Running Header: Provider Perspectives

Implementation of Provider Perspectives Resulted in Proper Health Care Resource Utilization

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Graduate Management Project

Submitted in Fulfillment of Requirements for the Degree of

Masters in Health Administration

April 13, 2001

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
13 APR 2001	**Final**	**Jul 2000 - Jul 2001**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Implementation of Provider Perspectives Resulted in Proper Health Care Resource Utilization	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
CPT Hugh A. Mclean, Jr.	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Eisenhower Army Medical Center Bldg 300 Fort Gordon, GA 30905	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
US Army Medical Department Center and School Bldg 2841 MCCS-HRA (US Army-Baylor Program in HCA) 3151 Scott Road, Suite 1412 Fort Sam Houston, TX 78234-6135	11. SPONSOR/MONITOR'S REPORT NUMBER(S) **4-01**

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES
The original document contains color images.

14. ABSTRACT
The Department of Defense Military Health System (MHS) is under constant pressure to decrease costs and increase operational efficiencies. One of the methods to decrease these inefficiencies is through the use of provider profiling systems. One such system is Provider Perspectives. This study shows that Provider Perspectives significantly decreased Emergency Room utilization and subsequently increased the usage of primary care clinics at Martin Army Community Hospital and Winn Army Community Hospital. A significant monthly cost avoidance of $49,000 was shown for Winn. Although, Martin Army Community Hospital showed an increase in monthly operating costs, access to health care increased. This study points out that although Provider Perspectives had a significant affect on usage and cost avoidance, it had a minimal affect on the two quality measures studied: cervical screenings and mammograms.

15. SUBJECT TERMS
Provider profiling, resource utilization

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**UU**	**99**	

Acknowledgements

First, I must thank COL Jimmy Sanders and COL Julie M Martin for all of their guidance and mentorship. The educational opportunities that they provided during my residency at Dwight David Eisenhower played a pivotal role in creating a strong foundation, which will aid me throughout the rest of my career in the Army and the health care administration field.

There are hosts of other people I must thank for aiding in the completion of my Graduate Management Project. First, I wish to thank Lieutenant Colonel Darrell Hanf for his guidance in helping me create my statistical methods of statistically analyzing my data, pushing me to use my "grey matter", and asking the ever thought provoking question "so what". Also, thanks go to Ms. Lee Chavis for always looking out for me and making sure I could concentrate on my residency. She always ensured that my GMP was grammatically sound. I appreciate everything she did for me during my residency year. Ms. Jennifer Bowman, Ms. Dickie England, and Ms. Pat Graham ensured that I was able to obtain the data for my study. Without these three people, my study never would have come to fruition.

Finally, I want to thank the most important person in this entire process and in my life, my wife, Kathryn. Since high school she has constantly made sure I could obtain any goal I set, even if it meant setting hers aside. She, along with my children, Hayley and Hugh III, deserve much of the credit for this Master's Degree in Health Administration. Thank you from the bottom of my heart.

Abstract

The Department of Defense Military Health System (MHS) is under constant pressure to decrease costs and increase operational efficiencies. One of the methods to decrease these inefficiencies is through the use of provider profiling systems. One such system is Provider Perspectives. This study shows that Provider Perspectives significantly decreased Emergency Room utilization and subsequently increased the usage of primary care clinics at Martin Army Community Hospital and Winn Army Community Hospital. A significant monthly cost avoidance of $49,000 was shown for Winn. Although, Martin Army Community Hospital showed an increase in monthly operating costs, access to health care increased. This study points out that although Provider Perspectives had a significant affect on usage and cost avoidance, it had a minimal affect on the two quality measures studied: cervical screenings and mammograms.

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Introduction

Due to the increasing cost of health care, cost containment is a major focus in all health care organizations. In 1950, only $12.7 billion was spent on health care annually in the United States. In 45 years this cost had risen 90 fold to $1.15 trillion in 1995. These figures represent an increase from 4.4 percent of the Gross Domestic Product (GDP), to 15 percent of the GDP (Getzen, 1997). Currently, provider profiling is favorably viewed as a way to curb the escalating cost of health care by standardizing the way providers practice medicine. One of these provider-profiling systems is called Provider Perspectives. When used properly, this system can decrease the variance of provider practices, which can lead to cost savings by avoiding costs associated with unnecessary tests or procedures.

The definition of physician profiling "is the collection, analysis, and use of provider practice data using epidemiological methods" (McNeil, Pedersen, and Gatsonis, 1992). This analysis is conducted to ensure accountability and may lead to an increased quality of patient care. It shows the most promise as an educational tool and should never be used as a reprisal method against physicians who do not adhere to established practice standards. Only accurate, case-mix adjusted data should be used when analyzing health care practices (Piland & Lyman, 1999).

The Department of Defense Military Health System (MHS) is under constant pressure to decrease costs and increase operational efficiencies. In turn, the Army Medical Department (AMEDD) is being "challenged to meet the health care delivery mission with fewer real dollars, and the additional confounding variables of military medical personnel losses, increased deployment of military medical personnel, …, and a misalignment of the financial incentives with the managed care contractual language" (Sanders, Perry, Goodman, Campbell, Coker, &

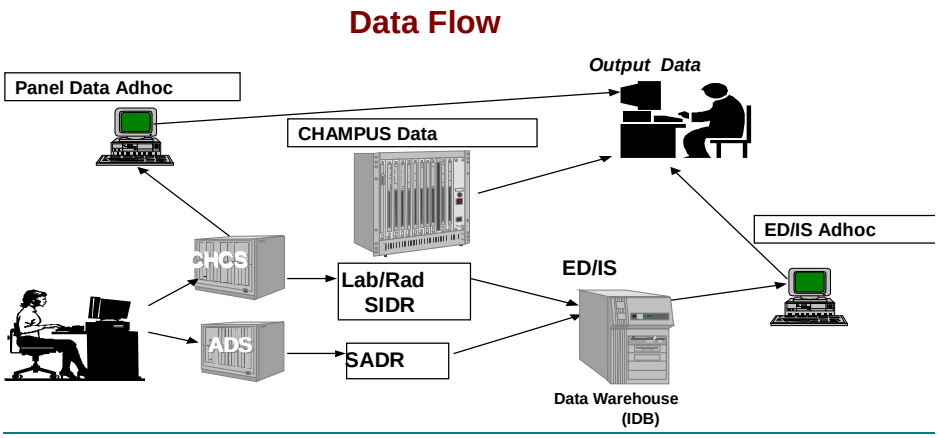
Thorp, 2001, p. 7). Additionally, there has been an increase in health care cost inflation, which when considered with other dynamics has led to a decline in the overall worth of the Defense Health Program (DHP) budget, especially in the last three to four years (Personal Communication Denise Cuenin, 18 October 2000). With the need to control costs, BG Darrel Porr, Lead Agent, Region 3, Commander of the Southeast Regional Medical Command (SERMC) and Dwight David Eisenhower Army Medical Center, decided to support the increased use of Provider Perspectives in certain military treatment facilities (MTF) in Region 3. These facilities include Martin Army Community Hospital (MACH), Fort Benning, Georgia, Winn Army Community Hospital (WACH), Fort Stewart, Georgia, and the 20th Medical Group, Shaw Air Force Base, South Carolina. The expected outcomes of the increased use of this system are improved cost efficiencies.

Lieutenant Colonel (LTC) Derek Ziegler , the former Administrator of Clinical Services at Lead Agent, Region 3, conceived Provider Perspectives in 1996 as an answer to the Office of the Secretary of Defense for Health Affairs' (OSD-HA) desires for medical treatment facilities to practice medicine in a more cost efficient manner. The authority to build this profiling system was granted by the Department of Defense (DoD) Utilization Management Department. The underlying objectives of the project were the production of cost-efficient processes, an improvement of the quality of patient care, and the development of built-in standards or benchmarks with which to compare practice patterns. The benchmark standards utilized in the Provider Perspectives Program are derived from the National Committee on Quality Assurance (NCQA) and national health maintenance organization (HMO) standards of care (Pemberton, 1999).

Cost management and quality improvement concerns were the impetus for LTC Ziegler's construction of the population health management tool called Provider Perspectives. First, he addressed one of the many problems faced by organizations, which is gathering valid data from numerous sources. LTC Ziegler solved this quandary by designing Provider Perspectives to combine data from the Executive Decision/Information System (ED/IS), Civilian Health and Medical Program for the Uniform Services (CHAMPUS), and pharmaceutical data sources (Figure 1) (Pemberton, 1999, p. 23).

Figure 1

Summary of all Data Sources of Provider Perspectives

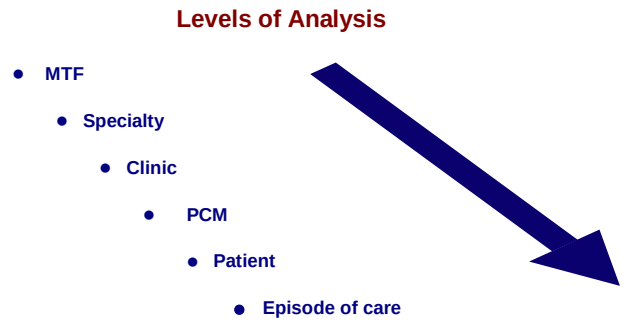


Data is input to the Ambulatory Data System (ADS), which captures outpatient encounters and the Composite Health Care System (CHCS), which is a system that captures ancillary service, inpatient, and outpatient information. This information is sent to the ED/IS data warehouse and is finally fed to the Provider Perspectives System. In addition, all CHAMPUS data is input to the Provider Perspectives system. The Provider Prospectives Program includes local, civilian, and regional benchmarks, and has the ability to compare specialties and clinics. All of the data are risk adjusted for age, gender, and severity of illness. Another positive aspect of this system is the

ability of the user to compare the physician practice patterns by individual members, physicians, clinics and hospitals. Additionally, the program affords the user the ability to drill down or "data mine" down to the most basic level: the episode of care. (Figure 2) (CEIS Advocate, 1999).

Figure 2.

Summary of Data Mining Level Capability.



Conditions which prompted the study

Major (MAJ) Phillip Pemberton (1999) conducted a descriptive study on the positive affects Provider Perspectives could have on provider behavior if it was fielded in its stand-alone form at Martin Army Community Hospital, Fort Benning, Georgia. His study exclusively analyzed three years of data prior to fielding the profiling system (1996-1998). He analyzed provider practice patterns in the area of clinic visits and preventive medicine (cervical cancer screening, mammography screening, etc.). These areas were measured against the National Committee for Quality Assurance standards using Health Plan Employer Data and Information Set (HEDIS) 3.0's standards (Table 1).

The author's work will further MAJ Pemberton's study and intends to show that the implementation of Provider Perspectives had a significant affect on provider practice patterns and patient behavior. This will be accomplished by showing an asymmetrical relationship

between two time periods: the time prior to implementation of Provider Perspectives and the time after implementation of Provider Perspectives. The author's goal is to show that after the implementation of this program, there was a statistically significant change in provider practices, which led to altered patient demand for ER services after it was fielded not only at MACH, but also at Winn Army Community Hospital, Fort Stewart, Georgia. The study is longitudinal in nature. The time studied is October 1997 to June 2000. The focus is primarily on the Emergency Department visits per month, and outpatient visits per month in primary care clinics (Family Practice, Internal Medicine, Pediatrics, and the Primary Care Clinic). Secondly, cervical and mammogram screenings are studied to look at the increase in the number of screenings and the overall percentile achieved.

The objective of this analysis is to confirm that after the implementation and proper use of Provider Perspectives, there are statistically significant changes in provider practices. The change in patient behavior will be seen by a decline in the number of emergency room (ER) visits and an increase in the number of primary care outpatient (OP) visits. Additionally, cervical and mammogram screenings are studied to confirm that there is a statistically significant increase in these quality of care areas.

The shift in patient resource utilization from ER to OP visits can be extrapolated into a significant cost avoidance, using Medical Expense and Productivity Report System (MEPRS) cost, not only for the Military Treatment Facilities (MTF) in Region 3, but also for MTFs within the SERMC and possibly across the U.S. Army Medical Command (MEDCOM). The cost of the stand-alone systems fielded at Fort Benning, Fort Stewart, and Shaw Air Force Base and the contract to move the system to web-based application is $435,000 (Personal Communication

with LTC Derek Ziegler, September 20, 2000). The bottom line of this study is to see if the $435,000 spent by the Lead Agent is going to be worth the investment.

Statement of the Question

Lead Agent, Region 3, has been the principal proponent in the development of this population-based health measurement tool. This program can analyze and profile many different provider practice measures. It is important to understand the reason this project focuses solely on the behavior of the provider. Kongstvedt (1997) states, "the practice behavior of physicians in a managed care organization (MCO) is the most important element in controlling cost and quality" (p. 299). Although the patient must come to the physician for the treatment of an illness, it is the provider that not only treats the patient, but also orders all ancillary services necessary to maintain a high standard of care (Fuchs, 1974).

With this premise in mind, it is paramount to ascertain the behavioral impact Provider Perspectives has had on the practice patterns of providers. Will the implementation of Provider Perspectives at Winn Army Community Hospital and Martin Army Community Hospital be associated with a decrease in the number of patients seen in the Emergency Department per month, and an increase in the number of outpatient visits per month? How much money will an MTF be able to cost avoid by seeing patients in a less expensive primary care setting versus an expensive emergency room visit? The cost avoidance and quality of care (through an increase in preventive measures) findings of this study are extremely important due to the large price tag for the Provider Perspectives software program, the need to demonstrate an increase in quality of health care, and to ensure that the program can meet expectations.

Literature Review

What has led the health care industry to the point of needing to invest hundreds of millions of dollars in information systems that improve quality and cost efficiency? The main impetus to curtail rising health care costs started in 1973 with the passage of the Health Maintenance Organization (HMO) Act. This piece of legislation's intent was to decrease the upward spiraling cost of health care by forcing every employer with more than 25 employees to offer an HMO along with other insurance companies as viable health care third party payers.

Further, in 1983, MEDICARE instituted a new type of system that forever changed the financial payment system for hospitals and physicians: Diagnosis Related Groups (DRG). Prior to DRGs, physicians were financially incentivized to keep patients in the hospital because they were paid on a daily or per diem basis. The longer the patients stayed in the hospital, the more money the provider was paid in the form of retrospective payments. This new payment system called prospective payments revolutionized medical payments by "providing incentives for the hospital to spend only what was needed to achieve an optimal patient care outcome" (Sultz & Young, 1999, p. 228). Under this payment system, hospitals and physicians were given a fixed payment based on a DRG, which included bundled prices based on a patient's condition, not on how much work (inpatient bed-days, x-rays, labs, etc.) the physician provided to the patient (Griffith, 1995).

With the ever decreasing federal health care budget and the increase in pressure from HMOs to find ways to treat patients in a more cost-affective, quality-enhancing manner, provider profiling has emerged as an affective tool to decrease the variation in provider practice behavior. Spoeri and Ullman (1997) conducted an extensive survey of physicians working for HMOs. This survey pointed out that 80 percent of the group practices used some sort of profiling tool and that

almost 60 percent of those groups provided feedback to the individual physician. The main driver in providing feedback is to change the physician's practice pattern. Modifying provider behavior is the key to cost avoidance. This is due to a direct correlation between physician practice patterns and controlling cost and quality (Kongstvedt, 1997).

This is a difficult task considering that physician medical training is heterogeneous in America with respect to the different techniques and methods taught in the curing process. Secondly, physicians are trained to be autonomous and in total control (Kongstvedt, 1997). Managed care business methods, particularly provider profiling, stand in direct conflict with a major part of a physician's training. Many health care professionals view this relationship as antagonistic in nature. Physicians feel that profiling takes away their decision-making capabilities by not allowing variance from the derived standard of care without being punished, because medicine is as much an "art," as it is a "science" (Kongstvedt, 1997).

Besides training, another difficult task is to identify areas within a health care organization where a large amount of money may be saved. The Emergency Room has been a focal point of different studies seeking to decrease provider practice pattern variation and patient utilization of the ER. Derlet and Young (1999) noted in their study of ER visits that up to 55 percent of visits to the ER were non-urgent, which means the patient could have utilized a more cost-efficient method. Unfortunately, health care organizations may not just send patients away who really do not require urgent care. The Emergency Medical Treatment and Active Labor Act (EMPTALA) states that all patients entering an ER must receive appropriate care, regardless of their ability to pay (Derlet & Young, 1999). Another means to avoid costs must be identified and provider profiling is a viable option to accomplish this stated goal.

Along with a need to decrease practice variation and save money came a big push to increase the quality of outcomes in health care. In 1984, Demming postulated “gains in quality attract new users and result in gains in efficiency and productivity, which translate into lower costs” (Meissenheimer, 1997, p. 12). To gain an appreciation of the affects of profiling, Hannan, Kilburn, Racz, Shields, and Chassin (1994) conducted a three-year study looking at patients receiving coronary arterial bypass surgery. During this study, there was a 21 percent reduction in mortality. After this data was risk-adjusted for age, sex, and patient acuity, the rate decreased to an astonishing 62 percent. In another study looking at overall outcomes of over 100,000 discharges at 30 different hospitals in Ohio, there was a large decrease in risk-adjusted mortality for many of the conditions that were profiled. In the previous study, a probable explanation for the decrease was the fact that mortality rates were made available to the public (Marshall, Shekelle, Leatherman, & Brook, 2000).

Purpose

In the past few years, the Department of Defense has experienced a decrease in the worth of the DHP budget. When faced with this challenge and the knowledge that inflationary and health care costs are increasing, BG Porr was under pressure to find cost-efficient methods of providing health care to the beneficiaries enrolled in Region 3 medical treatment facilities. Therefore, Provider Perspectives was chosen as the informational system to track provider practice patterns.

This study will have two hypotheses. The null hypothesis in this study is “Implementation of Provider Perspectives had no affect on the utilization rate of beneficiaries seen in the Emergency Room and Primary Care Outpatient clinics." The alternate hypothesis is “Implementation of Provider Perspectives had a significant affect on the utilization rate of

beneficiaries seen in both the Emergency Room and the Primary Care Outpatient clinics." The independent variable to be studied is pre- and post-implementation of Provider Perspectives (zero and one). The dependent variable is the number of ER and outpatient Prime patient visits per month. Prime patients are patients who are enrolled in the Prime option of TRICARE, which is the DoD form of health insurance. The study data will attempt to show this significant relationship by using an Analysis of Variance (ANOVA) to prove a relationship exists between the number of patient visits per month before and after Provider Perspectives was implemented. Additionally, the data will show that the number of cervical screenings and mammograms increased significantly after Provider Perspectives was implemented; thereby, bolstering the hypothesis that this program can improve the quality of patient care.

Since BG Porr has spent $435,000 on Provider Perspectives, it is incumbent to analyze whether the Department of Defense is getting a positive return on its investment. To determine this, the author's Graduate Management Project (GMP) suggests that a study of emergency room visits per month, and subsequently, the number of outpatient visits per month, will illustrate whether a significant relationship does exist between pre- and post-system implementation change in visits. If there were a change, it would suggest that this profiling system helped MACH's and WACH's providers better manage their patient panels and thereby caused a change in patient demand for ER services. Once MEPRS cost data is figured into the equation, the reader will be able to see that these facilities were able to utilize their resources in a more cost-efficient and quality enhancing manner. This illustration will be accomplished in two ways. First, by using (MEPRS) expense data and calculating a cost avoidance based on the decreased number of visits in the ER subsequent to the increase in the number of outpatient visits in the family practice, internal medicine, internal medicine, and pediatric clinics. Secondly, this shift in

resource usage, coupled with the empirical data showing an increase in preventive measures (cervical screenings and mammograms), will provide evidence that beneficiaries are receiving an increase in the quality of their care through continuity of care and better patient panel management by physicians.

Methods and Procedures

The Provider Perspectives program will provide the information on the number of Prime patients seen in the ER and the primary care outpatient clinics. This information will be measured by month and the time span of the study is October 1997 through June 2000 (Table 1).

Table 1

Metrics to be Measured

Emergency Departments Visits Per Month
Outpatient Visits in Primary Care Clinics Per Month (Family Practice, Internal Medicine, Pediatrics and Primary Care)

The independent variable will be dichotomous; 0 will indicate all visits prior to implementation and 1 will represent all visits that occurred after Provider Perspectives was implemented. The dependent variable will be continuous data showing the number of visits by Prime beneficiaries per month.

It is hypothesized that a change exists in the number of emergency room and outpatient visits after Provider Perspectives was implemented. If there is a correlation between the two groups, then the number of visits during the two time periods is likely to have changed after the program was put into operation. Therefore, change in the number of visits per month is a function of the time period being measured (pre- or post-implementation). The null and alternate hypotheses are stated below.

H(o): Differences in the number of visits are not associated with the time period.

y (pre-implementation) = y(post-implementation)

H(a): Differences in the number of visits are associated with the time period.

y(pre-implementation) $\neq$ y(post-implementation)

To analyze the data, an Analysis of Variance (ANOVA) will be employed and the significance level will be set at 0.05. An ANOVA test is used to compare the sample data to "see if two or more unknown population means are likely to be equal" (Sanders, et al., 1995, p. 416). Further, the F ratio is the test statistic of the ANOVA test. It shows the amount of variance that exists. If a difference between the population means exists, F >1, but if a difference does not exist the F ratio value is near 1. The calculated p value will be compared with the set alpha level ($\alpha = 0.05$) to either reject (calculated $|p \text{ value}| > |\alpha/2|$) or accept (calculated $|p \text{ value}| < |\alpha/2|$) the alternate hypothesis (Cooper & Schindler, 1998). Finally, a coefficient of correlation (r) will be used to assess the strength of the relationship between the number of monthly visits (y) and implementation time (x). The value r is measured on a scale -1.00 to +1.00. The closer r is to -1.00 or +1.00, the stronger the relationship between x and y (Sanders, 1995). The statistical program used to calculate the means, F values, and significance levels is the Statistical Program for the Social Sciences (SPSS) version 10.0.

Additionally, the author plans to employ ER and outpatient data from Blanchfield Army Community Hospital (BACH) as a control facility. This hospital is located at Fort Campbell, Kentucky, and has not implemented Provider Perspectives. This measure is being taken to provide more support for causation and to decrease the likelihood that any external variables or confounding factors, such as a MEDCOM-wide policy, might have caused the expected shift in utilization patterns. This Army hospital was chosen because of its overall size, its proximity to MACH and WACH, and the fact that it did not implement the Provider Perspectives program.

The author collected data from ED/IS for ER and primary care outpatient visits for Martin Army Community Hospital, Winn Army Community Hospital, and Blanchfield Army Community Hospital. The author had to obtain data from this source due to the inoperability of

Provider Perspectives at this time. The data was received in an Excel spreadsheet for the time period Oct 1997 – June 2000. It was divided up by month and by MEPRS codes, which allowed an analysis of specific clinic data. In the case of MACH, all data was sorted into four categories by MEPRS code: ER (BIAA) (Appendix A), Family Practice (BGAA) (Appendix C), Internal Medicine (BAAA) (Appendix E), and Pediatrics (BDAA) (Appendix G). For the dichotomous independent variable, the author then used a 1 to identify all months after implementation of Provider Perspectives at MACH (February 1999 – June 2000). Then SPSS was employed to conduct an ANOVA test on all four sets of data, along with a correlation assessment (r value).

The site-specific MEPRS cost for MACH and WACH used to calculate a cost avoidance is listed below.

Table 2

Average Clinic-Specific MEPRS Cost Data for Clinic Visits at MACH and WACH

	ER	Family Practice	Pediatrics	Internal Medicine	Primary Care
MACH	$195.22	$110.43	$74.09	$160.25	$88.46
WACH	$124.03	$100.20	$70.87	$95.30	$66.96

The author received the MEPRS cost data from the Chief of MEPRS at both MACH and WACH (Personal Communication with Jackie Ashby and Carol West, 21 March 2001). The author took the three fiscal years of cost for each clinic and averaged them. Since there are 33 months worth of data, more weight was given to fiscal years 98 and 99 (36.3% each) because they are full years (12 months) and only 27.4 % to the MEPRS cost for FY 00 (9 months).

Subsequently, the same separation and statistical methods were employed to the data from Winn Army Community Hospital (Appendices I, K, M, O, Q) and Blanchfield Army Community Hospital (Appendices S, U, W, Y, AA, AC, AE, AG, AI, AK) with one exception; both of these hospitals have a primary care clinic (BHAA). With respect to the dichotomous variables, at

WACH, a 1 was also used to indicate the time of implementation of Provider Perspectives (January 2000). Since Blanchfield was used as the control, the author used MACH's Provider Perspectives implementation time (February 1999) in labeling the independent variable. Therefore, April 1998 – Jan 1999 was labeled a 0 and Feb 1999 – June 2000 was labeled as a 1. The author did this for all Blanchfield clinics. Further, the same technique was applied again, but this time WACH's implementation time was Jan 2000. The author felt this was the optimal method to observe any change due to confounding factors.

With respect to BACH, the author did not include the time period Oct 97 – March 98. This is due to several factors. Mrs. Mary Arrington, Chief of Clinical Information at BACH, stated that during this time period the Corporate Executive Information System (CEIS), which is the predecessor to ED/IS, lost a lot of data from BACH and there were also data transfer problems during this time. She also stated that until April 1999, there was limited support for CEIS (Personal Communication with Mary Arrington, 2 April 2001).

After using SPSS to calculate the average means of the number of visits per month, the author will use site specific MEPRS cost data to calculate a cost avoidance by comparing the cost shifting that occurs between the ER and the outpatient clinics. This monthly cost will be extrapolated into an annual cost. The equations to be used to calculate the monthly cost avoidance are shown below.

Preimplementation

(Number of ERVisits per month * Associated MEPRS cost) – (Number of Family Practice Visits per month * Associated MEPRS cost + Number of Internal Medicine Visits per month * Associated MEPRS cost + Number of Pediatric Visits per month * Associated MEPRS cost + Number of Primary Care Clinic Visits per month (only WACH) * Associated MEPRS cost) = (+ cost incurred)

Postimplementation

(Number of ERVisits per month * Associated MEPRS cost) – (Number of Family Practice Visits per month * Associated MEPRS cost + Number of Internal Medicine Visits per month * Associated MEPRS cost + Number of Pediatric Visits per month * Associated MEPRS cost + Number of Primary Care Clinic Visits per month * Associated MEPRS cost + Number of Family Practice Visits per month (only WACH) * Associated MEPRS cost) = (- cost avoided or + cost incurred)

After calculating the visits and the cost avoidance for the ER and the outpatient clinics, the author will employ similar separation techniques and apply the identical dichotomous indicators used for ER and OP visits to study cervical screening and mammogram data (Table 1).

Table 3

Summary of Preventive Service Measures

Mammogram Screening
Cervical Cancer Screening

The author had an ad hoc report generated from CHCS for MACH and WACH. The specifications for this report were the following:

- For cervical screenings, the report (Oct 97 – June 00) was to identify all females 21-64 years of age who had received a pap smear, all duplicate screenings were deleted, and the data was broken down by the number of screenings per month.
- For mammograms, the report (Oct 97 – June 00) was to identify all females 52-69 years of age who had received a mammogram, all duplicate screenings were deleted, and the data was broken down by the number of screenings per month.

The author will attempt to show statistical significance between the two times (pre- and post-implementation). The numbers that will be analyzed will be the percentage of procedures conducted per month. This number will be calculated three ways:

- For cervical screenings, the number of procedures conducted per month will be divided by the population within the specified parameters and by three. The denominator contains a three because HEDIS standards state that a female must have the test once every three years.
- For mammograms using the TRICARE standard, the number of procedures conducted per month will be divided by the population within specified parameters. This is done in this manner because TRICARE standards state that a female between 52-69 will have a mammogram annually.
- For mammograms using the HEDIS standard, the number of procedures conducted per month will be divided by the population within specified parameters and two. The denominator contains a two because HEDIS standards state that a female between 52-69 will have a mammogram every two years.

Subsequently, the number of cervical screenings and mammograms will be grouped by quarters (four per year). The procedure percentages will be averaged to arrive at a quarterly total. This percentage will be compared to the established 50^{th} percentile benchmark standards as set forth by the National Committee for Quality Assurance. The State of Managed Care Quality Report (2000) states that to reach the 50^{th} percentile standard in breast cancer screenings, a health care facility must be conducting mammograms on at least 73.4 percent of their beneficiary population. The standard for cervical screenings is slightly lower: 71.8 percent (NCQA, 2000).

Limitations

There were some limitations noted by the author. First, the two military treatment facilities being analyzed did not have the program for the same amount of time. Martin Army Community Hospital employed this program from February 1999 – June 2000 and Winn Army Community Hospital had only six months worth of data, January 2000 – June 2000. This made it difficult to see if Provider Perspectives was equally effective at both military treatment facilities. Another limitation was the data from BACH. As will be explained in the methods section, six months of data had to be deleted due to suspect accuracy. It must be noted that in March 99, MACH implemented an ER triage system, which was used to divert patients from the ER to primary care clinics (Personal Communication with COL Ken Kerchief on 18 April 2001). Also, this study does not look at physician staffing, which could have an affect on the access to care.

With respect to the quality analysis portion of the study, the author was not able to exclude women who had previously been diagnosed with breast cancer from the mammogram study. Finally, WACH did not start tracking cervical screenings in CHCS until October 2000. Ultimately, this meant that this study did not include an analysis of cervical screenings from this facility.

Reliability and Validity

The validity and reliability of this study depend on the accuracy of the data that is input to the various sources, such as CHCS, CEIS, and CHAMPUS. The data is reliable and accurate from the standpoint that Provider Perspectives captures only Prime beneficiaries, who are enrolled in the TRICARE Prime option. Additionally, the author tried to discount any confounding factors by using BACH as a control.

Ethical Considerations

Patient confidentiality is paramount in any study involving health care. The Privacy Act of 1974 serves as the guiding policy on this issue. If any patient's social security number is obtained while mining for data, it will either be discarded or scrambled. Physician privacy is also essential when conducting provider profiling. The medical director should only know individual physician information. If this information was released, it could be viewed as an invasion of privacy and buy-in from the providers could be very difficult to obtain (Piland & Lyman, 1999).

The Results

The study showed that a statistically significant difference exists between the number of beneficiary visits to the emergency room and outpatient clinics (dependent variables) and the pre- and post-Provider Perspectives implementation time periods at both Winn Army Community Hospital and Martin Army Community Hospital. Data on outpatient visits were obtained from ED/IS. Additionally, MEPRS cost data calculated in the methods section were used to show a cost savings exists (Table 2).

Resource Utilization Analysis

The findings for Martin Army Community Hospital were statistically significant and are shown below (Table 4).

Table 4

Mean of clinic visits at Martin Army Community Hospital pre- and post-implementation of Provider Perspectives

Martin Army Comm. Hospital Monthly Visits						
	Visits Prior to P2	Visits After P2	Increase or Decrease in Visits	F Value	P Value	Pearson's Coefficient
Emergency Room	1911	1711	**-200**	6.93	0.013	-0.427
Family Practice	4135	5081	**946**	35.71	p<.001	0.732
Pediatrics	1289	1826	**537**	57.58	p<.001	0.806
Internal Medicine	424	1020	**596**	77.1	p<.001	0.845

It is apparent from the table that the monthly visits in the ER declined and subsequently, the primary care clinics' usage increased. Provider Perspectives did have a significant affect on the number of clinic visits in both the ER and all of the primary care clinics. Therefore, in the case of MACH, the alternate hypothesis should be accepted and the null hypothesis rejected.

Most of the findings for Winn Army Community Hospital were statistically significant and are shown below (Table 5)

Table 5

Mean of clinic visits at Winn Army Community Hospital pre- and post-implementation of Provider Perspectives

Winn Army Comm. Hospital Monthly Visits and Statistical Values						
Clinics	Visits Prior to P2	Visits After P2	Increase or Decrease in Visits	F Value	P Value	Pearson's Coefficient
Emergency Room	2167	1231	**-936**	22.173	p<.001	0.646
Family Practice	2927	3171	**244**	1.396	0.246	0.208
Pediatrics	1470	1226	**-244**	6.65	0.015	0.42
Internal Medicine	828	896	**68**	1.519	0.227	0.216
Primary Care	2373	3171	**798**	13.44	0.001	0.55

As the table above indicates, the monthly visits in the ER declined. This decline was even more significant than MACH's and most of the primary care clinics had an increased utilization by patients. In three of the clinics at WACH, the alternate hypothesis should be accepted. Although the Pediatric Clinic visits did show statistical significance, the visits declined, which is the opposite of what the author expected. Finally, the null hypothesis should be accepted in the Family Practice and Internal Medicine Clinics. It should be noted that the monthly visit totals did increase, which is what was expected.

Table 6

Mean of clinic visits at Blanchfield Army Community Hospital pre- and post-implementation of Provider Perspectives

Blanchfield Army Comm. Hospital Monthly Visits and Stat. Values (Using MACH's Time)						
Clinics	Visits Prior to P2	Visits After P2	Increase or Decrease in Visits	F Value	P Value	Pearson's Coefficient
Emergency Room	1871	2267	**396**	6.46	0.018	0.453
Family Practice	7248	9507	**2259**	17.521	p<.001	0.642
Pediatrics	1032	610	**-422**	8.144	0.009	-0.496
Internal Medicine	1986	1520	**-466**	19.16	p<.001	-0.659
Primary Care	1199	1445	**246**	0.653	0.427	0.16

To understand the table above, the reader must recall that the author used the implementation time of Provider Perspectives at Martin Army Community Hospital (Feb. 1999). The author used a 1 to indicate post implementation in the dichotomous independent variable (Appendices S, U, W, Y, & AB). The scientific reason for using BACH as a control and imposing MACH's implementation time was to account for any confounding factors that might affect patient shifting from the ER to the primary care clinics, such as a MEDCOM-wide policy to increase access to health care.

The data (Table 6) show the monthly visits in the ER and two primary clinics, Family Practice and Primary Care, but only Family Practice was found to have a statistically significant difference between the studied periods (Table 6). The Pediatric Clinic and Internal Medicine clinic visits also showed a statistically significant change but unexpectedly, there was a decrease in the number of patient visits.

Table 7

Mean of clinic visits at Blanchefield Army Community Hospital pre- and post-implementation of Provider Perspectives

Blanchfield Army Comm. Hosp.Monthly Visits and Stat. Values (Using WACH's Imp.Time)						
Clinics	Visits Prior to P2	Visits After P2	Increase or Decrease in Visits	F Value	P Value	Pearson's Coefficient
Emergency Room	2111	2156	**45**	0.051	0.823	0.045
Family Practice	8292	9993	**1701**	5.23	0.031	0.416
Pediatrics	786	698	**-88**	0.197	0.661	-0.088
Internal Medicine	1741	1524	**-217**	1.872	0.183	-0.264
Primary Care	1285	1596	**311**	0.777	0.386	0.174

The author used the implementation time of Provider Perspectives at Winn Army Community Hospital (Jan 2000). As in the previous study of BACH, the author used a 1 to indicate post implementation in the dichotomous independent variable (Appendices AC, AE, AG, AI, & AK). The numbers in the table above (Table 7) changed from Table 6 because the author applied the implementation time of Provider Prospectives at WACH, which was only six months versus 17 months at MACH. The shift in all of the clinics, including the ER, was less statistically significant.

When the WACH implementation time was applied to study BACH's data, the ER visits only increased by an average of 45 visits per month. The trends in all of the primary care clinics have the same trends as in the table with the MACH implementation time, but with the exception of family practice, none of them showed any statistical significance.

Both of the Blanchfield tables are very significant because they aid in the bolstering the hypothesis that Provider Perspectives in large part caused a change in provider behavior and patient utilization of the correct medical resources.

Cost Avoidance Analysis

Although, the data in the previous section showed that the alternate hypothesis of this paper is true, it is important to put this information to some tangible use. In health care, money is a very tangible asset and any time a cost can be avoided or money saved, it is a very welcome event. In this section, the author will attempt to show that by causing a patient shift to utilizing a less expensive resource, the primary care clinics, from the more expensive ER, cost savings could be realized. The equations below, along with MEPRS cost (Table 2) were used to calculate if a cost avoidance did, in fact, exist at both MACH and WACH.

Preimplementation

(Number of ERVisits per month * Associated MEPRS cost) – (Number of Family Practice Visits per month * Associated MEPRS cost + Number of Internal Medicine Visits per month * Associated MEPRS cost + Number of Pediatric Visits per month * Associated MEPRS cost + Number of Primary Care Clinic Visits per month (only WACH) * Associated MEPRS cost) = (+ cost incurred)

Postimplementation

(Number of ERVisits per month * Associated MEPRS cost) – (Number of Family Practice Visits per month * Associated MEPRS cost + Number of Internal Medicine Visits per month * Associated MEPRS cost + Number of Pediatric Visits per month * Associated MEPRS cost + Number of Primary Care Clinic Visits per month * Associated MEPRS cost + Number of Family Practice Visits per month (only WACH) * Associated MEPRS cost) = (- cost avoided or + cost incurred)

Table 8

Cost-avoidance analysis for Martin Army Community Hospital

Martin Army Community Hospital Cost Avoidance Analysis						
	Visits Prior to P2	Visits After P2	MEPRS cost	Cost Prior to Implementation	Cost after Implementation	Difference
Emergency Room	1911	1711	$195.22	$373,065.42	$334,021.42	-$39,044.00
Family Practice	4135	5081	$110.43	$456,628.05	$561,094.83	$104,466.78
Pediatrics	1289	1826	$74.09	$95,502.01	$135,288.34	$39,786.33
Internal Medicine	424	1020	$160.25	$67,946.00	$163,455.00	$95,509.00
Total				**$993,141.48**	**$1,193,859.59**	**$200,718.11**

In the cost-avoidance study, the author was able to show that although $39,000 was avoided in the Emergency Room, costs increased in all of the primary care clinics. Overall, there was a $200,000 increase in the cost of health care at MACH.

Table 9

Cost-avoidance analysis for Winn Army Community Hospital

Clinic	Visits Prior to P2	Visits After P2	MEPRS cost	Cost Prior to Implementation	Cost after Implementation	Difference
Emergency Room	2167	1231	$124.03	$268,773.01	$152,680.93	-$116,092.08
Family Practice	2927	3171	$100.20	$293,285.40	$317,734.20	$24,448.80
Pediatrics	1470	1226	$70.87	$104,178.90	$86,886.62	-$17,292.28
Internal Medicine	828	896	$95.30	$78,908.40	$85,388.80	$6,480.40
Primary Care	2373	3171	$66.96	$158,896.08	$212,330.16	$53,434.08
Total				**$904,041.79**	**$855,020.71**	**-$49,021.08**

The cost avoidance study conducted using WACH data indicates that the shift of inpatients from the ER to the primary care clinics allowed Winn to avoid $49,000 per month.

This is a positive event, but even more encouraging is that the study shows that a significant cost avoidance occurred after the implementation of Provider Perspectives (Table 9).

Quality Indicators Analysis

The results of the analysis of the chosen preventive medicine indicators, cervical screenings and mammograms, are shown below (Tables 10, 11). These results were not found to be statistically significant in the direction the study had hypothesized. The data for this analysis was obtained from CHCS (Appendix AM). The quality analysis first looked at the cervical screenings at MACH, since WACH cervical screening data was not available.

Table 10

Quality analysis of cervical screenings at Martin Army Community Hospital

Martin Army Comm. Hosp.Monthly Cervical Screenings with HEDIS Standards						
Medical Treatment Facility	Percent Prior to P2	Percent After P2	Increase or Decrease in Percent	F Value	P Value	Pearson's Coefficient
Martin ACH	264	195	**-69**	11.979	0.002	-0.528

This chart illustrates that the number of cervical screenings decreased significantly (Appendix AN), but the positive side to this illustration is that during the 33 months that were studied, MACH was consistently above the HEDIS benchmark standard (72 percent) for cervical screenings (NCQA, 2000) (Appendix AW).

The second quality indicator, mammograms, was analyzed using both WACH and MACH data (Appendices AO, AQ, AS, AU). In this analysis, both the HEDIS and TRICARE standards were analyzed. The reason for this additional standard was that HEDIS standards require a female between 52 and 69 to receive a mammogram once every two years; TRICARE standards for the same age group are once every year.

Table 11

Table showing a quality analysis of mammograms at MACH and WACH using HEDIS and TRICARE standards

MACH and WACH Mammograms with Different Benchmark Standards Applied							
Medical Treatment Facility	Standard Used	Percent Prior to P2	Percent After P2	Increase or Decrease in Percent	F Value	P Value	Pearson's Coefficient
MACH ACH	TRICARE	112	69	**-43**	26.496	0.001	-0.679
WACH ACH	TRICARE	88	91	**3**	0.044	0.836	0.038
MACH ACH	HEDIS	212	137	**-75**	16.268	<.001	-0.587
WACH ACH	HEDIS	170	182	**12**	0.343	0.562	0.105

This table indicates that the percentage of mammograms conducted at MACH dropped significantly after Provider Perspectives was implemented (Appendices AP, AR). Conversely, the percentage of tests conducted at WACH did increase, although not statistically significant degree (Appendices AR, AT).

Discussion

The author believes that the Provider Perspectives system caused physicians to monitor their empanelled patients more closely, and encouraged their patients to utilize the primary care clinics. The results of this study bolster this conclusion. There was a significant decrease in the number of emergency room visits, which are more costly than primary care visits (Table 2).

These results are particularly important in today's military health care environment, due to the overlying need to find methods to save money and utilize all resources in an optimal manner. Provider Perspectives results at MACH and WACH promulgate the notion that this system will encourage physicians to better manage their patients. This profiling system has the potential to improve the health of the enrolled Prime beneficiary population by allowing providers to closely monitor their empanelled population, affect their health care resource utilization patterns, and provide continuity of care. This is one of the main reasons this tool was accepted at MACH because the emphasis is not placed upon physician scrutiny, it is on patient resource utilization and behavior. Therefore, Provider Perspectives has the potential to aid the physician at the level, which can optimize resources the most; the health care decision node (Pemberton, 1999).

The results bare out the expected findings. At MACH, the alternate hypothesis was in fact true. For example, the results of a means plot and regression line analysis of the ER indicates there is a negative correlation between pre- and post-implementation of Provider Perspectives (Appendix B). An ANOVA calculated by SPSS indicates the relationship between the two time periods is significant with $\underline{F} = 6.932$ and $\underline{p} = 0.013$ (Appendix B). This negative correlation was confirmed to exist ($\underline{r} = -0.427$) (Appendix B). These values indicate that the decline in the number of ER visits at MACH is less likely to be due to chance alone.

The primary care clinic data at MACH also indicated a statistically significant increase in the number of patient visits per month at all of the clinics (Table 4). For example, the means plot for family practice indicates a significant increase in visits from an average of 4,135 per month to 5,080, an increase of 945 patients per month (Appendix B). The large statistical significance can be observed in the F value = 35.714 and $p < .001$ (Appendix D).

Additionally, the Internal Medicine Clinic visits increased considerably after implementation of the profiling system. There was a 20-fold increase in the means average between the two time periods: 423 to 1020. The F value = 77.1 and the $p < .001$. The means plot shows a definite positive correlation ($r = .845$) (Appendix F).

Finally, the Pediatric Clinic at MACH showed statistical significance in an average 15-fold (1,288 to 1,825) increase in visits per month after provider perspectives was implemented. The means plot indicates a strong positive correlation exists ($r = .806$). Further bolstering the argument for statistical significance was the ANOVA values: $F = 57.58$ and $p < .001$ (Appendix H).

In each clinic at MACH, the alternate hypothesis should be accepted. Upon initial glance, it appears that ER visits decreased and primary care visits increased. This cursory information coupled with the statistical analysis information bares out that implementation of Provider Perspectives did have a significant affect on the number of clinic visits in both the ER and all of the primary care clinics. Therefore, in the case of MACH, the alternate hypothesis should be accepted and the null hypothesis rejected.

Winn Army Community Hospital had similar findings to those at MACH. For instance, the results of a means plot and regression line analysis of the ER indicate there is a negative correlation between pre- and post-implementation of Provider Perspectives (Appendix D). An

ANOVA was calculated by SPSS and indicates that the relationship between the two time periods was significant with an F = 6.932 and a p= 0.013 (Appendix D). Pearson's correlation coefficient indicates that there is a linear association (r = -0.427) (Appendix D). This points to the fact that chance had little to do with the decline in the number of ER visits. The analysis bears out that Provider Perspectives had a significant affect on utilization patterns.

The primary care clinic's data at WACH indicated a statistically significant increase in the average number of patient visits per month at two of the four clinics (Table 5). For example, the means plot for Primary Care indicates a significant increase in visits from an average of 2,373 per month to 3,171, an increase of 798 patients per month (Appendix D). The large statistical significance can be observed by the F value = 13.44 and p = .001 (Appendix D). The Pediatric Clinic visits showed a statistically significant change too, but in an unexpected way; there was a decrease in the number of patient visits after implementation of the profiling system from 1,470 to 1,226. This is a decrease of 244 patients. Further, the significance can be seen in the F value = 6.65 and the p = .015. The means plot indicates that a very strong association exists (r = .845) (Appendix F).

Finally, the Family Practice and Internal Medicine Clinics both showed an increase in the number of patient visits per month, but they were not statistically significant (Appendices L, M). The threshold for significance (p = .05) was not reached in either Family Practice (p = .246) or Internal Medicine (p = .227).

In three of the clinics at WACH, the alternate hypothesis should be accepted. Although the Pediatric Clinic visits did show statistical significance, the visits declined which is opposite of what the author expected. This is due to the assumption that the pediatric patients shifted from the ER would utilize the Pediatric Clinic. Instead of the Pediatric Clinic, these patients may have

been enrolled in Family Practice and been part of the significant increase. Finally, the null hypothesis should be accepted in the Family Practice and Internal Medicine Clinics, but it should be noted that the monthly visit totals did increase, which is what was expected.

Before fully implementing Provider Perspectives, it was important to show that there is a decreased likelihood that any confounding variables could have affected clinic usage rate. Therefore, this study employed BACH as a control. The data (Table 6) indicates the monthly visits in BACH's ER increased by 396 patients per month after the time that Provider Perspectives was implemented at MACH. The BACH ER results of a means plot and regression line analysis indicate that there is a negative correlation between pre- and post-implementation of Provider Perspectives (Appendix T). An ANOVA was calculated by SPSS and indicates that a significant relationship exists ($F = 6.46$ and a $p = 0.018$) (Appendix T). Pearson's correlation coefficient indicates that there is a linear association ($r = 0.453$) (Appendix T).

Two primary clinics were observed to have an increase in patient visits per month; Family Practice and Primary Care, but only the increase in Family Practice was found to have statistical significance (Table 6). For example, the means plot for Family Practice indicates a significant increase in visits from an average of 7,248 per month to 9,507, an increase of 2,259 patients per month (Appendix V). The large statistical significance can be observed in the F value = 13.44 and $p = .001$ (Appendix V). Although, the Primary Care Clinic had an increase in the average number of patients (246/month), this was not found to be statistically significant ($F = .653$ and $p = .427$) (Appendix AB).

Interestingly, after applying the MACH implementation time of Provider Perspectives to BACH, the Pediatric Clinic and Internal Medicine visits showed a statistically significant decrease in the number of patient visits. Internal Medicine had an average decrease of 466

patient visits per month, which yielded $F = 19.16$ and $p < .001$ (Table 6) (Appendix X). The change in the Pediatric Clinic was very similar with a statistically significant average patient decrease of 422 ($F = 8.144$ and $p = .009$) (Table 8) (Appendix Z).

Similar results were obtained when the author imposed WACH's Provider Perspectives implementation time onto BACH's data. The shift in all of the clinics, including the ER, was less statistically significant. When the WACH implementation time was applied to study BACH's data, the ER visits only increased by an average of 45 visits per month which is not significant ($F = .051$ and $p = .823$) (Appendix AD). The trends in all of the primary care clinics have the same trends as in the table with the MACH implementation time, but none of them showed any statistical significance. One explanation for this failure to obtain statistical significance is the unacceptable decrease in statistical power associated with the decrease in sample size.

Both of the Blanchfield tables (6 & 7) are very significant because they aid in bolstering the hypothesis that no confounding factors such as a MEDCOM-wide policy caused a shift in patient resource utilization and Provider Perspectives, in large part, affected a change in provider behavior and patient utilization of the correct medical resources. Provider Perspectives did influence a significant change in patient utilization (visits/month) of health care resources. At both MACH and WACH, a statistically significant decrease in ER usage was observed (Appendices B, J).

Consequently, along with a shift to proper resource utilization, a cost avoidance can be realized and, indeed, at MACH and WACH, this was accomplished in the ER in the amounts of $39,000 and $116,000, respectively. At MACH, there was an overall monthly operating increase of $200,000. This would be troubling if the patient shift from the ER to the primary care clinics had occurred in a 1:1 fashion, but it occurred on a 1:20 basis. For every one patient shifted out of

the ER, 20 patients were seen in the primary care clinics. Therefore, this points out that even though the cost went up, so did access to care.

At Winn, the study showed slightly different results, but just as noteworthy. For every one patient visit to the ER avoided, there was one seen in a primary care clinic (1:1). By using the MEPRS cost, a significant monthly cost avoidance was realized; $49,000 per month (Table 9). This monetary figure is very important because one of the author's initial intents was to show that BG Porr, Lead Agent, Region 3 had received a positive return on his investment. In fact, when the monthly cost avoidance at Winn is extrapolated out to an annual total ($588,000), this would be more than the current cost for Provider Perspectives ($435,000). In fact, this system would pay for itself in nine months if only deployed exclusively at WACH.

To gauge the affect of Provider Perspectives on quality measures, SPSS was employed to determine statistical significance. In the case of cervical screenings at MACH, there was a decrease in the average percent of monthly mammograms by 69 percent. This was a significant decrease ($\underline{F}$=11.979 and $\underline{p}$ = .002) (Table 10). Although, the study does not directly look at why there was a significant decrease, a noteworthy point is that when applying the HEDIS standards, the quality of care was above the 50^{th} percentile (Appendix AW). When MACH is considered at the institution level, the 50^{th} percentile threshold was not reached in MAJ Pemberton's study (Pemberton, 1999).

The other quality measure, mammograms, was also analyzed with mixed results. In the case of this preventive test, both HEDIS and TRICARE standards were used, and the 50^{th} HEDIS percentile was applied to both (Appendix AX, AY). The TRICARE and HEDIS standards for cervical screenings are the same, which is one screening annually after age 18. With respect to

mammograms the TRICARE standard is one mammogram annually after age 50. The HEDIS mammogram standard is one mammogram every two years after age 52 (Humana, 2001).

At Martin Army Community Hospital, there was a significant decrease in the average monthly percentage of mammograms using both standards (Table 11), but it should be noted that the HEDIS data set met the HEDIS 50th percentile goal (73%). When applying the more stringent TRICARE standards, the HEDIS benchmark was met in only six of eleven quarters studied (Appendix AX).

At Winn Army Community Hospital, Provider Perspectives seems to have had a positive affect on the number of females receiving mammograms. Although, SPSS did not show statistical significance using either HEDIS or TRICARE standards (Table 11), there was an increase in the number of mammograms. When the percentage of women receiving mammograms (HEDIS and TRICARE standards) was compared to the HEIDS 50th percentile benchmark, both sets of data were consistently above the 50th percentile threshold for all 33 months.

This study has concluded that a strong probability exists that Provider Perspectives had a significant affect on physician practice patterns and patient behavior, which was shown by decreased ER and increased Primary Care Clinic utilization. This proper resource utilization was extrapolated to a significant cost avoidance at WACH and an increase in access at MACH. Finally, the quality analysis showed that Provider Perspectives did not have a positive statistically significant affect on cervical and mammogram screenings.

Conclusions and Recommendations

The alternate hypothesis in this study was “Implementation of Provider Perspectives had a significant affect on the utilization rate of beneficiaries seen in both the Emergency Room and the Primary Care Outpatient clinics." This hypothesis was supported using SPSS and should be accepted. In view of these findings, the author recommends that Provider Perspectives be adopted and sufficient resources applied to convert to a web-based application. When adopted, leaders should use Provider Prospectives as an indicator method, not a reprisal tool. Since Provider Perspectives was successful at two MTFs in Region 3, and its educational and cost-avoidance benefits were realized, there should be strong consideration given to fielding this program throughout Region 3 and the Military Health System (MHS).

Currently, another provider profiling tool under development in the Department of Defense is the Air Force’s executive decision-making tool called the Population Health Operational Tracking and Optimization System (PHOTO). Both the Provider Perspectives and PHOTO have similar capabilities (Personal Communication with Major Scott Corcoran, April 14, 2001). Since the DoD has one goal, to have the best population-based health assessment tool, there should be extensive collaboration conducted between MEDCOM and the Air Force to develop a system combining features of both systems to create a superior assessment tool for the DoD. Further, the TRICARE Management Activity should conduct a formal evaluation to determine the most cost-efficient manner to merge these two systems.

Further, as an alternate method of verifying the findings and conclusions of this study, the author would recommend that a follow on study be conducted. This study might address the following areas: Whether the implementation of Provider Perspectives increased the number of

patients seen per physician, decreased the number of referrals to civilian providers, decreased the amount paid in medical claims by CHAMPUS, and decreased pharmacy costs per patient.

Presently, the main beneficiaries of the success of this profiling program are two groups: Patients and Region 3. The patients are the main recipients of this program. The quality of their care will increase due to physicians monitoring their empanelled beneficiary's health status and providing care in a more appropriate setting. The second beneficiary of a positive outcome of this program is Region 3. If fielded in all hospitals in Region 3, a large cost avoidance could be realized throughout the region. This study has taken the initial steps in showing that a significant cost avoidance and an increase in access to quality health care can occur with the proper use of Provider Prospectives.

Appendices

A. Martin Army Community Hospital Emergency Room Visits Data

B. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of MACH ER Visits Data

C. Martin Army Community Hospital Family Practice Clinic Visits Data

D. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of MACH Family Practice Visits Data

E. Martin Army Community Hospital Internal Medicine Clinic Visits Data

F. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of MACH Internal Medicine Clinic Visits Data

G. Martin Army Community Hospital Pediatric Clinic Visits Data

H. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of MACH Pediatric Clinic Visits Data

I. Winn Army Community Hospital Emergency Room Visits Data

J. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of WACH ER Visits Data

K. Winn Army Community Hospital Family Practice Clinic Visits Data

L. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of WACH Family Practice Visits Data

M. Winn Army Community Hospital Internal Medicine Clinic Visits Data

N. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of WACH Internal Medicine Clinic Visits Data

O. Martin Army Community Hospital Pediatric Clinic Visits Data

P. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of WACH Pediatric Clinic Visits Data

Q. Winn Army Community Hospital Primary Care Clinic Visits Data

R. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of WACH Primary Care Clinic Visits Data

S. Blanchfield Army Community Hospital ER Visits with Martin Army Community Hospital Implementation Time (Feb. 1999) Imposed

T. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH ER Visits Data with MACH Implementation Time (Feb. 1999) Imposed

U. Blanchfield Army Community Hospital Family Practice Clinic Visits with Martin Army Community Hospital Implementation Time (Feb. 1999) Imposed

V. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Family Practice Data with MACH Implementation Time (Feb. 1999) Imposed

W. Blanchfield Army Community Hospital Internal Medicine Clinic Visits with Martin Army Community Hospital Implementation Time (Feb. 1999) Imposed

X. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Internal Medicine Data with MACH Implementation Time (Feb. 1999) Imposed

Y. Blanchfield Army Community Hospital Pediatric Clinic Visits with Martin Army Community Hospital Implementation Time (Feb. 1999) Imposed

Z. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Pediatric Clinic Data with MACH Implementation Time (Feb. 1999) Imposed

AA. Blanchfield Army Community Hospital Primary Care Clinic Visits with Martin Army Community Hospital Implementation Time (Feb. 1999) Imposed

AB. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Primary Care Visits Data with MACH Implementation Time (Feb. 1999) Imposed

AC. Blanchfield Army Community Hospital ER Visits with Winn Army Community Hospital Implementation Time (Jan. 2000) Imposed

AD. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH ER Visits Data with WACH Implementation Time (Jan. 2000) Imposed

AE. Blanchfield Army Community Hospital Family Practice Clinic Visits with Winn Army Community Hospital Implementation Time (Jan. 2000) Imposed

AF. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Family Practice Visits Data with WACH Implementation Time (Jan. 2000) Imposed

AG. Blanchfield Army Community Hospital Internal Medicine Clinic Visits with Winn Army Community Hospital Implementation Time (Jan. 2000) Imposed

AH. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Internal Medicine Clinic Visits Data with WACH Implementation Time (Jan. 2000) Imposed

AI. Blanchfield Army Community Hospital Pediatric Clinic Visits with Winn Army Community Hospital Implementation Time (Jan. 2000) Imposed

AJ. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Pediatric Clinic Visits Data with WACH Implementation Time (Jan. 2000) Imposed

AK. Blanchfield Army Community Hospital Primary Care Clinic Visits with Winn Army Community Hospital Implementation Time (Jan. 2000) Imposed

AL. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of BACH Primary Care Clinic Visits Data with WACH Implementation Time (Jan. 2000) Imposed

AM. Martin Army Community Hospital Cervical Screenings Using HEDIS Standards

AN. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of MACH Cervical Screenings Using HEDIS Standards

AO. Martin Army Community Hospital Mammogram Screenings Using HEDIS Standards

AP. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of MACH Mammogram Screenings Using HEDIS Standards

AQ. Martin Army Community Hospital Mammogram Screenings Using TRICARE Standards

AR. Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of MACH Mammogram Screenings Using TRICARE Standards

AS. Winn Army Community Hospital Mammogram Screenings Using HEDIS Standards

AT. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of WACH Mammogram Screenings Using HEDIS Standards

AU. Winn Army Community Hospital Mammogram Screenings Using TRICARE Standards

AV. Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives, SPSS Analysis of Variance Test, and SPSS Correlation Matrices of WACH Mammogram Screenings Using TRICARE Standards

AW. Percentage of Cervical Screenings at MACH Using HEDIS Standards

AX. Percentage of Mammogram Screenings at MACH Using HEDIS and TRICARE Standards

AY. Percentage of Mammogram Screenings at WACH Using HEDIS and TRICARE Standards

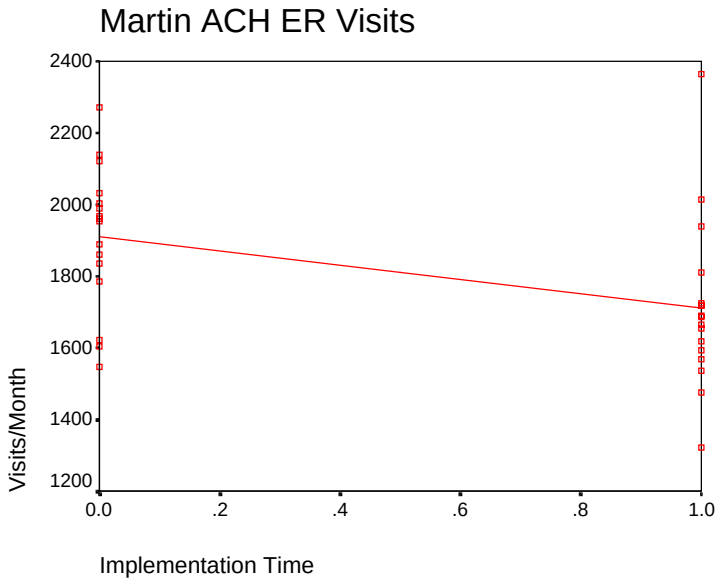
Appendix A

Martin Army Community Hospital Emergency Room Visits

CalendarYear	Calendar Year	Visits	Implementation Time
1997	10	1547	0
1997	11	1620	0
1997	12	1602	0
1998	1	1834	0
1998	2	1786	0
1998	3	1962	0
1998	4	1859	0
1998	5	2271	0
1998	6	1967	0
1998	7	1954	0
1998	8	2005	0
1998	9	2121	0
1998	10	1988	0
1998	11	2032	0
1998	12	1889	0
1999	1	2140	0
1999	2	2014	1
1999	3	2366	1
1999	4	1938	1
1999	5	1810	1
1999	6	1534	1
1999	7	1617	1
1999	8	1594	1
1999	9	1665	1
1999	10	1724	1
1999	11	1690	1
1999	12	1718	1
2000	1	1719	1
2000	2	1476	1
2000	3	1653	1
2000	4	1569	1
2000	5	1684	1
2000	6	1322	1

Appendix B

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	328740.1	1	328740.089	6.932	.013[a]
	Residual	1470191	31	47425.510		
	Total	1798931	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	-.427
	IMPLTIME	-.427	1.000
Sig. (1-tailed)	VISITS	.	.007
	IMPLTIME	.007	.
N	VISITS	33	33
	IMPLTIME	33	33

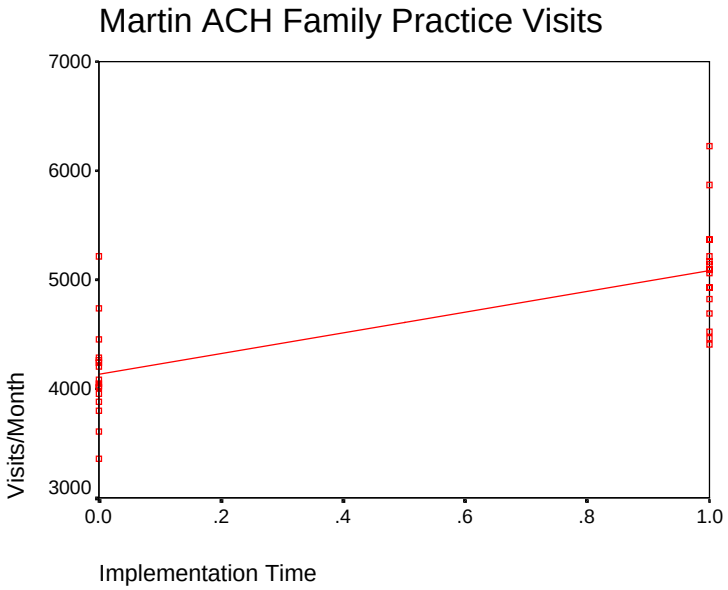
Appendix C

Martin Army Community Hospital Family Practice Clinic Visits

CalendarYear	Calendar Year	Visits	Implementation Time
1997	10	4028	0
1997	11	3353	0
1997	12	3602	0
1998	1	3800	0
1998	2	3877	0
1998	3	4283	0
1998	4	4086	0
1998	5	4052	0
1998	6	4237	0
1998	7	4203	0
1998	8	4012	0
1998	9	4267	0
1998	10	5220	0
1998	11	4454	0
1998	12	3950	0
1999	1	4738	0
1999	2	5098	1
1999	3	6230	1
1999	4	5054	1
1999	5	4933	1
1999	6	5215	1
1999	7	4690	1
1999	8	4928	1
1999	9	5168	1
1999	10	5874	1
1999	11	5369	1
1999	12	4518	1
2000	1	4409	1
2000	2	5093	1
2000	3	5368	1
2000	4	4464	1
2000	5	5140	1
2000	6	4824	1

Appendix D

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7372494	1	7372493.819	35.714	.000[a]
	Residual	6399462	31	206434.242		
	Total	1.4E+07	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.732
	IMPLTIME	.732	1.000
Sig. (1-tailed)	VISITS	.	.000
	IMPLTIME	.000	.
N	VISITS	33	33
	IMPLTIME	33	33

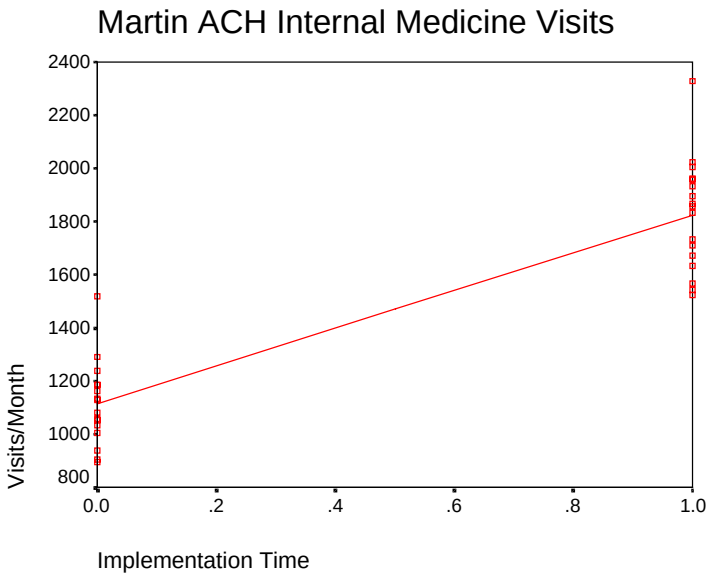
Appendix E

Martin Army Community Hospital Internal Medicine Clinic Visits

CalendarYear	Calendar Year	Visits	Implementation Time
1997	10	319	0
1997	11	266	0
1997	12	288	0
1998	1	309	0
1998	2	337	0
1998	3	399	0
1998	4	376	0
1998	5	335	0
1998	6	362	0
1998	7	334	0
1998	8	512	0
1998	9	524	0
1998	10	517	0
1998	11	559	0
1998	12	598	0
1999	1	747	0
1999	2	802	1
1999	3	978	1
1999	4	775	1
1999	5	670	1
1999	6	665	1
1999	7	745	1
1999	8	1024	1
1999	9	1090	1
1999	10	974	1
1999	11	1155	1
1999	12	1302	1
2000	1	1194	1
2000	2	1391	1
2000	3	1390	1
2000	4	890	1
2000	5	1211	1
2000	6	1085	1

Appendix F

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2929647	1	2929647.309	77.098	.000[a]
	Residual	1177963	31	37998.796		
	Total	4107610	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
VISITS	Pearson Correlation	1.000	.845**
	Sig. (2-tailed)	.	.000
	N	33	33
IMPLTIME	Pearson Correlation	.845**	1.000
	Sig. (2-tailed)	.000	.
	N	33	33

**. Correlation is significant at the 0.01 level (2-tailed).

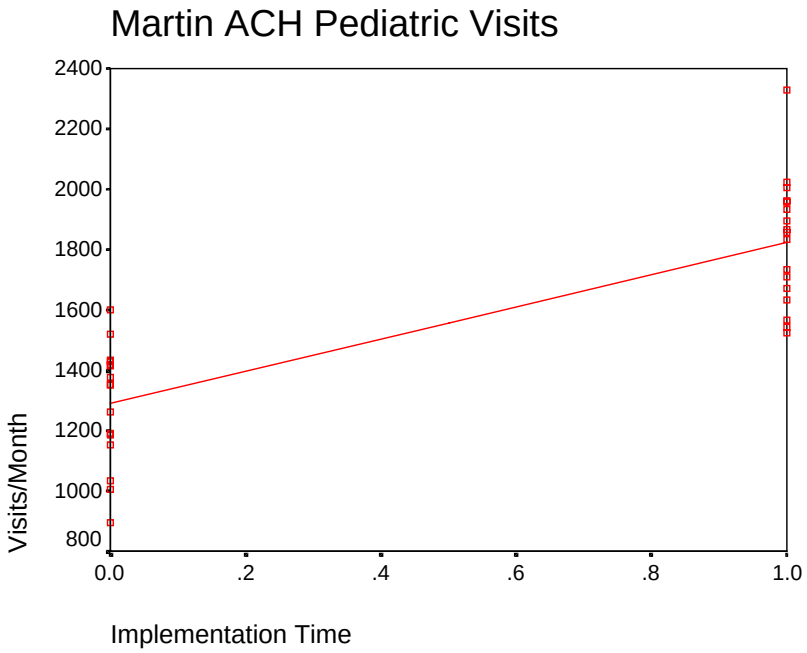
Appendix G

Martin Army Community Pediatric Clinic Visits

CalendarYear	Calendar Year	Visits	Implementation Time
1997	10	1004	0
1997	11	893	0
1997	12	1033	0
1998	1	1435	0
1998	2	1376	0
1998	3	1600	0
1998	4	1352	0
1998	5	1264	0
1998	6	1418	0
1998	7	1191	0
1998	8	1353	0
1998	9	1427	0
1998	10	1413	0
1998	11	1152	0
1998	12	1185	0
1999	1	1521	0
1999	2	1568	1
1999	3	1855	1
1999	4	1673	1
1999	5	1542	1
1999	6	1525	1
1999	7	1632	1
1999	8	1868	1
1999	9	1896	1
1999	10	2022	1
1999	11	1960	1
1999	12	1835	1
2000	1	1955	1
2000	2	1932	1
2000	3	2330	1
2000	4	1734	1
2000	5	2006	1
2000	6	1708	1

Appendix H

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2380213	1	2380213.000	57.581	.000[a]
	Residual	1281449	31	41337.061		
	Total	3661662	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.806
	IMPLTIME	.806	1.000
Sig. (1-tailed)	VISITS	.	.000
	IMPLTIME	.000	.
N	VISITS	33	33
	IMPLTIME	33	33

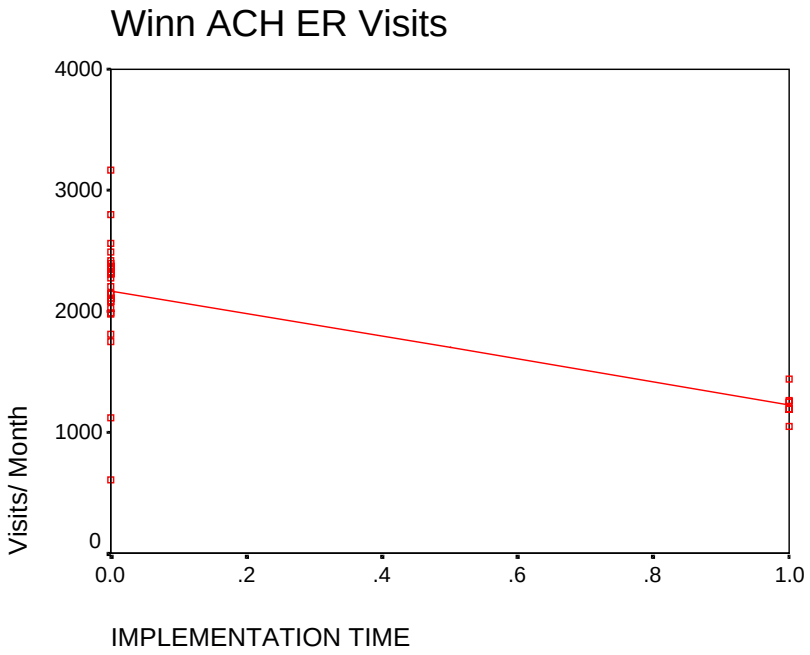
Appendix I

Winn Army Community Hospital Emergency Room Visits

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	1124	0
1997	11	1750	0
1997	12	2412	0
1998	1	2365	0
1998	2	2112	0
1998	3	2138	0
1998	4	1993	0
1998	5	2308	0
1998	6	2083	0
1998	7	2028	0
1998	8	2087	0
1998	9	2355	0
1998	10	2369	0
1998	11	2398	0
1998	12	2273	0
1999	1	3170	0
1999	2	2562	0
1999	3	2793	0
1999	4	2207	0
1999	5	2320	0
1999	6	1974	0
1999	7	2141	0
1999	8	2343	0
1999	9	2309	0
1999	10	2492	0
1999	11	1811	0
1999	12	605	0
2000	1	1049	1
2000	2	1266	1
2000	3	1444	1
2000	4	1191	1
2000	5	1185	1
2000	6	1254	1

Appendix J

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA

VISITS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4300665	1	4300664.729	22.173	.000
Within Groups	6012656	31	193956.653		
Total	1.0E+07	32			

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	-.646
	IMPLTIME	-.646	1.000
Sig. (1-tailed)	VISITS	.	.000
	IMPLTIME	.000	.
N	VISITS	33	33
	IMPLTIME	33	33

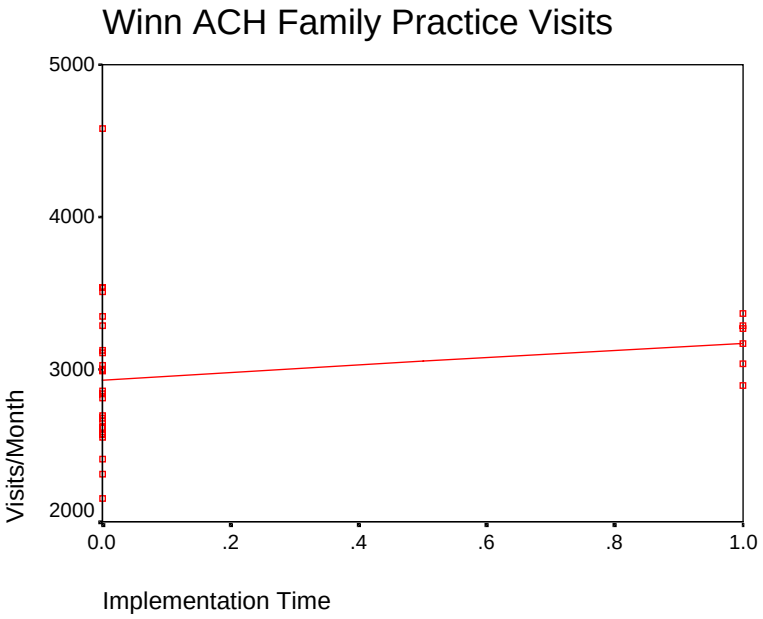
Appendix K

Winn Army Community Hospital Family Practice Visits

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	2699	0
1997	11	2148	0
1997	12	3004	0
1998	1	2663	0
1998	2	2843	0
1998	3	3512	0
1998	4	2994	0
1998	5	2616	0
1998	6	2856	0
1998	7	2311	0
1998	8	2682	0
1998	9	2612	0
1998	10	2811	0
1998	11	2572	0
1998	12	2573	0
1999	1	2558	0
1999	2	3286	0
1999	3	4582	0
1999	4	3532	0
1999	5	3030	0
1999	6	3535	0
1999	7	2992	0
1999	8	3103	0
1999	9	2412	0
1999	10	3128	0
1999	11	3352	0
1999	12	2620	0
2000	1	3271	1
2000	2	3040	1
2000	3	3170	1
2000	4	2894	1
2000	5	3365	1
2000	6	3288	1

Appendix L

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2607567	1	2607566.896	6.108	.019[a]
	Residual	1.3E+07	31	426928.841		
	Total	1.6E+07	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	-.406
	IMPLTIME	-.406	1.000
Sig. (1-tailed)	VISITS	.	.010
	IMPLTIME	.010	.
N	VISITS	33	33
	IMPLTIME	33	33

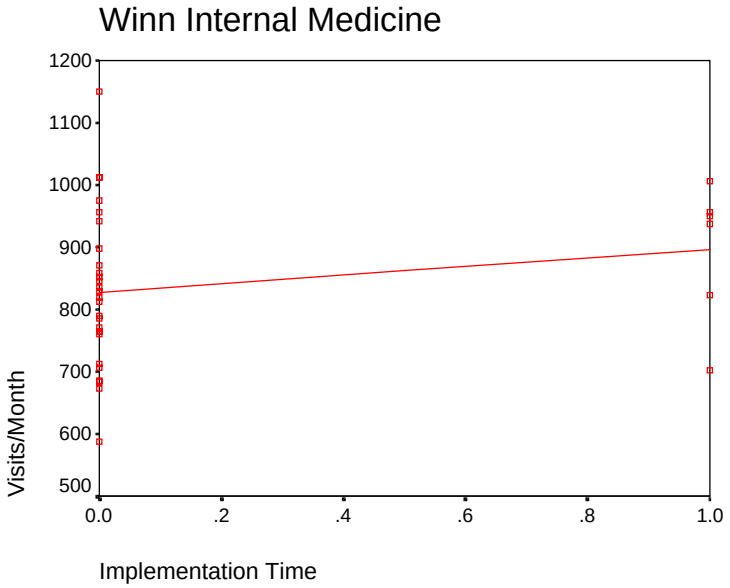
Appendix M

Winn Army Community Hospital Internal Medicine Clinic Visits

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	764	0
1997	11	587	0
1997	12	786	0
1998	1	853	0
1998	2	942	0
1998	3	1149	0
1998	4	830	0
1998	5	764	0
1998	6	1012	0
1998	7	706	0
1998	8	685	0
1998	9	835	0
1998	10	858	0
1998	11	870	0
1998	12	818	0
1999	1	812	0
1999	2	846	0
1999	3	1013	0
1999	4	974	0
1999	5	789	0
1999	6	683	0
1999	7	673	0
1999	8	760	0
1999	9	770	0
1999	10	898	0
1999	11	957	0
1999	12	713	0
2000	1	956	1
2000	2	1006	1
2000	3	937	1
2000	4	702	1
2000	5	823	1
2000	6	951	1

Appendix N

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22811.05	1	22811.045	1.519	.227[a]
	Residual	465518.8	31	15016.737		
	Total	488329.9	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.216
	IMPLTIME	.216	1.000
Sig. (1-tailed)	VISITS	.	.114
	IMPLTIME	.114	.
N	VISITS	33	33
	IMPLTIME	33	33

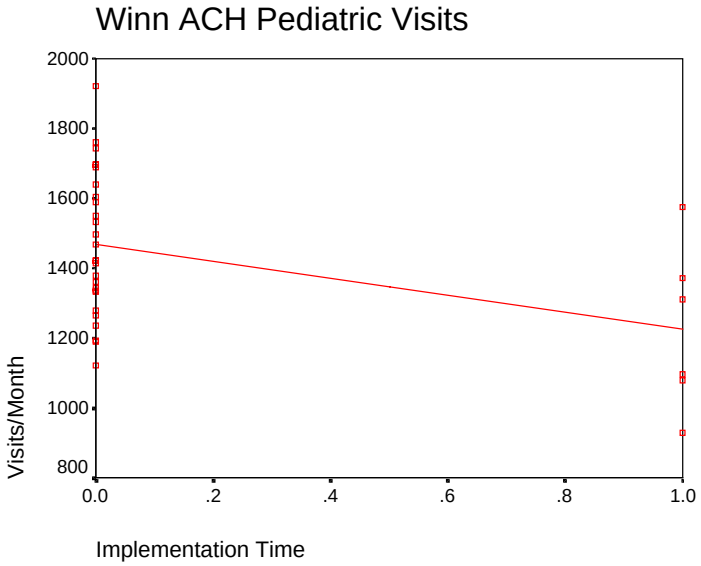
Appendix O

Winn Army Community Hospital Pediatric Clinic Visits

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	1761	0
1997	11	1266	0
1997	12	1531	0
1998	1	1332	0
1998	2	1551	0
1998	3	1697	0
1998	4	1422	0
1998	5	1342	0
1998	6	1377	0
1998	7	1121	0
1998	8	1279	0
1998	9	1602	0
1998	10	1697	0
1998	11	1691	0
1998	12	1590	0
1999	1	1193	0
1999	2	1234	0
1999	3	1744	0
1999	4	1360	0
1999	5	1415	0
1999	6	1335	0
1999	7	1191	0
1999	8	1467	0
1999	9	1495	0
1999	10	1639	0
1999	11	1921	0
1999	12	1423	0
2000	1	1574	1
2000	2	1372	1
2000	3	1078	1
2000	4	1095	1
2000	5	1310	1
2000	6	927	1

Appendix P

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	291026.8	1	291026.774	6.651	.015[a]
	Residual	1356397	31	43754.734		
	Total	1647424	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.174
	IMPLTIME	.174	1.000
Sig. (1-tailed)	VISITS	.	.193
	IMPLTIME	.193	.
N	VISITS	27	27
	IMPLTIME	27	27

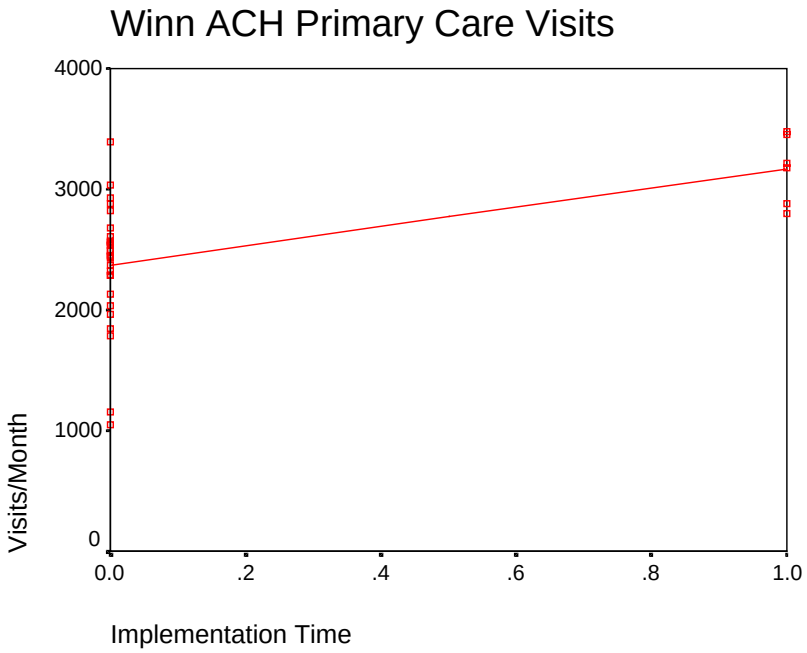
Appendix Q

Winn Army Community Hospital Primary Care Clinic Visits

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	1842	0
1997	11	1160	0
1997	12	2035	0
1998	1	2605	0
1998	2	2365	0
1998	3	2564	0
1998	4	2424	0
1998	5	2290	0
1998	6	2134	0
1998	7	1785	0
1998	8	1962	0
1998	9	2535	0
1998	10	2490	0
1998	11	2676	0
1998	12	2886	0
1999	1	2932	0
1999	2	2489	0
1999	3	2818	0
1999	4	2550	0
1999	5	2284	0
1999	6	2319	0
1999	7	2437	0
1999	8	2449	0
1999	9	1047	0
1999	10	3037	0
1999	11	3397	0
1999	12	2569	0
2000	1	3482	1
2000	2	3455	1
2000	3	3182	1
2000	4	2803	1
2000	5	3217	1
2000	6	2884	1

Appendix R

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3119313	1	3119313.173	13.442	.001[a]
	Residual	7193696	31	232054.703		
	Total	1.0E+07	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.174
	IMPLTIME	.174	1.000
Sig. (1-tailed)	VISITS	.	.193
	IMPLTIME	.193	.
N	VISITS	27	27
	IMPLTIME	27	27

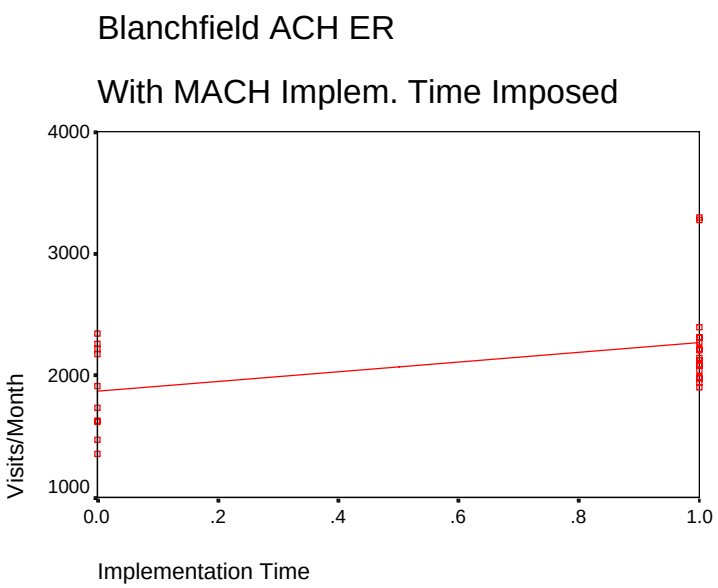
Appendix S

Blanchfield Army Community Hospital ER Visits with Martin Army Community Hospital Implementation Time (Feb 1999) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	726	.
1997	11	641	.
1997	12	710	.
1998	1	726	.
1998	2	431	.
1998	3	603	.
1998	4	1353	0
1998	5	1631	0
1998	6	1618	0
1998	7	1472	0
1998	8	1734	0
1998	9	2254	0
1998	10	2221	0
1998	11	2179	0
1998	12	1911	0
1999	1	2340	0
1999	2	2391	1
1999	3	3295	1
1999	4	2218	1
1999	5	3277	1
1999	6	1975	1
1999	7	1899	1
1999	8	1941	1
1999	9	2311	1
1999	10	2142	1
1999	11	2034	1
1999	12	2124	1
2000	1	2206	1
2000	2	2088	1
2000	3	2269	1
2000	4	2083	1
2000	5	2309	1
2000	6	1983	1

Appendix T

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	987624.0	1	987624.018	6.464	.018[a]
	Residual	3819480	25	152779.199		
	Total	4807104	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.453
	IMPLTIME	.453	1.000
Sig. (1-tailed)	VISITS	.	.009
	IMPLTIME	.009	.
N	VISITS	27	27
	IMPLTIME	27	27

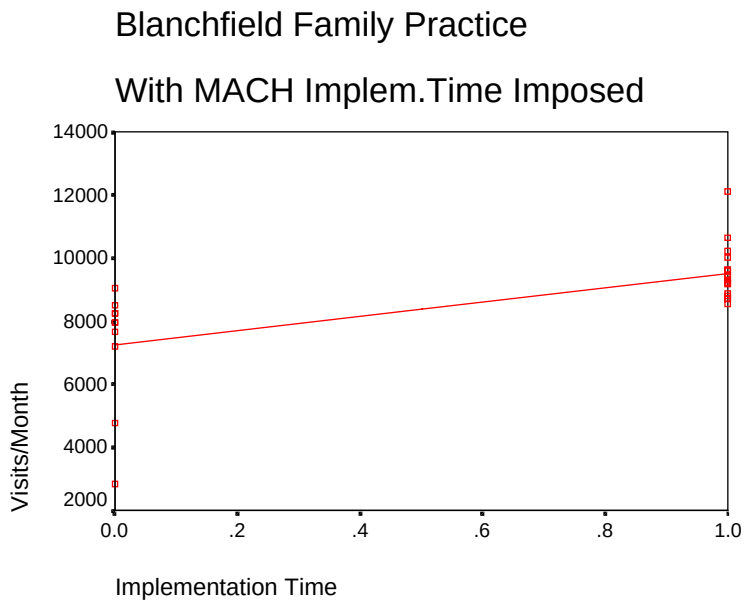
Appendix U

Blanchfield Army Community Hospital Family Practice Clinic Visits with Martin Army Community Hospital Implementation Time (Feb 1999) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	839	.
1997	11	215	.
1997	12	283	.
1998	1	291	.
1998	2	355	.
1998	3	384	.
1998	4	2856	0
1998	5	4774	0
1998	6	7944	0
1998	7	7212	0
1998	8	7957	0
1998	9	7660	0
1998	10	8252	0
1998	11	8502	0
1998	12	8262	0
1999	1	9061	0
1999	2	9428	1
1999	3	10633	1
1999	4	9154	1
1999	5	8530	1
1999	6	8696	1
1999	7	8876	1
1999	8	9469	1
1999	9	9235	1
1999	10	8722	1
1999	11	9642	1
1999	12	9281	1
2000	1	10031	1
2000	2	10239	1
2000	3	12113	1
2000	4	9204	1
2000	5	9585	1
2000	6	8785	1

Appendix V

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.2E+07	1	32137203.68	17.521	.000[a]
	Residual	4.6E+07	25	1834203.082		
	Total	7.8E+07	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.642
	IMPLTIME	.642	1.000
Sig. (1-tailed)	VISITS	.	.000
	IMPLTIME	.000	.
N	VISITS	27	27
	IMPLTIME	27	27

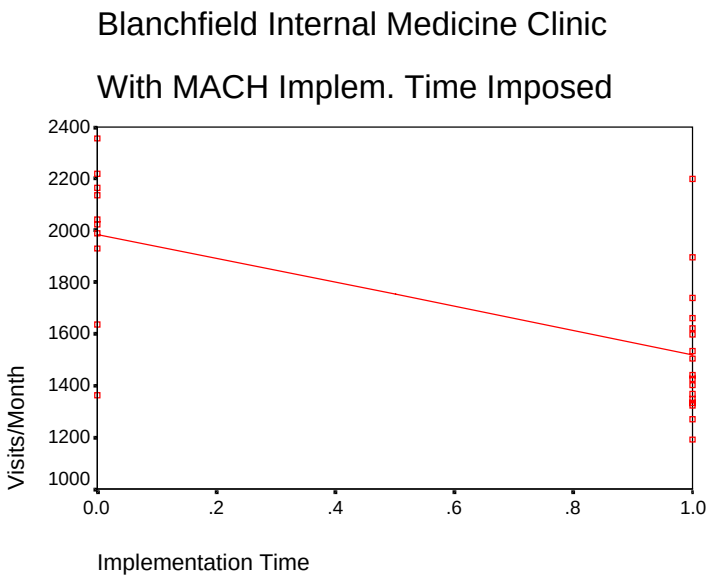
Appendix W

Blanchfield Army Community Hospital Internal Medicine Clinic Visits with Martin Army Community Hospital Implementation Time (Feb 1999) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	190	.
1997	11	59	.
1997	12	120	.
1998	1	141	.
1998	2	151	.
1998	3	135	.
1998	4	2022	0
1998	5	1363	0
1998	6	2138	0
1998	7	1929	0
1998	8	2220	0
1998	9	2163	0
1998	10	2356	0
1998	11	1988	0
1998	12	2045	0
1999	1	1638	0
1999	2	1659	1
1999	3	2200	1
1999	4	1622	1
1999	5	1189	1
1999	6	1270	1
1999	7	1322	1
1999	8	1439	1
1999	9	1597	1
1999	10	1367	1
1999	11	1504	1
1999	12	1536	1
2000	1	1898	1
2000	2	1334	1
2000	3	1427	1
2000	4	1403	1
2000	5	1348	1
2000	6	1738	1

Appendix X

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1363967	1	1363966.749	19.156	.000[a]
	Residual	1780069	25	71202.746		
	Total	3144035	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	-.659
	IMPLTIME	-.659	1.000
Sig. (1-tailed)	VISITS	.	.000
	IMPLTIME	.000	.
N	VISITS	27	27
	IMPLTIME	27	27

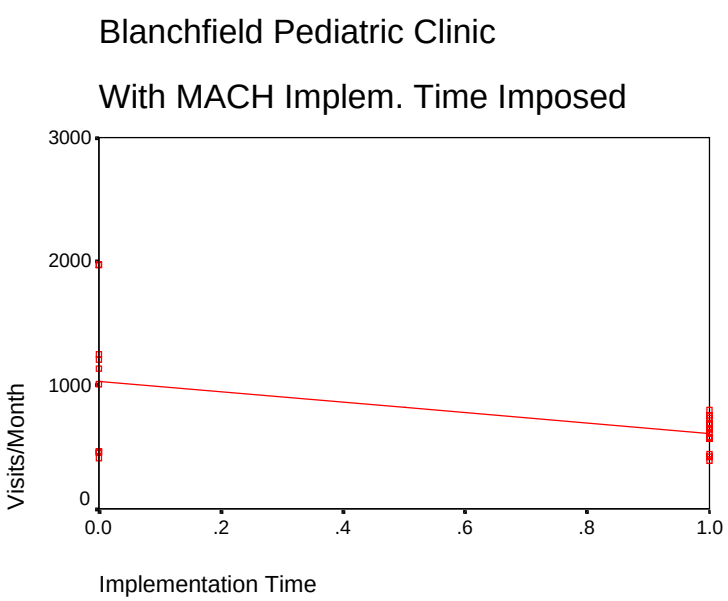
Appendix Y

Blanchfield Army Community Hospital Pediatric Clinic Visits With Martin Army Community Hospital Implementation Time (Feb 1999) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	81	.
1997	11	104	.
1997	12	98	.
1998	1	125	.
1998	2	143	.
1998	3	171	.
1998	4	1976	0
1998	5	1972	0
1998	6	1204	0
1998	7	1138	0
1998	8	1247	0
1998	9	1003	0
1998	10	414	0
1998	11	461	0
1998	12	448	0
1999	1	465	0
1999	2	562	1
1999	3	579	1
1999	4	569	1
1999	5	582	1
1999	6	622	1
1999	7	392	1
1999	8	441	1
1999	9	759	1
1999	10	415	1
1999	11	572	1
1999	12	692	1
2000	1	680	1
2000	2	641	1
2000	3	795	1
2000	4	654	1
2000	5	737	1
2000	6	686	1

Appendix Z

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1123021	1	1123020.831	8.144	.009[a]
	Residual	3447402	25	137896.073		
	Total	4570423	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	-.496
	IMPLTIME	-.496	1.000
Sig. (1-tailed)	VISITS	.	.004
	IMPLTIME	.004	.
N	VISITS	27	27
	IMPLTIME	27	27

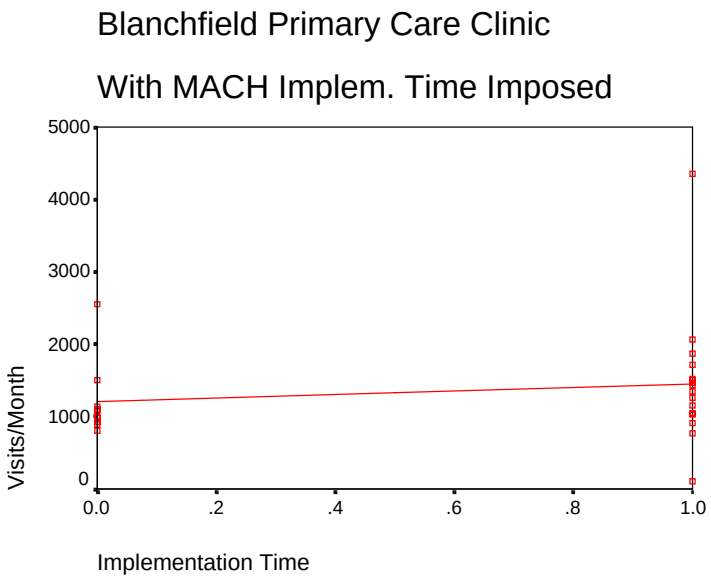
Appendix AA

Blanchfield Army Community Hospital Primary Care Visits With Martin Army Community Hospital Implementation Time (Feb 1999) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	529	.
1997	11	406	.
1997	12	453	.
1998	1	536	.
1998	2	319	.
1998	3	510	.
1998	4	2547	0
1998	5	1499	0
1998	6	804	0
1998	7	983	0
1998	8	1000	0
1998	9	1110	0
1998	10	1137	0
1998	11	897	0
1998	12	933	0
1999	1	1078	0
1999	2	1028	1
1999	3	1057	1
1999	4	764	1
1999	5	108	1
1999	6	909	1
1999	7	1025	1
1999	8	1259	1
1999	9	1461	1
1999	10	4355	1
1999	11	1528	1
1999	12	1496	1
2000	1	1866	1
2000	2	2058	1
2000	3	1710	1
2000	4	1340	1
2000	5	1439	1
2000	6	1162	1

Appendix AB

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	381646.5	1	381646.474	.653	.427[a]
	Residual	1.5E+07	25	584161.504		
	Total	1.5E+07	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.160
	IMPLTIME	.160	1.000
Sig. (1-tailed)	VISITS	.	.213
	IMPLTIME	.213	.
N	VISITS	27	27
	IMPLTIME	27	27

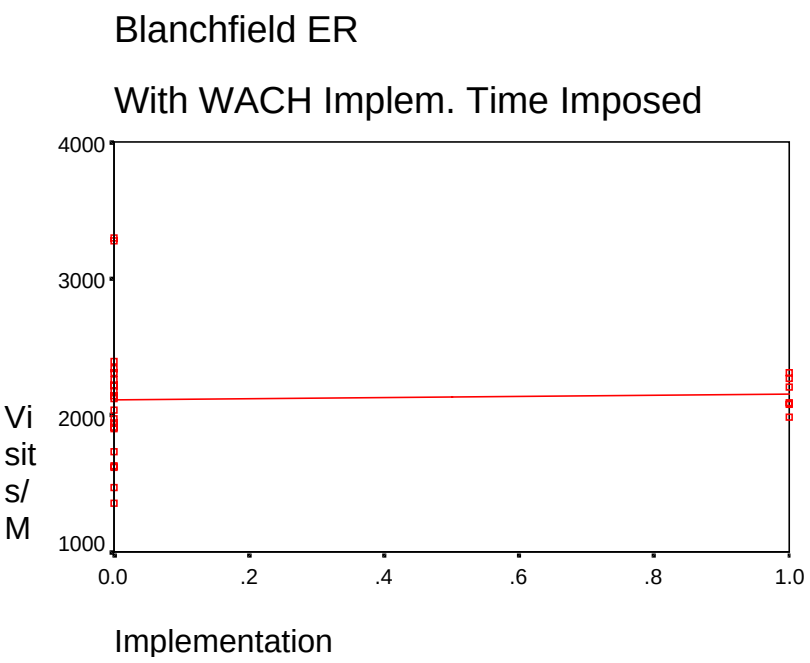
Appendix AC

Blanchfield Army Community Hospital ER Visits with Winn Army Community Hospital Implementation Time (Jan 2000) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	726	.
1997	11	641	.
1997	12	710	.
1998	1	726	.
1998	2	431	.
1998	3	603	.
1998	4	1353	0
1998	5	1631	0
1998	6	1618	0
1998	7	1472	0
1998	8	1734	0
1998	9	2254	0
1998	10	2221	0
1998	11	2179	0
1998	12	1911	0
1999	1	2340	0
1999	2	2391	0
1999	3	3295	0
1999	4	2218	0
1999	5	3277	0
1999	6	1975	0
1999	7	1899	0
1999	8	1941	0
1999	9	2311	0
1999	10	2142	0
1999	11	2034	0
1999	12	2124	0
2000	1	2206	1
2000	2	2088	1
2000	3	2269	1
2000	4	2083	1
2000	5	2309	1
2000	6	1983	1

Appendix AD

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9813.429	1	9813.429	.051	.823[a]
	Residual	4797291	25	191891.623		
	Total	4807104	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.045
	IMPLTIME	.045	1.000
Sig. (1-tailed)	VISITS	.	.411
	IMPLTIME	.411	.
N	VISITS	27	27
	IMPLTIME	27	27

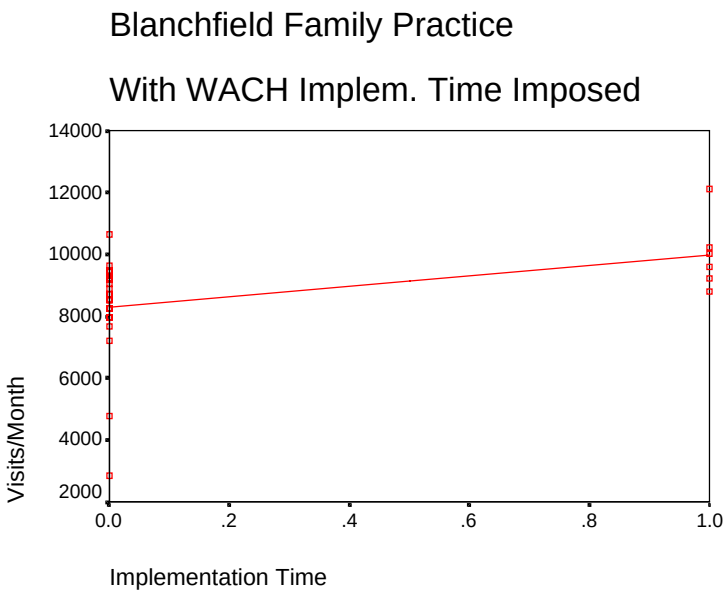
Appendix AE

Blanchfield Army Community Hospital Family Practice Clinic Visits with Winn Army Community Hospital Implementation Time (Jan 2000) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	839	.
1997	11	215	.
1997	12	283	.
1998	1	291	.
1998	2	355	.
1998	3	384	.
1998	4	2856	0
1998	5	4774	0
1998	6	7944	0
1998	7	7212	0
1998	8	7957	0
1998	9	7660	0
1998	10	8252	0
1998	11	8502	0
1998	12	8262	0
1999	1	9061	0
1999	2	9428	0
1999	3	10633	0
1999	4	9154	0
1999	5	8530	0
1999	6	8696	0
1999	7	8876	0
1999	8	9469	0
1999	9	9235	0
1999	10	8722	0
1999	11	9642	0
1999	12	9281	0
2000	1	10031	1
2000	2	10239	1
2000	3	12113	1
2000	4	9204	1
2000	5	9585	1
2000	6	8785	1

Appendix AF

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.3E+07	1	13489311.24	5.228	.031[a]
	Residual	6.5E+07	25	2580118.780		
	Total	7.8E+07	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.416
	IMPLTIME	.416	1.000
Sig. (1-tailed)	VISITS	.	.015
	IMPLTIME	.015	.
N	VISITS	27	27
	IMPLTIME	27	27

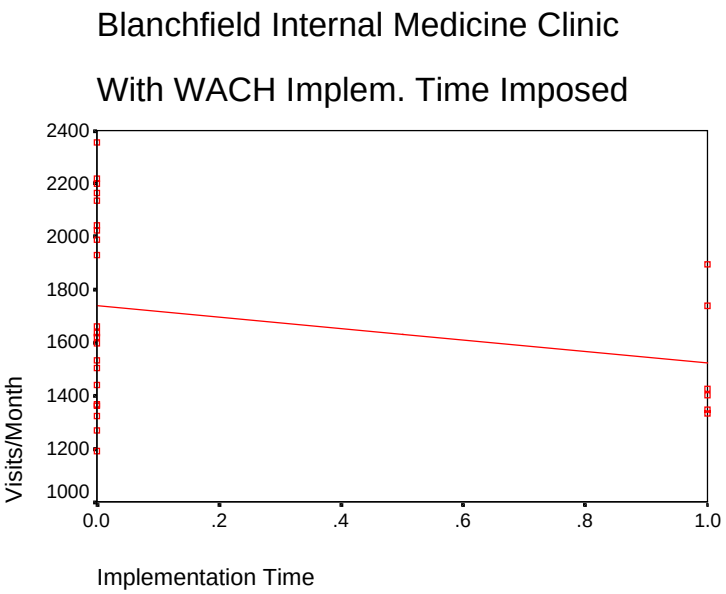
Appendix AG

Blanchfield Army Community Hospital Internal Medicine Visits with Winn Army Community Hospital Implementation Time (Jan 2000) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	190	.
1997	11	59	.
1997	12	120	.
1998	1	141	.
1998	2	151	.
1998	3	135	.
1998	4	2022	0
1998	5	1363	0
1998	6	2138	0
1998	7	1929	0
1998	8	2220	0
1998	9	2163	0
1998	10	2356	0
1998	11	1988	0
1998	12	2045	0
1999	1	1638	0
1999	2	1659	0
1999	3	2200	0
1999	4	1622	0
1999	5	1189	0
1999	6	1270	0
1999	7	1322	0
1999	8	1439	0
1999	9	1597	0
1999	10	1367	0
1999	11	1504	0
1999	12	1536	0
2000	1	1898	1
2000	2	1334	1
2000	3	1427	1
2000	4	1403	1
2000	5	1348	1
2000	6	1738	1

Appendix AH

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	218977.8	1	218977.788	1.872	.183[a]
	Residual	2925058	25	117002.305		
	Total	3144035	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	-.264
	IMPLTIME	-.264	1.000
Sig. (1-tailed)	VISITS	.	.092
	IMPLTIME	.092	.
N	VISITS	27	27
	IMPLTIME	27	27

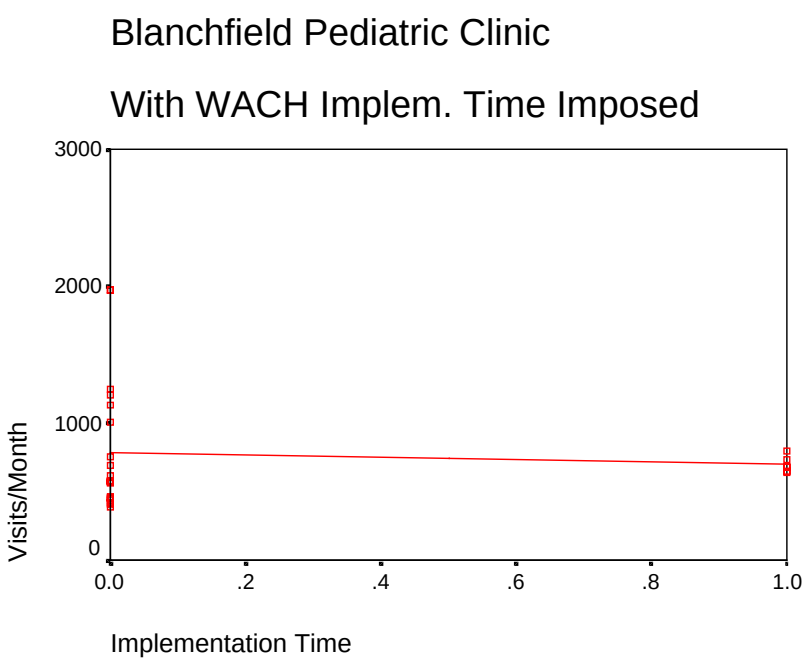
Appendix AI

Blanchfield Army Community Hospital Pediatric Clinic Visits with Winn Army Community Hospital Implementation Time (Jan 2000) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	81	.
1997	11	104	.
1997	12	98	.
1998	1	125	.
1998	2	143	.
1998	3	171	.
1998	4	1976	0
1998	5	1972	0
1998	6	1204	0
1998	7	1138	0
1998	8	1247	0
1998	9	1003	0
1998	10	414	0
1998	11	461	0
1998	12	448	0
1999	1	465	0
1999	2	562	0
1999	3	579	0
1999	4	569	0
1999	5	582	0
1999	6	622	0
1999	7	392	0
1999	8	441	0
1999	9	759	0
1999	10	415	0
1999	11	572	0
1999	12	692	0
2000	1	680	1
2000	2	641	1
2000	3	795	1
2000	4	654	1
2000	5	737	1
2000	6	686	1

Appendix AJ

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35729.17	1	35729.167	.197	.661[a]
	Residual	4534693	25	181387.740		
	Total	4570423	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	-.088
	IMPLTIME	-.088	1.000
Sig. (1-tailed)	VISITS	.	.330
	IMPLTIME	.330	.
N	VISITS	27	27
	IMPLTIME	27	27

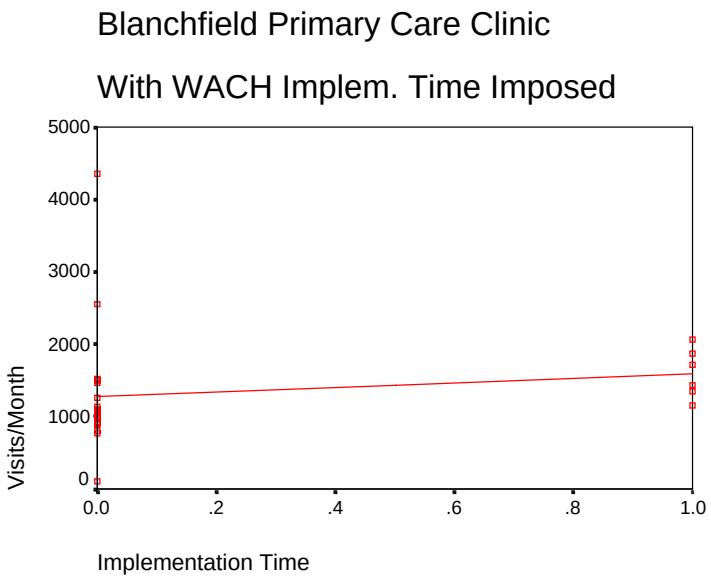
Appendix AK

Blanchfield Army Community Hospital Primary Care Clinic Visits with Winn Army Community Hospital Implementation Time (Jan 2000) Imposed

Calendar Year	Calendar Month	Clinic Visits	Implementation Time
1997	10	529	.
1997	11	406	.
1997	12	453	.
1998	1	536	.
1998	2	319	.
1998	3	510	.
1998	4	2547	0
1998	5	1499	0
1998	6	804	0
1998	7	983	0
1998	8	1000	0
1998	9	1110	0
1998	10	1137	0
1998	11	897	0
1998	12	933	0
1999	1	1078	0
1999	2	1028	0
1999	3	1057	0
1999	4	764	0
1999	5	108	0
1999	6	909	0
1999	7	1025	0
1999	8	1259	0
1999	9	1461	0
1999	10	4355	0
1999	11	1528	0
1999	12	1496	0
2000	1	1866	1
2000	2	2058	1
2000	3	1710	1
2000	4	1340	1
2000	5	1439	1
2000	6	1162	1

Appendix AL

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	451848.6	1	451848.574	.777	.386[a]
	Residual	1.5E+07	25	581353.420		
	Total	1.5E+07	26			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: VISITS

SPSS Correlation Matrices

Correlations

		VISITS	IMPLTIME
Pearson Correlation	VISITS	1.000	.174
	IMPLTIME	.174	1.000
Sig. (1-tailed)	VISITS	.	.193
	IMPLTIME	.193	.
N	VISITS	27	27
	IMPLTIME	27	27

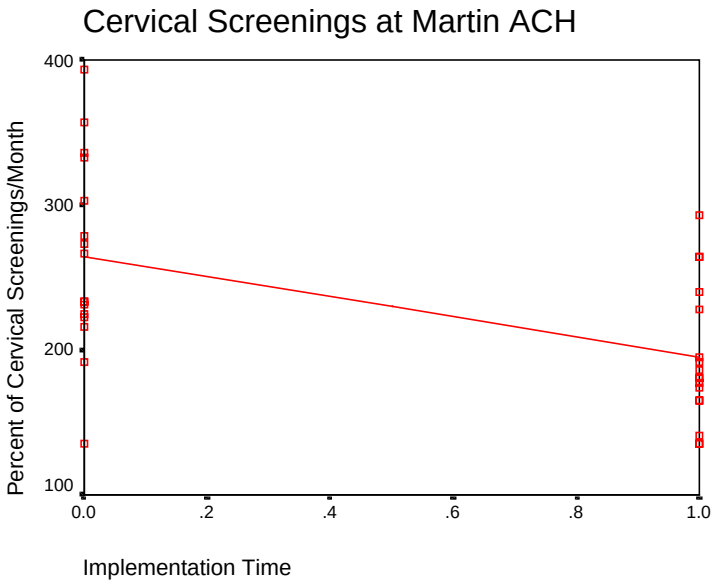
Appendix AM

Martin Army Community Hospital Cervical Screenings Using HEDIS Standards

Calendar Year	Calendar Month	Percentage of Screenings Per Month	Implementation Time
1997	10	393	0
1997	11	303	0
1997	12	273	0
1998	1	357	0
1998	2	333	0
1998	3	336	0
1998	4	225	0
1998	5	279	0
1998	6	231	0
1998	7	267	0
1998	8	234	0
1998	9	216	0
1998	10	234	0
1998	11	135	0
1998	12	192	0
1999	1	222	0
1999	2	264	1
1999	3	293	1
1999	4	192	1
1999	5	165	1
1999	6	177	1
1999	7	228	1
1999	8	180	1
1999	9	174	1
1999	10	165	1
1999	11	135	1
1999	12	135	1
2000	1	180	1
2000	2	264	1
2000	3	240	1
2000	4	195	1
2000	5	141	1
2000	6	186	1

Appendix AN

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39737.188	1	39737.188	11.979	.002[a]
	Residual	102832.7	31	3317.184		
	Total	142569.9	32			

a. Predictors: (Constant), IMPLTIME

b. Dependent Variable: PERCENT

SPSS Correlation Matrices

Correlations

		PERCENT	IMPLTIME
Pearson Correlation	PERCENT	1.000	-.528
	IMPLTIME	-.528	1.000
Sig. (1-tailed)	PERCENT	.	.001
	IMPLTIME	.001	.
N	PERCENT	33	33
	IMPLTIME	33	33

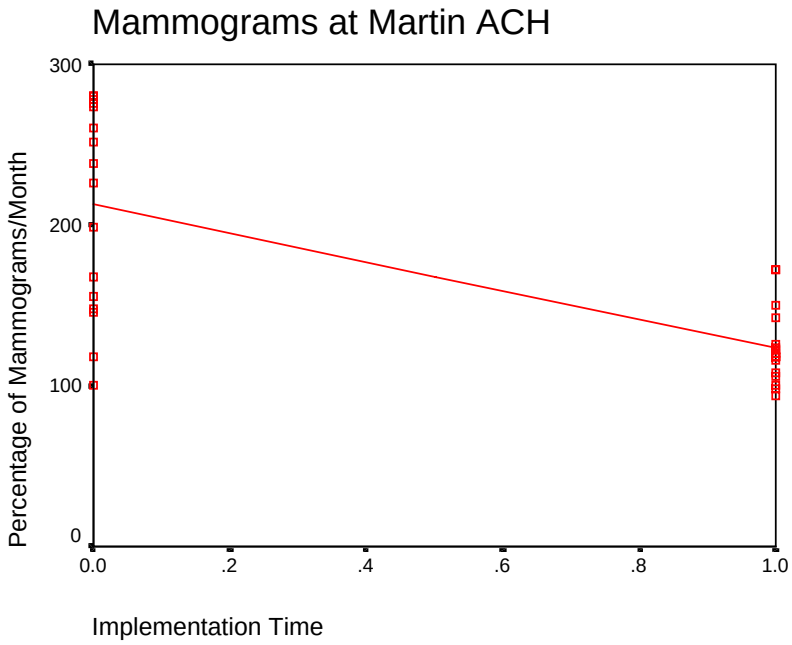
Appendix AO

Martin Army Community Hospital Mammogram Screenings Using HEDIS Standards

Calendar Year	Calendar Month	Percent	Implementation Time
1997	10	274	0
1997	11	278	0
1997	12	276	0
1998	1	156	0
1998	2	148	0
1998	3	226	0
1998	4	168	0
1998	5	198	0
1998	6	146	0
1998	7	118	0
1998	8	280	0
1998	9	260	0
1998	10	280	0
1998	11	238	0
1998	12	252	0
1999	1	100	0
1999	2	118	1
1999	3	94	1
1999	4	126	1
1999	5	98	1
1999	6	116	1
1999	7	118	1
1999	8	142	1
1999	9	124	1
1999	10	118	1
1999	11	120	1
1999	12	172	1
2000	1	108	1
2000	2	100	1
2000	3	172	1
2000	4	150	1
2000	5	212	1
2000	6	244	1

Appendix AP

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
PERCENT * IMPLTIME	Between Groups	(Combined)	46609.416	1	46609.416	16.268	.000
	Within Groups		88818.221	31	2865.104		
	Total		135427.6	32			

SPSS Correlation Matrices

Correlations

		PERCENT	IMPLTIME
Pearson Correlation	PERCENT	1.000	-.587
	IMPLTIME	-.587	1.000
Sig. (1-tailed)	PERCENT	.	.000
	IMPLTIME	.000	.
N	PERCENT	33	33
	IMPLTIME	33	33

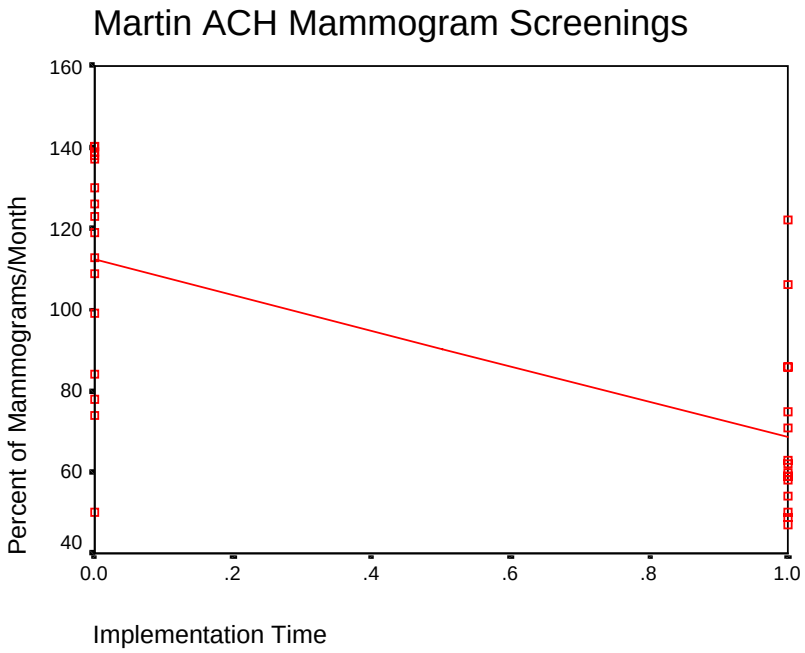
Appendix AQ

Martin Army Community Hospital Mammogram Screenings Using TRICARE Standards

Calendar Year	Calendar Month	Percent	Implementation Time
1997	10	137	0
1997	11	139	0
1997	12	138	0
1998	1	78	0
1998	2	74	0
1998	3	113	0
1998	4	84	0
1998	5	99	0
1998	6	123	0
1998	7	109	0
1998	8	140	0
1998	9	130	0
1998	10	140	0
1998	11	119	0
1998	12	126	0
1999	1	50	0
1999	2	59	1
1999	3	47	1
1999	4	63	1
1999	5	49	1
1999	6	58	1
1999	7	59	1
1999	8	71	1
1999	9	62	1
1999	10	59	1
1999	11	60	1
1999	12	86	1
2000	1	54	1
2000	2	50	1
2000	3	86	1
2000	4	75	1
2000	5	106	1
2000	6	122	1

Appendix AR

Means plot indicating a negative correlation between pre- and post-implementation of Provider Perspectives



SPSS Analysis of Variance Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
PERCENT * IMPLTIME	Between Groups	(Combined)	15848.187	1	15848.187	26.496	.000
	Within Groups		18542.055	31	598.131		
	Total		34390.242	32			

SPSS Correlation Matrices

Correlations

		PERCENT	IMPLTIME
Pearson Correlation	PERCENT	1.000	-.679
	IMPLTIME	-.679	1.000
Sig. (1-tailed)	PERCENT	.	.000
	IMPLTIME	.000	.
N	PERCENT	33	33
	IMPLTIME	33	33

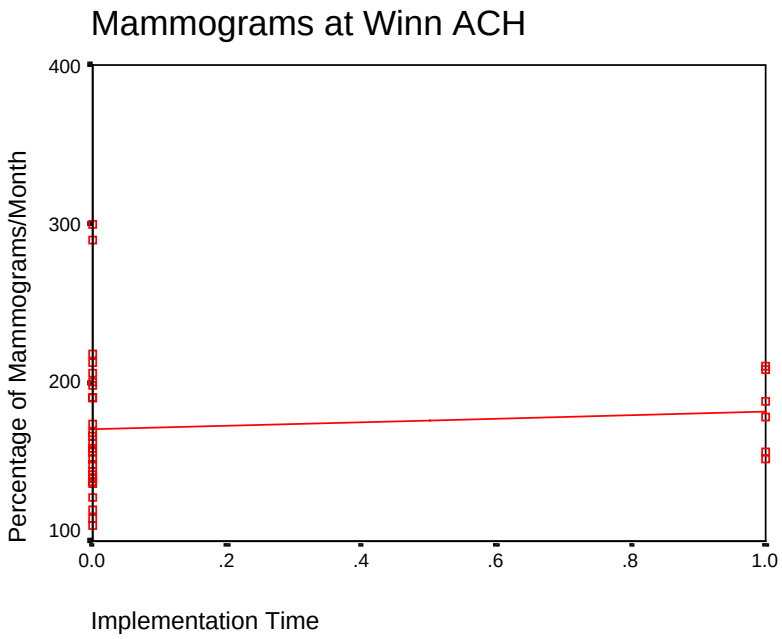
Appendix AS

Winn Army Community Hospital Mammogram Screenings Using HEDIS Standards

Calendar Year	Calendar Month	Percentage of Screenings Per Month	Implementation Time
1997	10	206	0
1997	11	190	0
1997	12	212	0
1998	1	144	0
1998	2	140	0
1998	3	300	0
1998	4	142	0
1998	5	128	0
1998	6	190	0
1998	7	158	0
1998	8	290	0
1998	9	138	0
1998	10	148	0
1998	11	140	0
1998	12	166	0
1999	1	110	0
1999	2	156	0
1999	3	114	0
1999	4	152	0
1999	5	136	0
1999	6	218	0
1999	7	168	0
1999	8	200	0
1999	9	162	0
1999	10	174	0
1999	11	198	0
1999	12	120	0
2000	1	188	1
2000	2	178	1
2000	3	210	1
2000	4	152	1
2000	5	156	1
2000	6	208	1

Appendix AT

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
PERCENT * IMPLTIME	Between Groups	(Combined)	663.946	1	663.946	.343	.562
	Within Groups		59920.296	31	1932.913		
	Total		60584.242	32			

SPSS Correlation Matrices

Correlations

		PERCENT	IMPLTIME
Pearson Correlation	PERCENT	1.000	.105
	IMPLTIME	.105	1.000
Sig. (1-tailed)	PERCENT	.	.281
	IMPLTIME	.281	.
N	PERCENT	33	33
	IMPLTIME	33	33

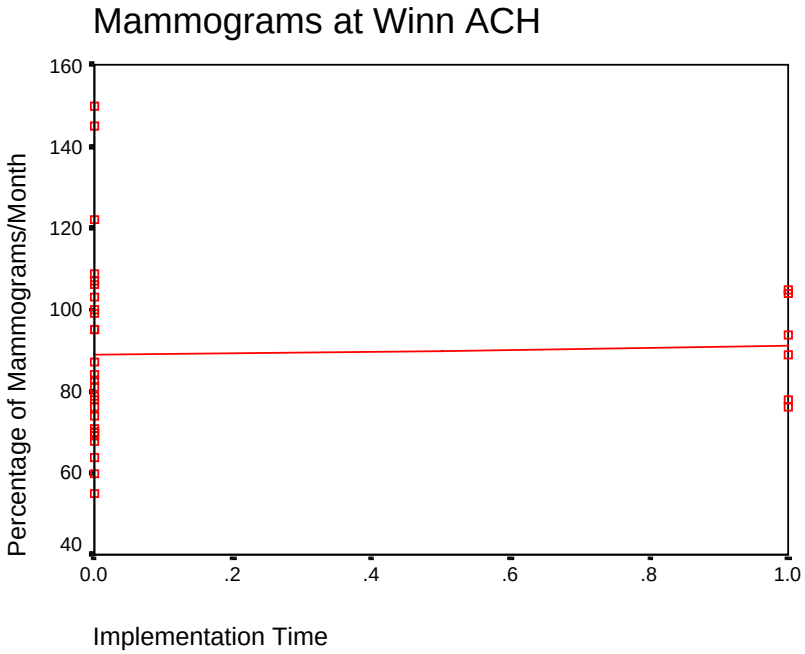
Appendix AU

Winn Army Community Hospital Mammogram Screenings Using TRICARE Standards

Calendar Year	Calendar Month	Percentage of Screenings Per Month	Implementation Time
1997	10	103	0
1997	11	95	0
1997	12	106	0
1998	1	122	0
1998	2	70	0
1998	3	150	0
1998	4	71	0
1998	5	64	0
1998	6	95	0
1998	7	79	0
1998	8	145	0
1998	9	69	0
1998	10	74	0
1998	11	70	0
1998	12	83	0
1999	1	55	0
1999	2	78	0
1999	3	107	0
1999	4	76	0
1999	5	68	0
1999	6	109	0
1999	7	84	0
1999	8	100	0
1999	9	81	0
1999	10	87	0
1999	11	99	0
1999	12	60	0
2000	1	94	1
2000	2	89	1
2000	3	105	1
2000	4	76	1
2000	5	78	1
2000	6	104	1

Appendix AV

Means plot indicating a positive correlation between pre- and post-implementation of Provider Perspectives.



SPSS Analysis of Variance Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
PERCENT * IMPLTIME	Between Groups	(Combined)	21.879	1	21.879	.044	.836
	Within Groups		15472.667	31	499.118		
	Total		15494.545	32			

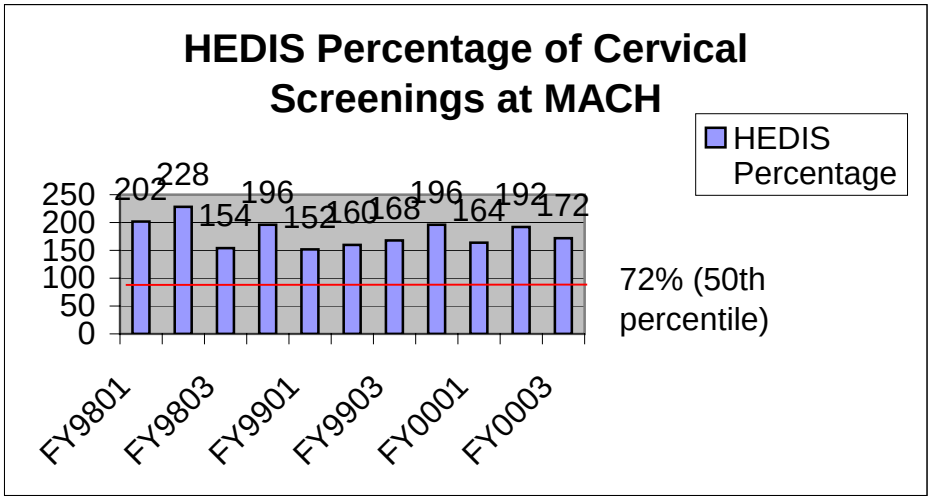
SPSS Correlation Matrices

Correlations

		PERCENT	IMPLTIME
Pearson Correlation	PERCENT	1.000	.038
	IMPLTIME	.038	1.000
Sig. (1-tailed)	PERCENT	.	.418
	IMPLTIME	.418	.
N	PERCENT	33	33
	IMPLTIME	33	33

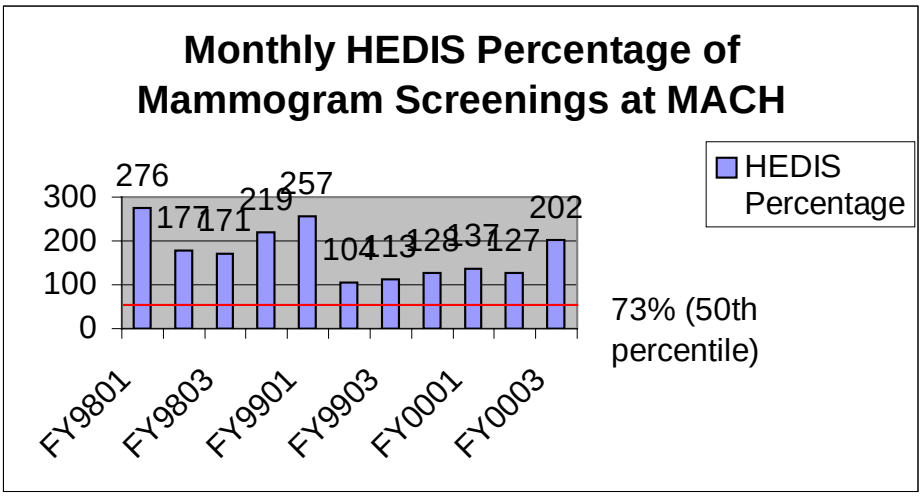
Appendix AW

Percentage of Cervical Screenings at MACH using HEDIS Standards

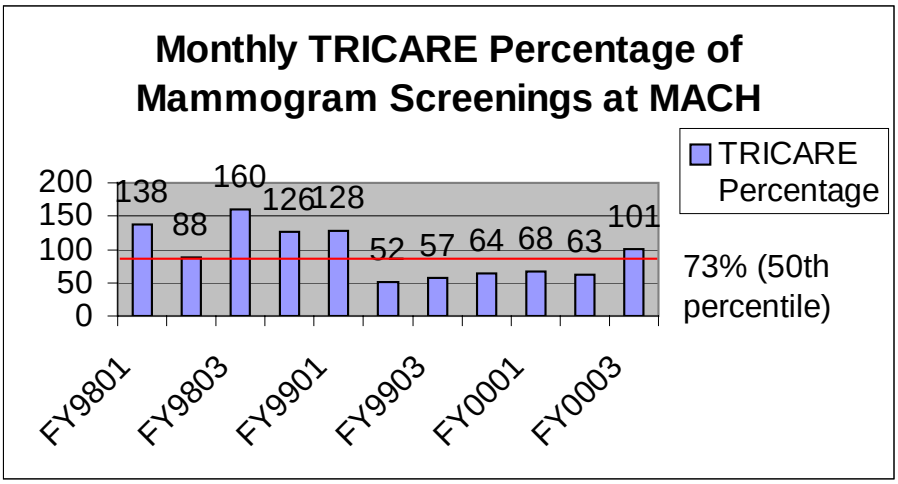


Appendix AX

Percentage of Mammogram Screenings at MACH Using HEDIS Standards

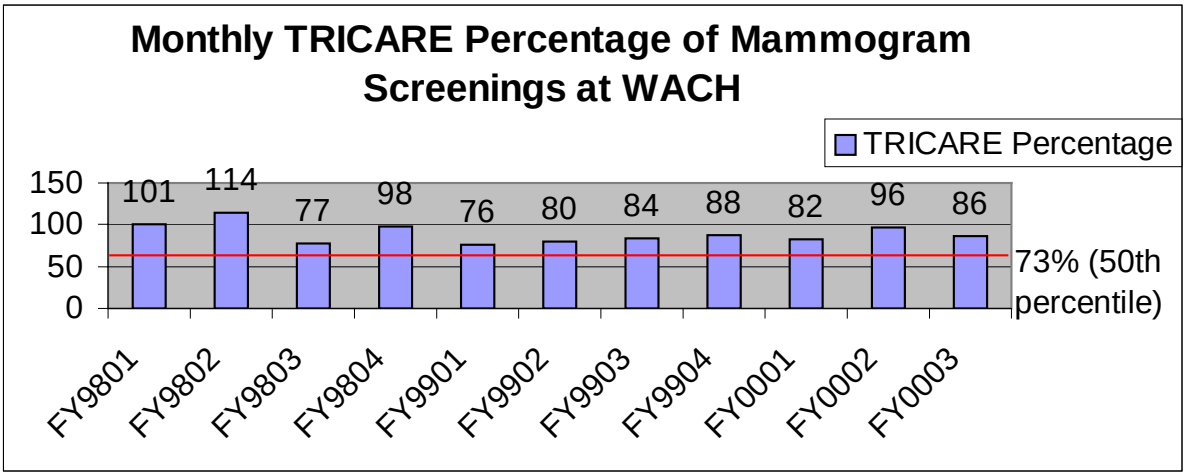


Percentage of Mammograms at MACH Using TRICARE Standards

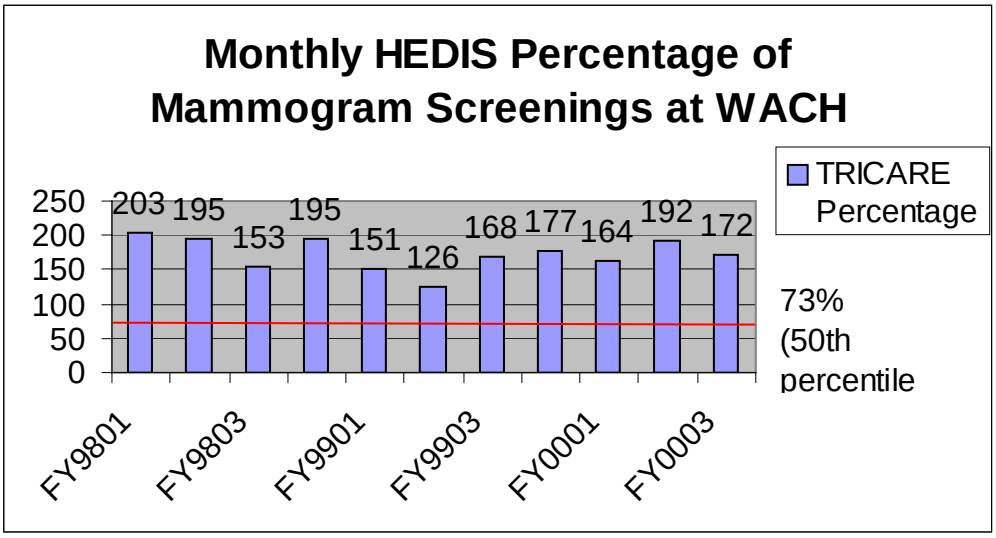


Appendix AY

Percentage of Mammogram Screenings at WACH Using HEDIS Standards



Percentage of Mammograms at WACH Using TRICARE Standards



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