once estimates of the costs of illness and disease have been obtained, they can be utilized in cost-benefit and cost-effectiveness analyses and in other mechanisms to establish priorities, make government policy decisions, prepare and deliver congressional testimony, and to support agency budgets. In relation to cost-benefit and cost-effectiveness analyses, Herbert Klarman has expanded upon cost-effective analysis as providing a firm foundation for cost-benefit analysis in the health care sector.

As previously indicated, rate setting and cost finding must go hand in hand. Health care institutions and providers must determine

costs accurately in order to set fees/rates at a level that will insure their continued survival. The health care industry has never been more aware of this fact than at the present. This is indicated by a multitude of articles in the literature. Arthur Owens has reported on the results of a questionnaire survey indicating a tremendous slowdown in doctors' growth income.<sup>6</sup> Merian Kichner has reported on a similar survey indicating that restraint is the key with regard to physician fee increases at the present time.<sup>7</sup> To further emphasize the significance of the issue, Thomas Ranseen has proposed an emergency department holistic pricing model of which cost is a key element.<sup>8</sup>

Relating the problem of cost determination closer to the local level, Medical Group Management Association, Denver, Colorado, publishes annually a cost and productivity survey based on medical group practice expense and revenue information from the previous calendar year. This survey basically provides administrators and other health professionals information on the "cost of doing business" for medical groups.<sup>9</sup> Additionally, Hospital Administrative Services for Ambulatory Care publishes a six-month data book which provides cost data on emergency departments, outpatient clinics, and outpatient ancillary services in addition to other relevant information.<sup>10</sup>

Returning to the local level, each health care institution must have a mechanism for determining cost as previously indicated. The military currently utilizes the Uniform Chart of Accounts (UCA) which basically captures unit of service cost by work center. The UCA provides a mechanism for cost comparison between services and between the military

and civilian sector. It is this perspective of the system that adds significance and validity to the study at hand.

#### Research Methodology

The initial step involved in the research will be to study and analyze the operation of the Ambulatory Health Clinic, 97th General Hospital. This will be accomplished mainly through interviews with the clinic staff and personal observations. The staffing of the clinic will also be defined with a breakdown by job title and grade. Cost and other pertinent data associated with operation of the clinic will then be reviewed and analyzed. The Comptroller, 97th General Hospital, will be the point of contact for the majority of the cost data. Based on this information, the actual cost of operating the clinic for a period of one year will be determined. For the purpose of this study, fiscal year 1982 will be utilized. The final cost figure will contain both direct and indirect costs and will be adjusted to compensate for the exchange rate established by the Department of the Army for the period under study. This will facilitate a comprehensive and accurate study and will provide a value which is readily comparable to cost figures in the civilian health care sector in the United States. A comparison of this nature provides a mechanism for adding significant meaning to the study. In addition to compensation for the exchange rate, other cost elements will also be identified to expand or adjust the results of the survey beyond the simple reproduction of appropriate parts of the UCA Expense Accounts.

During the same period as the initial study, a literature review will also be conducted and personal contact will be made with the civilian

health care sector in order to obtain comprehensive cost data. Once this data has been obtained, a comparison will be made of the actual costs associated with the operation of similar practices in the military and civilian sectors. The basis for this comparison will be cost per patient visit. The results of this comparison will then be analyzed, and conclusions will be made based on this analysis.

#### Footnotes

<sup>1</sup>Merian Kirchner, "Fee Increases: Restraint Takes Over," Medical Economics (October 11, 1982): 218.

<sup>2</sup>Thomas A. Hodgson and Mark R. Meiners, "Cost of Illness Methodology: A Guide to Current Practices and Procedures," Milbank Memorial Fund Quarterly/Health and Society 60 No. 3 (Summer 1982): 429.

<sup>3</sup>Ibid., pp. 438-439.

<sup>4</sup>Anne A. Scitovsky, "Estimating the Direct Cost of Illness," Milbank Memorial Fund Quarterly/Health and Society 60 No. 3 (Summer 1982): 463.

<sup>5</sup>Herbert E. Klarmon, "The Road to Cost-Effectiveness Analysis," Milbank Memorial Fund Quarterly/Health and Society 60 No. 4 (Fall 1982): 599.

<sup>6</sup>Arthur Owens, "Earnings: Where Do You Fit In?" Medical Economics (September 13, 1982): 246.

<sup>7</sup>Kirchner, p. 218.

<sup>8</sup>Thomas A. Ranseen, "A Holistic Approach: Recognizing Emergency Department Price Components," Healthcare Financial Management 36 No. 12 (December 1982): 22.

<sup>9</sup>Medical Group Management Association, The Cost and Production Survey Report (1982): p. 6.

<sup>10</sup>Hospital Administrative Services for Ambulatory Care, HAS/Monitrend Six-Month National Data Book (June 1982): p. 89.

## II. DISCUSSION

### Study and Analysis of the Ambulatory Health Clinic

The Ambulatory Health Clinic, 97th General Hospital, is essentially a general outpatient clinic servicing United States military personnel and their dependents located in and around the Frankfurt Military Community. The clinic also provides services to United States government civilian employees and their dependents on a charge basis. Additionally, there are numerous United States military retirees located in and around the Frankfurt area. Given the population supported and the case mix variations encountered, the Ambulatory Health Clinic thus becomes an appropriate clinic for comparison with general outpatient practices in the civilian sector.

The clinic currently operates from 0630 to 1630 hours, Monday through Friday. This includes a split shift with certain employees working from 0630 to 1530 hours and others from 0730 to 1630 hours. The split shift allows for continuous patient care throughout the day to include the normal lunch period. Normal hours for military sick call in the clinic are from 0630 to 0830 hours. Military patients report to the clinic during these hours, sign in and have their vital signs taken. They are then triaged by a physician and given an appointment with an appropriate health care provider the same morning. Appointments are scheduled every 20 minutes beginning at 0700 hours. After receiving care, patients are required to sign out of the clinic. The sign in and out process provides a control mechanism and also provides a mechanism for accurate tabulation and substantiation of workload data.

Sick call for dependents/retirees/civilians is essentially conducted in the same manner except that normal hours are from 1200 to 1300 hours with appointments scheduled the same afternoon beginning at 1230 hours. Appointments are again scheduled every 20 minutes. In any instance where all available appointments are scheduled, additional patients are worked in whenever possible during the morning or afternoon as appropriate.

Turning to other aspects of the clinic operation, supplies are ordered through the Logistics Division, 97th General Hospital, and are maintained at an appropriate stockage level. It is important to note that the majority of the items utilized by the Ambulatory Health Clinic are standard items purchased through the normal procurement process. A negligible amount (less than 1%) are actually procured from the local economy. As for custodial services, they are provided on a contractual basis by a Local National firm. Other supporting services (i.e. medical equipment maintenance, administration, etc.) are provided by in-house hospital resources.

### Staffing

Current staffing documents define the authorized staffing of the Ambulatory Health Clinic by job title and grade as indicated in Table 1. A more accurate reflection of the actual staffing of the clinic, however, is depicted in Table 2. It must be noted at this point that patients scheduled to see the Chief, Department of Clinics, also sign in and out through the Ambulatory Health Clinic and are therefore counted as workload for the clinic. This position is, however, not reflected against the staffing documents. The significance of this point will become

<u>Job Title</u>	<u>Grade</u>	<u>MOS</u>	<u>Branch</u>
Emergency Medical Officer	03	62A	MC
Practical Nurse	E6	91C30	
Patient Care Assistant	E5	91B20	
Patient Care Assistant	E4	91B10	
Patient Care Assistant	E3	91B10	
Medical Officer	12	00602	GS
Medical Officer	01	00602	IC*
Clinical Nurse	05	00610	IC*
Clerk Typist	04	00322	IC*

\* Local National Grades

Table 1. Ambulatory Health Clinic Authorized Staffing

<u>Job Title</u>	<u>Grade</u>	<u>MOS</u>	<u>Branch</u>
Medical Officer (GMO)	13	00602	GS
Medical Officer (GMO)	13	00602	GS
Medical Officer (GMO)	KD/2	00602	IC*
Medical-Surgical Nurse	03	66H	ANC
Practical Nurse	E7	91C40	
Patient Care Assistant (3)	E5	91B20	
Patient Care Assistant (3)	E4	91B10	
Clerk Typist	GS4	00322	USFD**
Clerk Typist	GS3	00322	USFD**

\* Local National

\*\* US Forces Dependent

Table 2. Ambulatory Health Clinic Actual Staffing

obvious upon evaluation of cost data associated with operation of the clinic.

#### Review and Analysis of Cost Data

For review and analysis of cost data, the Uniform Chart of Accounts (UCA) available through the Comptroller Division, 97th General Hospital, provided an excellent place to start. Based on available information, fiscal year 1982 was selected as an appropriate period for the study.

After a thorough review of UCA data, the direct cost of operating the Ambulatory Health Clinic for fiscal year 1982 was determined to be \$407,484 with a corresponding indirect cost of \$836,201. This resulted in a total cost of \$1,243,685 for the period of one year. A breakdown of UCA expense assignments has been included as Appendix A. The workload data also available through the UCA reflected a total of 25,430 out-patient visits to the Ambulatory Health Clinic during fiscal year 1982. This workload data by quarter is depicted in Table 3. The resulting cost per patient visit is thus calculated to be \$48.90 for this period.

Even though extraction of UCA data would appear to be a simple task, familiarization with the UCA and its many components is a very time consuming process. Despite this fact, it must be noted that no new information has been generated to this point. The study and analysis of the clinic operation and corresponding cost data, however, identified specific cost elements which had to be adjusted/expanded beyond the previous reproduction of appropriate parts of the UCA Expense Accounts in order to provide an accurate cost assessment.

<u>Quarter</u>	<u>Ambulatory Visits</u>
1	5,906
2	6,441
3	6,616
4	<u>6,467</u>
Total Ambulatory Visits	25,430

Table 3. Ambulatory Health Clinic Workload Data  
(Fiscal Year 1982)

The first such area of concern pertains to the exchange rate established by the Department of the Army for the period of the study. Taking this factor into consideration provides a meaningful figure for comparison not only with other military facilities in the United States, but also with similar practices in the civilian sector. In order to accomplish this, the exchange rate established by the Department of the Army for fiscal year 1982 had to be compensated for utilizing the actual average exchange rate for the same period. Based on UCA data, the exchange rate established by the Department of the Army for fiscal year 1982 was 2.26 Deutsch Marks (DM) per dollar. The actual average exchange rate for the same period was 2.34 DM per dollar. This figure was obtained from the 18th Finance and Accounting Office and was computed utilizing the average monthly exchange rates for fiscal year 1982 as depicted in Table 4.

After a comprehensive review and analysis, it was determined that three areas had to be addressed regarding the exchange rate - Local National salaries, contracts, and supplies and equipment bought on the local economy. Turning first to the area of supplies and equipment, it was previously noted that the majority of the items utilized by the Ambulatory Health Clinic are standard items purchased through the normal procurement process. Based on information provided by the Logistics Division, 97th General Hospital, less than one percent of the supplies and equipment utilized by the Ambulatory Health Clinic during the period under study were purchased on the local economy. Given this information, it was decided that a value of less than one percent would be negligible and would not be beneficial to include in the study.

<u>Month</u>	<u>Year</u>	<u>Average Monthly Exchange Rate</u>
October	1981	2.24
November	1981	2.21
December	1981	2.24
January	1982	2.27
February	1982	2.34
March	1982	2.36
April	1982	2.38
May	1982	2.29
June	1982	2.40
July	1982	2.44
August	1982	2.45
September	1982	2.48

Table 4. Average Monthly Exchange Rates (Fiscal Year 1982)

As for contracts, custodial services are, as previously indicated, provided on a contractual basis by a Local National firm. The UCA appropriation for custodial services for the Ambulatory Health Clinic was \$24,807 for fiscal year 1982. The conversion of this figure from the Department of the Army 2.26 exchange rate to the actual average exchange rate of 2.34 is depicted in Appendix B. The resulting cost figure is \$23,959 for custodial services for the year. The corresponding difference is \$848 less than the original figure. When this figure is subtracted from the total cost, the actual cost for operating the Ambulatory Health Clinic becomes \$1,242,837 with a corresponding cost per patient visit of \$48.87.

The third factor that must be taken into consideration is that of Local National salaries. After a thorough review and analysis of manpower and salary data, it was determined that Local National salaries for fiscal year 1982 totaled \$33,679. A breakdown by quarter has been provided in Table 5. This figure is again based on the 2.26 exchange rate. The conversion of this figure from the 2.26 exchange rate to the actual rate of 2.34 is depicted in Appendix C. The resulting cost figure is \$32,528. The corresponding difference is \$1,151 less than the original figure. When this figure is also subtracted from the total cost, the actual cost for operating the Ambulatory Health Clinic becomes \$1,241,686 with a corresponding cost per patient visit of \$48.82.

During the study and analysis of the clinic operation and corresponding cost data, one other major factor became obvious. As previously indicated, patients scheduled to see the Chief, Department of Clinics, also sign in and out through the Ambulatory Health Clinic and are

<u>Quarter</u>	<u>Salaries</u>
1	\$ 6,408
2	\$ 6,863
3	\$10,676
4	<u>\$ 9,732</u>
	\$33,679

Table 5. Local National Salaries (Fiscal Year 1982)

therefore, counted as workload for the clinic. It was interesting to note that the entire salary of this individual for fiscal year 1982 was counted as an expense of the Ambulatory Health Clinic. This individual also has responsibilities relating to the Emergency Room, Physical Examinations, and ten outlying health clinics in addition to the Ambulatory Health Clinic. Upon investigation, it was determined that this individual spent only 25 percent of his time either directly or indirectly involved with the Ambulatory Health Clinic. A more accurate assessment of the actual salary expenses counted against the clinic should therefore, be 25 percent of the salary as opposed to 100 percent. The end result is that only \$15,342 of the original \$61,368 should be counted as an expense to the Ambulatory Health Clinic for fiscal year 1982. Subtracting the difference of \$46,026 from the adjusted figure of \$1,241,686, the actual total cost becomes \$1,195,660. The actual cost per patient visit associated with operation of the Ambulatory Health Clinic for fiscal year 1982 thus becomes \$44.02.

#### Comparison of Cost/Expense Data With the Civilian Health Care Sector

In order to add significant meaning to the study, a literature review was conducted and personal contact was made with the civilian health care sector in the United States to obtain comprehensive cost data associated with the operation of civilian ambulatory practices. The purpose of this research effort was to facilitate a comparison of cost data between similar practices in the military and civilian health care sectors.

As a result of this study, numerous sources of data were obtained. There were two, however, that were more relevant to the study at hand than the others - The Cost and Production Survey Report (1982) published annually by the Medical Group Management Association and the HAS/Monitrend Six-Month National Data Book (June 1982) published by Hospital Administrative Services for Ambulatory Care.

The figures contained in The Cost and Production Survey Report were based entirely on calendar year 1981. Additionally, the data was based on independent multi-specialty medical groups with varying numbers of full time physician equivalents as opposed to an ambulatory clinical situation in a hospital environment. Given, then, the nature of the data, it was considered to be beneficial but not conducive for the proposed comparison.

The HAS/Monitrend Six-Month National Data Book, on the other hand, provided an excellent source for the study and analysis. The monitrend for Ambulatory Care Facilities provides data on emergency departments, outpatient clinics, and outpatient ancillary services functioning within a hospital setting. The information provided was based on six months of data from those institutions that consistently reported data for the period covered by the report. Although three years of data (1979, 1980 and 1981) were obtained, the most recent was national data for the six month period ending 31 December 1981. This period did provide some overlap with the first quarter of fiscal year 1982. Additionally, the population supported and case mix variations in hospital outpatient clinics are appropriate for comparison with the Ambulatory Health Clinic, 97th General Hospital.

Emergency services and clinic services in the report were represented by indicators that reflect standard approaches to the measurement of direct expenses and staffing. As for indirect or overhead cost per service, hospitals are asked to report on a percentage of direct expense the overhead or indirect expense that contributes to the full cost of each department. This is another perspective of the report that makes it conducive for comparison with the costs determined in this study from the modified Uniform Chart of Accounts data. It was this data, then, that provided the basis for comparison to complete the study.

Turning to evaluation of the data, the period of concern is the six month period ending 31 December 1981 as previously indicated. For this period, the median outpatient clinic visits for the hospitals reporting were 6,174.<sup>1</sup> The corresponding median direct and indirect expenses per visit were \$22.63 and \$24.89 respectively.<sup>2</sup> This resulted in a total median cost per patient visit for hospital outpatient clinics for the last six months of calendar year 1981 of \$47.52.

The only aspect remaining, then, to complete this study is to compare this value with the value obtained in the military sector. Remembering that the cost per patient visit of operating the Ambulatory Health Clinic for fiscal year 1982 was determined to be \$47.02, the difference between the two values is computed to be fifty cents per patient visit. This result is surprising to note from two perspectives. First of all, the closeness of the two values is very surprising. Secondly, it is also surprising to note that the military cost per patient visit is actually lower than the median value in the civilian sector.

Evaluation and Analysis of The Comparison Data

Given this outcome, it is extremely beneficial to evaluate and analyze all aspects of the comparison data. It is important to note again that the civilian figures were based on median values for the last six months of calendar year 1981. It is also important to note that the military data was based on fiscal year 1982 values which included a period covering three quarters later than the 1981 data. The key here is that the military cost per patient visit was actually lower even though inflation for the later period was not even taken into consideration in the study. This was, however, the closest overlapping data obtainable at the time of the study. This factor tends to make the results of the comparison even more surprising.

One might at this point tend to bring up the factor of workload given the differences in comparison data between the two sectors. It is only natural to expect that an increase in patient workload should result in a corresponding decrease in cost per patient visit to the point where the law of diminishing marginal returns takes over. This may not, however, always prove to be the case. Referring to the civilian data, the median outpatient visits for the six month period ending 31 December 1981 were 6,174 with a cost per patient visit of \$47.52 as previously reported. The data for the preceding period ending 30 June 1981 indicated 8,814 median outpatient visits with a cost per patient visit of \$37.71 which is lower as one might expect.<sup>3</sup> If, however, the period ending 31 December 1980 is examined, the median outpatient visits total 9,738 with a cost per patient visit of \$36.33.<sup>4</sup> Admittedly, the cost figure is

less, but it did not drop significantly. It is even more interesting to examine the difference between this period and the preceding period ending 30 June 1980 which had 9,366 median outpatient visits with a cost per patient visit of \$30.98.<sup>5</sup> One might expect the cost per patient visit for the 31 December 1980 period to be somewhat lower than the 30 June 1980 period given the higher figure for median outpatient visits. The actual cost is, however, significantly higher. The difference in workload should not, therefore, be considered a significant factor with respect to the outcome of the study.

Given, then, the results of the study and an analysis of the comparison data, now is an appropriate time to turn to a discussion of conclusions and recommendations regarding the outcome of this research effort.

#### Footnotes

<sup>1</sup>Hospital Administrative Services for Ambulatory Care, HAS/Monitrend Six-Month National Data Book (June 1982): p. 91.

<sup>2</sup>Ibid.

<sup>3</sup>Hospital Administrative Services for Ambulatory Care, HAS/Monitrend Six-Month National Data Book (December 1981): p. 85.

<sup>4</sup>Hospital Administrative Services for Ambulatory Care, HAS/Monitrend Six-Month National Data Book (June 1981): p. 85.

<sup>5</sup>Hospital Administrative Services for Ambulatory Care, HAS/Monitrend Six-Month National Data Book (December 1980): p. 85.

### III. CONCLUSIONS AND RECOMMENDATIONS

#### Conclusions

Earlier in this study a specific question was asked. That question bears repeating at this time. Can a military health care clinic actually be competitive with civilian counterparts given that recipients have virtually free access to care? Given the results of the study at hand, that question can be emphatically answered in the affirmative. It has been shown that the actual cost per patient visit for fiscal year 1982 of the Ambulatory Health Clinic, 97th General Hospital, was lower than the national median cost per patient visit in similar clinics in the civilian sector in the United States. This is without a doubt an accomplishment that deserves recognition.

There have been and continue to be many that question the efficiency of the military health care sector. This is evidenced by the fact that justification of increased funding for the military sector becomes more and more difficult each year. It is the hope of this author that a certain degree of confidence will be restored in the efficiency of the military health care sector as a result of this study.

Given the existing volatile economic environment, civilian health care institutions have virtually been forced into operating efficiently in order to insure their continued survival. Reductions in government spending and attempts to contain health care costs through a competitive approach have contributed significantly to this situation. The growth of new forms of competition such as health maintenance organizations,

surgi-centers, emergi-centers, and other similar care methodologies has placed increased pressure particularly on the hospital setting. Irrespective of the situation as it exists in the civilian sector, the cost of operating the Ambulatory Health Clinic is still right in line with its civilian counterparts.

One must conclude then that the Ambulatory Health Clinic has been and continues to be operated efficiently and that the military health care sector can be competitive with the civilian sector even though recipients do have virtually free access to care.

#### Recommendations

First of all, the staff of the Ambulatory Health Clinic should be recognized for their outstanding contributions to the overall health care mission of the 97th General Hospital. This is particularly true given an increasing outpatient workload and continuous resource limitations that are common throughout the military health care sector today.

Given the increasing difficulty associated with justification of funding for the military health care sector, it is also recommended that this study be utilized to restore confidence in the efficiency of the military health care system. This could be accomplished through an extensive dissemination of the findings of the study. The results of the study could also be utilized in the justification process for funding.

Finally, it is recommended that future residents in the U.S. Army-Baylor University Program in Health Care Administration consider similar studies in the area of emergency departments and outpatient ancillary services.

APPENDIX A

AMBULATORY HEALTH CLINIC UCA EXPENSE ASSIGNMENTS

AMBULATORY HEALTH CLINIC UCA EXPENSE ASSIGNMENTS (BHAT)

Direct Expenses:		\$407,484
Indirect Expenses:		
EAXB	Ambulatory Care Depreciation:	15,181
EBYV	Health Facilities Project Office:	1,604
EDB	Utilities Branch:	24,349
EDC	Facilities Branch:	10,814
EDD	Minor Construction:	728
EDE	Other Engineering Support:	6,946
EEYA	Supply Services Administration:	639
EEYB	Property Management Branch Suspense Account:	827
EEYE	Self-Service Supply Center:	712
EF	Custodial Services:	24,807
EG	Medical Equipment Maintenance:	4,572
EEYC	Medical Supply Branch:	6,260
EEYD	Medical Gases:	11
EBYA	Reenlistment Activities:	190
EBYB	Other Administration:	10,054
EBYC	Headquarters Offices (CDR, XO, CPS, CSM):	2,742
EBYD	Clinical Support Division:	1,557
EBYE	Other Headquarters Activities:	4,223
EBYF	Adjutant:	693
EBYG	Message Center and Mailroom Activities:	1,496
EBYH	Other Adjutant Activities:	279
EBYI	Chaplain:	1,926
EBYJ	Personnel Division:	1,030
EBYK	Medical Company Administration:	2,827
EBYL	Other Personnel Activities, Safety and Recruiting:	448
EBYM	Military Personnel Branch:	2,423
EBYN	Civilian Personnel Branch:	391
EBYO	Works Council:	426
EBYP	Comptroller Office:	3,209
EBYQ	Medical Library:	1,186
EBYR	Department of Nursing, Office of the Chief:	5,431
EBYS	Other Administration Activities:	363
EBYT	Medical Supply Suspense Account:	69
EBYU	American Red Cross Field Director:	229
EKYA	Central Appointments:	14,565
EKYC	Outpatient Records:	4,755
DAYM	Inpatient Pharmacy:	199,241
DAYN	Outpatient Pharmacy:	1,065
DBAM	Clinical Laboratory:	121,558
DBB	Anatomical Pathology:	5,901
DBC	Blood Bank:	1,215
DEA	Central Sterile Supply:	666
DEB	Central Material Services:	820
DCAM	Diagnostic Radiology Service:	141,605
DDA	EKG:	6,424
DDB	EEG:	2,209
DDD	Pulmonary Function:	19

AMBULATORY HEALTH CLINIC UCA EXPENSE ASSIGNMENTS (BHAT) (CONT.)

DHA	Inhalation Respiratory Therapy:	17
DHB	Occupational Therapy:	121
DHD	Physical Therapy:	30,262
DHE	Social Work Service:	162,338
DI	Nuclear Medicine:	<u>4,778</u>
Total Indirect Expenses:		\$836,201
Total Expense:		\$1,243,685

APPENDIX B

EXCHANGE RATE CONVERSION FOR CUSTODIAL CONTRACT

EXCHANGE RATE CONVERSION FOR CUSTODIAL CONTRACT

Original UCA Expense Assignment for Custodial Service (EF):	\$24,807
Department of the Army Exchange Rate for Fiscal Year 1982:	x 2.26
Value of Custodial Service in DM:	<u>56,064</u>
Actual Average Exchange Rate for Fiscal Year 1982:	2.34
Actual Dollar Value of Contract:	<u>\$23,959</u>
	\$24,807
	<u>23,959</u>
Actual Difference in Dollar Value:	\$ 848

APPENDIX C

CONVERSION OF LOCAL NATIONAL SALARIES EXPENSE

CONVERSION OF LOCAL NATIONAL SALARIES EXPENSE

Total Local National Salaries Expense:	\$33,679
Department of the Army Exchange Rate for Fiscal Year 1982:	x 2.26
Value of Local National Salaries in DM:	<u>76,115</u>
Actual Average Exchange Rate for Fiscal Year 1982:	+ 2.34
Actual Dollar Value of Local National Salaries:	<u>\$32,528</u>
	\$33,679
	<u>-32,528</u>
Actual Difference in Dollar Value:	\$ 1,151

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