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This study examines the history of third party collections program in the military in general and the US Army in particular. It also examines the program functioning at Moncrief Army Community Hospital, Fort Jackson, SC. The study concludes that the success or failure of a hospital's local program has little to do with external incentives but is centered in dynamic command interest and motivated program managers. The study recommends the use of electronic claims interface as a mechanism to speed the claims process.

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DEVELOPMENT OF A THIRD PARTY COLLECTIONS AND ACCOUNTABILITY SYSTEM FOR DEPARTMENT OF THE ARMY MEDICAL DEPARTMENT ACTIVITIES

A Graduate Management Project

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of

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by

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Abstract

This study examines the history of third party collections program in the military in general and the U.S. Army in particular. It also examines the program functioning at Moncrief Army Community Hospital at Fort Jackson, SC. The study concludes that the success or failure of a hospital's local program has little to do with external incentives but is centered in dynamic command interest and motivated program managers. The study also recommends the use of electronic claims interface as a mechanism to speed the claims process.

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Introduction

Fort Jackson and Moncrief Army Community Hospital

Fort Jackson, South Carolina, is an Army Basic Combat Training (BCT) installation located adjacent to the city of Columbia, South Carolina. The post's major mission is to train approximately 50,000 basic enlistees per year in entry level soldier skills and prepare them to move on to Advanced Individual Training (AIT) at another post. Some trainees do remain at Fort Jackson in order to attend AIT courses located at the post. Fort Jackson is expected to grow in the coming years as it takes on the basic training and AIT mission of other posts scheduled to be closed under the Base Realignment and Closure Act (BRAC).

Moncrief Army Community Hospital located on Fort Jackson is the post's source of medical care. The hospital is a 450 bed facility erected in 1972 but operates only 145 beds at the present time. Current patient census averages 113. Care provided at the hospital is primarily to the large retiree population located in Columbia and the surrounding area. It is

estimated that the retirees number approximately 80,000 while the total active duty population on the post averages only 10,000. Workforce at the hospital averages 450 military and 450 civilian personnel.

Conditions Which Prompted the Study

The Army Medical Department experienced a short period of build up during the Reagan and Bush Administration years. Now, in light of proposed massive cutbacks in active duty personnel end strengths, this period appears to have come to an end. Greater efficiency in the use of the defense budget dollar will be demanded by the public, especially if the "peace dividend" is ever quantified and channelled into domestic programs.

Part of stretching congressionally appropriated resources is the responsibility to ensure medical services provided to beneficiaries are both appropriate and cost effective. The stretching of those resources includes taking the opportunity to ensure that any additionally available resources are discovered and used. Such is the case for third party insurance claims.

In the past, Army hospitals have been unable to capture third party payments from insurers of

non-active duty beneficiaries. This was due primarily to a lack of a mechanism for such collection. Further, procedures for disposition of the funds if they could be collected had not been identified and no method of detailing services provided was available. These circumstances have changed.

In 1986, Title 10, United States Code, Section 1095 was enacted as part of the Consolidated Omnibus Budget Reconciliation Act of 1986. The public law drawn from it (PL 99-272) gives the federal government the right to collect from health insurance plans for reasonable inpatient hospital care costs incurred on behalf of military retirees and dependents. The original idea behind the legislation was that there should be no difference between a military medical treatment facility (MTF) and a civilian facility as far as reimbursement for services provided was concerned. It was also considered prejudicial that military beneficiaries were being treated differently by the insurance industry even though they were accepting payment for insurance coverage from those same beneficiaries.

The legislation prompted the development in 1986-1987 of the Coordination of Benefits program

which was later codified as 32 Code of Federal Regulations, part 220. In this regulation, the basics of the program were covered. The program was implemented by the Veterans Administration initially. The services eventually received additional instruction in DoD Instruction 6010.15, dated 4 September, 1987. Although there was sufficient information to implement the program, no incentive (other than that inherent in directives) was included. US Army Health Services Command (HSC) followed suit forwarding 6010.15 and gave MTFs instruction to develop procedures for the program and an implementation directive.

The program did not function well. For Army facilities, during FY 1988, collections totaled $7.8 million over a total of $31.5 million billed. That is a collection rate of 25 percent; certainly not impressive by any standard. The military services as a whole averaged only 25 percent collecting $16.2 million of the projected $66.4 million. It should be pointed out here that the Navy collected only $1.5 million of the total $16.2 million.

The program's effectiveness was called into question again when in 1989 the DoD Office of the

Inspector General reviewed the performance of 25 military MTFs. Their findings were not complimentary and served as the initial catalyst for a thorough program review. The bottom line of the investigation was that the MTFs were doing a poor job of managing the program. A number of suggestions for improvement were made. Even so, probably the most important improvement came in early 1990.

In a message to HSC, Department of the Army gave authority to MTFs that would allow them to locally retain funds generated by the program for the purpose of enhancing care at the facility. It was at this time that several Army facilities that had been doing relatively little in the program saw an opportunity for "discretionary" funds and proceeded to follow-up more vigorously on third party claims.

The local retention of funds presumably made the collection of claims very attractive to MTFs, but collection performance has not improved as was estimated. In FY 1990, overall collection rates for HSC still hovered around 50 percent with some individual facilities higher and others significantly lower.

Problem Question

How has the Coordination of Benefits program (now known as the Third Party Collections program) functioned at Moncrief Army Community Hospital and is there opportunity for improvement? The intent of this study is to examine strategies for increasing reimbursements to the facility, more accurately tracking bills and accounts receivable, implementing a more effective use of current and additional automation, and finally, organizing the program physically so as to serve the hospital best. The study should provide recommendations to the Command for: 1) monitoring the program at the command level, 2) ensuring that it is functioning at optimum level by integrating Total Quality Management principles at the operator level, 3) using available automation in conjunction with other tools to ensure maximum effort to collect is made with the greatest return on the labor investment, 4) placing the Third Party Collections program in the appropriate organizational element that will best facilitate optimum function.

Literature Review

Third party collections definitions

The following definitions will be useful during

the literature review:

Inpatient hospital care: Treatment provided to an individual who is admitted to a bed in a facility of the uniformed services.

Insurance plan: Any plan or program that is designed to provide compensation or coverage for expenses incurred by a beneficiary for medical services and supplies. It includes plans or programs for which the beneficiary pays a premium to an issuing agent as well as those plans or programs to which the beneficiary is entitled as a result of employment or membership in an organization/group.

Medical service or health plan: Nearly the same as an insurance plan but is a subgroup of it. Usually reserved to describe health maintenance organizations (HMOs) or other similar organizations that provide healthcare as part of the employment agreement.

Medicare or CHAMPUS supplemental plan: These are plans, either insurance or medical, used to supplement a person's benefit under Medicare or CHAMPUS.

Third party payer: Any organization that provides insurance, medical or health plans by contract/agreement. The only exclusions for DoD collections purposes are Medicare (Part A), Medicaid,

CHAMPUS, and income supplemental policies.

Background issues

Prior to the 1930s, individuals assumed responsibility for their own healthcare. There really was no need to provide insurance since labor was readily available and definitely not in a position to bargain for such a benefit. But shortly after the depression came to a close, commercial insurance as we know it today came into being. Blue Cross and Blue Shield (BC/BS) (commonly referred to as "the Blues") were two of the pioneer leaders with their major purpose being to ensure that hospitals and providers were paid for their services. The idea caught on and a number of insurance companies introduced coverage similar to that offered by BC/BS (Kongstevdt, 1989).

Today, the most common forms of coverage are provided as insurance plans obtainable through companies like BC/BS or health service plans available as a benefit provided to employees of an organization. Individual plans account for 15 percent of policies in force and group plans comprise the remaining 85 percent (Jacobs, 1987).

The implementation of Medicare has given the federal government the distinction of being the

largest third party payer in the insurance industry (Duis, 1989). The experience gained does not seem to have been shared with other federal organizations as illustrated by poor collection efforts.

Insurance and the Military.

As health insurance plans grew, the business of collecting from the insuring party became an important portion of the hospital's daily operations. This was especially true in view of the fact that insured patients' bills were, and still are, of less concern to the hospital than those not similarly insured. The military, on the other hand, was not collecting from insurance plans. Although there are no data or reasons for not collecting, the researcher established as an a priori assumption that the need was not felt. That is, the "free" care of dependents was not an issue. After Viet Nam, that scenario changed with the paring down of the military. (Gunnell, 1990).

Although it took a number of years and the occasion of CHAMPUS costs to reach record highs, the General Accounting Office (GAO) issued a report in February, 1985 stating legislation to authorize Veterans Administration recoveries from private health insurance would result in substantial savings. The

GAO estimated the VA could have recovered from $98 to $284 million in FY 82 if laws had been passed allowing the VA to collect from the private insurers of veterans (GAO, 1985). This particular program, authorized in legislation enacted 7 April, 1986, is now known in the VA as the Medical Cost Recovery Program.

As part of the Consolidated Omnibus Budget Reconciliation Act of 1986, Congress enacted Title 10 to require the Department of Defense to collect from third party payers reasonable inpatient hospital care costs associated with the care of non-active duty beneficiaries. But after several years of experience it became obvious that the military was making minimal efforts to comply with the law (Fed Register, 1990).

Initial problems were discovered when the Air Force Audit Agency conducted an audit in 1989 of selected Air Force hospitals. The audit determined Air Force hospitals were not complying with the intent of the law and recommended each Hospital Commander investigate their program and take actions to implement the law.

Concurrently, a major audit of the collection program was being conducted by the Department of

Defense, Office of the Inspector General. Succinctly, its findings were as follows:

1. Military hospitals had not implemented effective collections programs.

2. Military departments had not developed and implemented any effective management of the program.

3. The Office of the Assistant Secretary of Defense, Health Affairs (OASD-HA) had not prepared any guidance for the services.

4. Available automation was not being used in conjunction with the program.

Initial Efforts to Improve Collections

In May, 1988, LTC James M. Kosman, Director of Army Defense Medical Information System (DMIS) sent a memorandum to Army MTFs that discussed three major additions to the Automated Quality of Care Evaluation Support System (AQCESS), the patient accounting system. Included in the AQCESS change package was a medical insurance billing module designed to support the automated printing of Form UB-82 (DD Form 2502). This form was the accepted format for billing third parties and was to be used for that purpose (Kosman, 1988).

The system change was a first step in automating the billing but came under fire by the DoD IG report when it was found that it had "systems problems and was not operational at most hospitals." (DoD IG, 1990). There have been no other changes to the AQCESS system other than small refinements. Major changes are expected sometime in 1991. However, the Composite HealthCare System (CHCS), a comprehensive hospital information system currently being field tested by a civilian vendor is supposed to upgrade this capability. Fielding of CHCS is presently limited to a few "beta sites". Problems with the current version are slowing further fielding. It is interesting to note that the civilian vendor is borrowing the VA's billing system. It is even more interesting to note that CHCS is a sister of the VA's Decentralized Hospital Computer Program (DHCP). This probably all has to do with the fact that CHCS was designed by the programers who built DHCP for the VA, left the VA and formed their own company and proposed CHCS to DoD (David Owings, personal communication, 25 March, 1991). It is sufficient to say that MTF automation in billing is still antiquated.

The Air Force Answer.

In February, 1990, MG Vernon Chong, Commander Wilford Hall USAF Medical Center, proposed to Headquarters Air Training Command that a public/private partnership demonstration project be conducted at Wilford Hall that would employ a civilian vendor to increase collections under the third party program. The firm contacted was Birch and Davis Associates, a consulting firm out of Silver Spring, Maryland (Chong, 1990). As an aside, it should be noted that Birch and Davis had done consulting work on DEERS, TRIMIS, CHCS and other major DoD projects and was therefore familiar with the workings of DoD.

The rationale for the project was that it would be financially more effective to let a contractor, who had experience in the third party collections field, use that expertise on behalf of the military. This is typical of the rationale used in the past for civilian service contracts to the military. In fact, it was in agreement with a ruling by the government that contracting for the collection of debt is a viable alternative and that payment for the contractor's services may be taken from the collections. However, contracting was supposed to be

used only "if reasonable in-house collections efforts and remedies were, or are likely to be, unsuccessful or not feasible" (Federal Register, 1987).

Certainly it can be argued that in-house efforts were unsuccessful given that the Air Force was collecting approximately 50 percent of what it was billing. Birch and Davis made their argument that they could get the billing done more effectively. In a presentation to MG Chong, the company stated that it could raise the collections Wilford Hall was receiving from $2.7 million to $29.9 million, including outpatient revenue. This was an astounding 13 fold increase.

The presentation paper was considered by the Air Force Office of Health Care Innovation, Bolling AFB, Virginia, in June 1989. Prior to their consideration however, a message (SGHC261600Z Mar 90) from Bolling advised activities that local contracts were discouraged. When Companion Technologies (the billing system vendor considered by Birch and Davis) was contacted, the project was still on hold even though general agreement by all parties was reached on the effectiveness and efficiency of the program as proposed. (D. Hartis, personal communication, 2 April,

1991). The company was at a loss to explain the delay.

The Army Answer

Health Services Command is the Army's major proponent for fixed medical treatment facilities within the Continental United States. Specifically, the Deputy Chief of Staff, Resource Management has been tasked with providing guidance to the field for concurring with the intent of the program. When Department of Defense Instruction 6010.15 addressing third party collections was published, operational guidance from HSC was still very vague leaving collections procedures up to local design. It later became obvious through performance report data that some facilities like Dwight David Eisenhower Army Medical Center were doing better than many other HSC facilities. Those facilities with successful program were sought out by other Army MTFs, to include the MTF at Fort Jackson (M. Hatchell, personal communication, 7 March 1991). At present, MTFs still have limited specific guidance in operating their programs.

Recently, a task force out of the HSC Command Judge Advocate General office has been formed to improve the program's execution and provide better

guidance. (D. Hamil, personal communication, 5 March, 1991).

The Congressional Answer

Searching for a way to motivate managers to increase their emphasis on the program, Congress passed Public Law 101-189 allowing funds to be retained at the collecting facility for the purpose of funding the local program and enhancing care for the beneficiaries. Some limited accounting guidance was forwarded to individual MTFS that would assist them in the tracking of retained funds (Grider, 1990). Some facilities have done a little better but not to the satisfaction of the current commander of HSC, MG Lanoue. (D. Hamil, personal communication, 5 March 1991).

Recent Changes in Third Party Collection Rules

Up until recently, outpatient charges could not be collected. A recent change to Title 10 allows collections against those parties to include Medicare supplemental policies. (Congressional Record, 1990) As of today, no additional guidance from Health Services Command has been given to the MTFs. However, Health Affairs is in the process of writing new guidance that will assist in determining charges

(S. Olson, personal communication, 11 April 1991).

The Civilian and Military Sectors

The military's civilian counterparts have not had the problems discussed above. The difference is simple: civilian hospitals must ensure that they make their insurance collections because their continued viability is significantly affected when those collections are not made. The military on the other hand does not have a profit motive equal to the civilian sector. Therefore, motivation to collect from insurance companies receives high emphasis in civilian hospitals.

The Insurance Pie

In May 1990, the Health Care Financing Administration (HCFA) released a study that illustrated the importance insurance funding generally plays in the financing of health care. In the total expenditures for healthcare in 1988, 54.4 percent was paid by the government while 45.6 percent was paid by private means. Over 50 percent of the government share was for Medicare with the remainder being made up by other federal and state programs. Of the private portion, a massive 72.6 percent was paid for private insurance with only 11.7 percent coming out

of the consumer pocket and the remaining 10.7 percent from private funds (Data Line, 1990).

It is apparent in this era of high costs, many hospitals without large private pay patient populations must pursue the insured population if they are to take up the slack of unreimbursed care or other financial stress.

Military hospitals do not share this concern directly. The military MTF seeks to use insurance reimbursements to lower CHAMPUS costs, provide additional services, increase pharmacy budgets, or purchase items for patients care that might not otherwise be purchased due to hospital budget constraints. The similarity between the civilian sector and the military occurs at the point where emphasis on collection of third party reimbursements will help the financial status of both organizations and presumably keep the doors open to more patients.

The Accounts Receivable Management Process

Accounts receivable management has been of great interest to hospitals in the last few years. It is critical that bad debt (or unreimbursed care) be kept to as low a portion of the total hospital charges as possible. As a result, managers have sought better

ways to capture the insurance billing portion of their operations. In the following paragraphs, several major concepts being implemented by hospitals are briefly discussed. It will be noted by the reader that none of the concepts is shockingly innovative. It will become obvious that effective collections programs rest firmly on the basics of good management.

Accounts receivable management actually starts prior to the account becoming receivable, i.e., when the patient registers or is admitted. Verifying demographic, billing, and insurance data at the beginning of the care process has proven to be effective in decreasing billing problems (Raymond, 1988). The most effective point to do so is at the point of reception. By ensuring that admissions personnel are trained in pursuing third party information, billing procedures will be more correct. One of the easiest methods of ensuring that clerks ask the correct questions is to include the insurance portion as one of the "screens" an admissions clerk sees during the automated admission process.

Health Care Systems Support Activity, Washington, D.C., realized in 1988 that an automated screen was the best mechanism available to ensure insurance

information was obtained at the time of admission. They subsequently updated the AQCESS system to include that screen as part of an update module. (Kosman, 1988)

The civilian hospital has its choice of any number of systems for patient accounting. Included at Figure 1 is a listing of the top 16 hospital management

Top 16 Hospital Management Information System Vendors

Shared Medical Systems
HBO and Co.
American Express Health Systems
Spectrum Healthcare Solutions
TDS Healthcare Systems Corp
Medical Information Technology
Gerber Alley
GTE Health Systems
3M Health Systems
Dun and Bradstreet Software Svcs
Compucare
Management Systems Associates
Healthcare Knowledge Systems
Arthur Anderson
Ernst and Young
IDX

Figure 1

information system vendors as judged by Healthweek in its September 24, 1990 issue. These systems include accounts receivable management.

During the admitting process, most hospitals ensure that a patient is financially counseled to

clarify his responsibilities to pay or ensure his insurance company pays. Here again is a major difference between Army hospitals and their civilian counterparts. If the Army MTF is not paid by insurance, the beneficiary receives the care and is not billed for the actual care except for the per diem rate. Conversely, the financial counseling conducted with a civilian sector admission is thepoint where the facility identifies the likelihood of payment for services if the potential patient is admitted.

Another important step in the management of receivables occurs in the coding of procedures and the final diagnosis code. The codes referred to are the Current Procedural Terminology ,4th Edition (CPT-4). In addition to these 7,000 codes, HCFA has required the International Classification of Diseases, 9th Edition, Clinical Modification (ICD-9-CM) codes be used. Altogether, a GS5/GS6 coding clerk and civilian equivalent must deal with over 12,000 possible codes (Regan, 1989). The coding is entered on the bill and is the basis of reimbursement to the facility. An error could be costly. During the researcher's visit to Dwight David Eisenhower Army Medical Center, Augusta, Georgia, it came to light that an

inexperienced coder miscoded a procedure and cost the facility $18,000. Fortunately the error was corrected after the fact (M. Hatchell, personal communication, 7 March 1991).

Monitoring and Controlling Accounts Receivable

The civilian hospital uses a ratio analysis to quantify its financial position in accounts receivable. Typically, the total amount of accounts receivable is a function of the average amount of revenue per day and number of days a patient or his insurance company takes to pay. Using this information, a hospital can manage its receivables by comparing their information with industry standards. The ratios are derived in a two step process as illustrated in Figure 2:

Step 1

$$\frac{\text{Revenue for period}}{\text{Days in period}} = \text{Revenue per day}$$

Step 2

$$\frac{\text{Receivables at end of period}}{\text{Revenue per day}} = \text{Avg days receivables are outstanding}$$

Figure 2

These ratios reveal the length of time it is taking to collect receivables (Annis, 1988). Army hospitals could also use the ratios.

To further the process of control, accounts receivable should be managed like a business (Zimmerman, 1988). What this really means is that for an activity to excel in the collection of accounts receivable, regardless of whether it is civilian or military, it must be competitive and have strong leaders dedicated to the collection process.

A study examining the 3 common winning traits of 11 hospitals judged as having successful billing sections demonstrated the following:

1. The section was managed like a business.

2. All 11 hospitals emphasized hiring good people for the right jobs and training them in a variety of skills.

3. All were innovative in the management of their billing sections and encouraged employees to also be innovative.

Goal setting and continuous revisiting of the goals complemented the efforts of the employees (Cepress, 1988).

The actual effect of the winning traits concept can be traced back to basic management principles.

Computer systems for accounts receivable.

By virtue of the complexity associated with the

management of accounts receivables at either a civilian or Army facility, use of automation is mandated. The civilian sector hospital devotes a significant portion of their assets to the purchasing and maintaining of information systems, especially in large hospitals. The researcher could not locate any definitive information about the size of the investment. Chief Financial Officers at two hospitals in Columbia, South Carolina, stated their investment was "significant" and general data available in 1988 showed that automated management of healthcare information including financial management was a $200-300 million industry. (Perlstein, 1988).

On the other hand, automated accounting through the AQCESS system is not state of the art. Accounts receivable (actually the management of insurance information) has not been adequately addressed simply because there has been no reason. A recent message from HSC simplifies the situation even further by declaring that accounts receivable are now to be accounted for under a cash basis rather than an accrual basis. (Deszi, 1991) This simply means that insurance reimbursements are not credited to the hospital operations appropriation until they are

received. But this will not eliminate the need for automated management since comparative information will still be critical to the efficient operation and a measure of performance of the the billing section.

This paper will not address the selection of a software system to handle accounts receivable since it is the researcher's opinion that an acceptable system is already available to DoD without further expense or massive redesign of the current system.

In an older article, Goodwin (1987) noted that the patient accounts manager should be a member of the information systems council or committee. Since the Army centrally manages information systems, this is not a requirement for an Army MTF for the specific purpose of patient accounting systems. It would still be a valid idea for a civilian facility. The researcher identified one particular local additional automated capability that could greatly assist the patient accounts manager as illustrated in the following discussion.

Anderson (1989) states that hospitals should make use of automated claims processing for as many payers as possible. He states that such processing lowers labor costs and results in fewer rejections because

all the information a payer needs is delivered at the time of the presentation of the bill. A number of major vendors have come into this field as a natural result of automated bill paying done outside the healthcare field. Larkin (1990) describes the effectiveness of one vendor, CIS, as having a "99 percent" acceptance rate.

A question naturally arises as to why a hospital would not want to eliminate the problems associated with the management of insurance claims. Specifically, many have problems with the cost/benefit of some electronic claims systems (Larkin, 1990). Some vendors ask for 10 percent of the amount collected (D. Hartis, personal communication, 2 April, 1991). If a hospital had some $28 million in insurance claims each year, $2.8 million is significant enough to warrant cost/benefit analysis. In the DoD system, this could also result in a significant loss of revenue and was an informal criticism of the Burch and Davis offer to the Air Force mentioned earlier. Is there, then, a middle ground where both the vendor and the DoD could win? To this researcher, there appears to be such a position.

Organization of the Third Party Collections Office

In an information paper prepared for the Chief of Staff, HSC, the author of that paper stated the placement of the newly established Military-Civilian Health Systems Branch might be in the Patient Administration Division (PAD) or other similar area (Flood, 1990). This was a logical decision since the responsibilities of the branch included the CHAMPUS benefits/assistance functions already located in PAD. Anderson (1989) states that admissions, collections, and billing should all be under one manger, facilitating smooth flow of information. Arguments had been made that the branch could be placed under the Clinical Support Division or Resource Management Division. The decision for placement was originally left to the discretion of the MTF commander.

Purpose of the Study

The purpose of this study is to determine a method by which Moncrief Army Community Hospital could increase its effectiveness in third party collections, make use of available or additional automation to manage the collections/accounts receivable, reduce the time spent in manually producing the Uniform Billing Statement (UB-82) sent to the insurance companies, and

employ simple TQM techniques allowing the third party collections employee(s) to manage and monitor their own effectiveness. The study should provide a solid recommendation for generic third party collections improvement, placement of the third party collections branch in the hospital, as well as a general recommendation to the Department of Defense for implementing the study's findings at DoD MTFs.

Methods and Procedures

Four major objectives were identified at the outset of the study. First, an extensive review of Moncrief's program was required to determine what the local program requirements were and how the program was performing. The second objective was to learn what initiatives were being planned at the governmental level with reference to software and policy for the management of the third party collections program. Third, the researcher had to review what was in place or available at local healthcare organizations for the handling of the third party collections program. Fourth, the study had to determine the best organizational location for the third party collections branch/employees.

Step one of the study was to examine the Moncrief

program. Sub-tasks included determining the level of understanding of the program both at the management and labor levels, flowcharting the handling of the program itself to discover if better management was not the best answer to increased productivity, and analyzing the performance of the section with data accumulated from Moncrief's Resource Management Division and HSC. Moncrief's FY 90 performance, based on percent collection (total collected over total billed) was compared to the rest of HSC to determine its position relative to other hospitals, regardless of size. An assumption made at this time was that a 70-80 percent collection rate would be highly successful, 60-69 percent would be successful, and 50-59 percent as satisfactory. The 80 percent level matched the Burch and Davis study mentioned in the literature review which assumed 80 percent as highly successful.

An additional comparison was done between first quarter FY 90 and first quarter FY 91 performance data of 22 hospitals for which reliable data was available to determine if any improvement in collections was evident. Also, a check of the insurance interview at the time of admission was conducted to ensure

compliance with local and command directives.

Step two was to locate a source from which the researcher could gain information on the status of any software and policy changes forthcoming to the collections program. The purpose of this step was to ensure that recommendations made as a result of this study were not already being implemented by DoD.

Step three was to study the systems of a state governmental agency, local hospitals, and a major health insurance vendor. The state governmental agency contacted was the South Carolina Department of Health and Human Services Finance Commission, Third Party Liability Section. The local hospitals were Columbia's primary not-for-profit hospital, Richland Memorial, the William Jennings Bryan Dorn Veterans Administration Hospital, and Eisenhower Army Medical Center. The health insurance vendor was Blue Cross/Blue Shield of South Carolina.

Programs for collection of third party payments were compared between the individual organizations as well as the use of their own or proprietary systems for reimbursement/ collections. An analysis of the applicability of their experience was conducted.

The portion of the study with the insurance vendor

was designed to get their view of the third party collections program initiated by DoD and to determine whether there were any commonalities between insurance companies that would aid in the more accurate processing of claims. It was realized that this part of the study might be difficult since the implementation of federal claims was not received well by the insurance industry.

Step four was an analysis of the organizational placement of the third party collections section. The analysis was designed to determine the most efficient location in the hospital structure for the section.

Results

Step One: Examining Moncrief's Performance

Interviews with the Chief, Patient Administration Division demonstrated he had a good understanding of the legislation behind the third party program and an even better understanding of the current guidance being provided by HSC. Initiatives to model the Moncrief program after Eisenhower Army Medical Center's successful program had already been taken.

Interviews with the third party collections employee revealed a lesser but adequate knowledge of

the program and its goals. Management of the program was an additional duty for the employee at the time. It was noted by the researcher that even though the employee's knowledge of insurance operations was limited, the motivation of the employee was extremely high. Other than the AQCESS system, no additional automation in PAD was being used to monitor the performance of the collection effort and collection data was being entered manually in a ledger book.

In late December 1990, a temporary employee was hired to operate program on a full time basis. She had previous experience in insurance claims and was familiar with the concepts. She had not had any previous training on the AQCESS system but was quick to grasp the operation of the system and seemed comfortable with talking to insurance companies when following up on past due reimbursements. She functioned for about six weeks and then was called into her reserve unit for Operation Desert Storm.

The handling of insurance information was flowcharted and examined for bottlenecks. See Figure 3. It can be readily seen that the process is simple and could easily avail itself to automation.

Third Party Insurance Information Flowchart

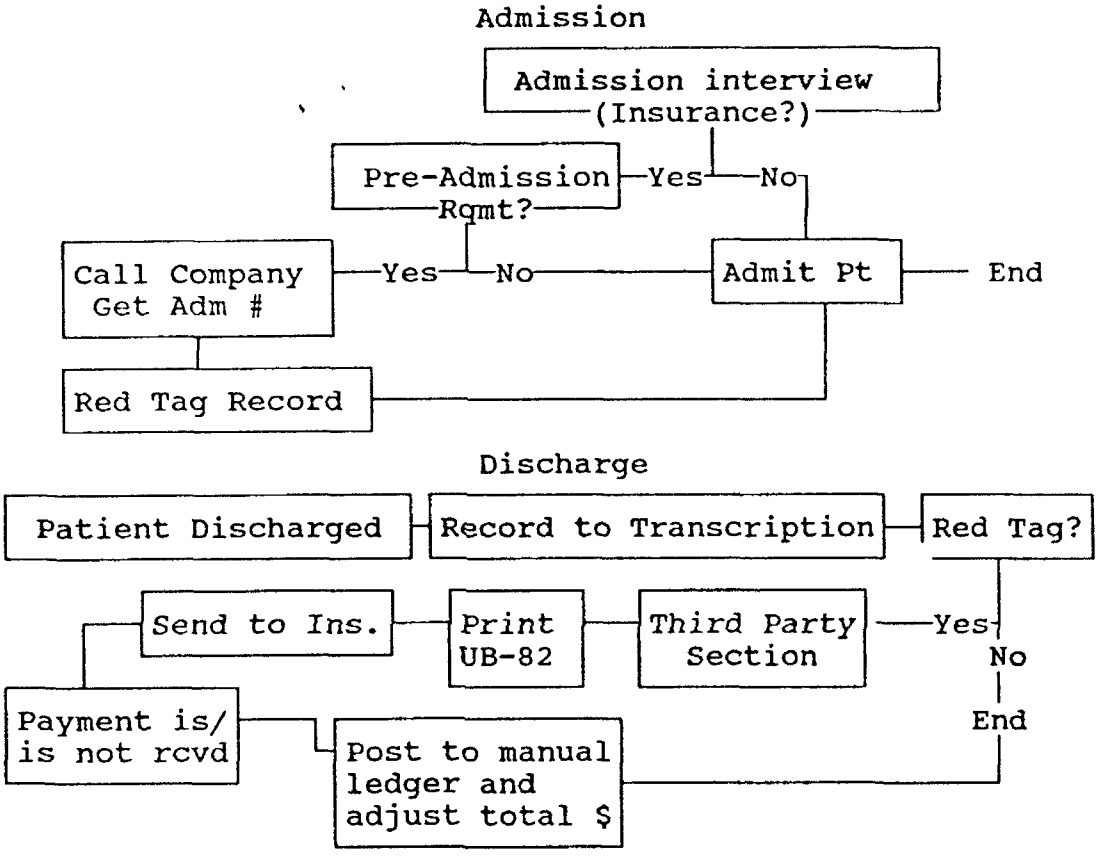

Figure 3

An initial analysis of Moncrief's performance for FY 90 showed that the program ended FY 90 with an overall collection of 70.45 percent, highly successful. In comparison with the rest of the command, Moncrief ranked sixth. However, first quarter FY 91 performance is below FY 90 performance as explained below.

Using amount billed over amount collected in first quarter of FY 90 as a raw ratio, it was discovered that Moncrief ended the quarter at a 40 percent collection rate. Given that reimbursements are not expected to be received at the hospital for at least the first 60 days, the low percent of collection can be justified. In first quarter of FY 91, the performance dropped to 31 percent.

A pairwise comparison for first quarter FY 90 and 91 between the same 22 hospitals for which reliable data was available, demonstrated that even though the MTFs were allowed to keep their collections, performance dropped. The drop was not found to be statistically significant. See Appendix.

A remarkable change in the Command's percent not collected of the total billed was discovered during the analysis. First quarter FY 90 had a 29.9 percent rate while first quarter FY 91 skyrocketed to 51 percent. The most notable changes occurred in the care not covered and expired policy columns.

A review of 130 Moncrief insurance interviews found that 129 had statements on file in the record that the patient had been queried as to the status of any health insurance.

Step Two: Locating the Policy Source

The researcher contacted Navy Commander Steve Olson, health systems analyst at the Office of the Deputy Assistant Secretary of Defense, Health Affairs, Washington, D.C., and visited him in Washington. At the time of the interview, he and others were working on a commercial software package that would take care of the accounts receivable management portion of the collections program. Presentations from two vendors had been completed at that time. Others were being considered but not imminently. The researcher was also able to review the presentation made to Commander Olson by Arthur Anderson Company, a major accounting firm. Although the software presented was excellent, it was too broad for the simple application needed at Moncrief and would need considerable changes to work with AQCESS.

Commander Olson also identified one of the major issues surrounding the third party program which is our inability to enforce any punitive measures for a patient's failure to acknowledge he has insurance.

Step Three: Local Studies of Collections Strategies

In the third step, studies at a state agency, local hospitals, and health insurance vendor were all

completed in Columbia, SC with the exception of a visit to Eisenhower Army Medical Center in Augusta, GA.

The state agency visited was the State Finance Commission, Third Party Liability Section. The researcher and office manager began by examining the process through which the state seeks reimbursement from private carriers for services rendered by local physicians. The most remarkable part of the study was the discovery that no software for such a program had been written, nor was it available in any other state. The director of the program had to design her own together with Clemson University programmers. The original data flow document was over 450 pages but produced this state's premier collection program. The federal government was so impressed with the final product that they now recommend the system to other states. In fact Georgia state representatives were in the office at the time of my visit as a result of this recommendation.

The section employed eight people whose sole purpose was the follow-up of insurance claims. A change was coming to the office in the form of a private contractor, Blue Cross/Blue Shield, who will

now handle the program using their electronic claims interface and the massive data base built by the Third Party Liability section. The contractor will be monitored by the director of the third party liability section.

The researcher's study at Richland Memorial was exceptionally rewarding. During an interview with the Director of Billing and Accounting, the concept of electronic claims interface (ECI) was reintroduced. Specifically, when patients are interviewed for financial information, insurance information is entered into an extremely complex hospital information system. Upon discharge and completion of the inpatient record, the information needed is downloaded into a system known as P.A.I.D IV which is owned by Companion Technologies, a subsidiary of Blue Cross/Blue Shield. The system is used almost exclusively for insurance billing and only rarely are manual UB-82s produced because an insurance carrier is not on the electronic claims interface system.

The researcher obtained a list of vendors to whom the system could send claims. See Figure 4. Additional vendors are being added at this time.

List of Vendors on the PAID IV System

CHAMPUS	MEDICARE	SC MEDICAID
MEDICARE PtB	Liberty Life	Principal Mutual
Phila Life	Confed Life	Guardian
State Mutual	Great Southern	New England Life
Pacific Mutual	Confederation	Great West
Mail Handlers	Phila Amer Life	Blue Cross
Blue Cross Cen	Travelers RR	Phoenix Mutual
Aetna	Equicor	Metropolitan
Provident	Travelers	Connecticut
General		
General American	John Hancock	Life of Georgia
New York Life	Benefit Trust	

Figure 4

Rejection rates overall were fluctuating between 8 and 10 percent. Employee and management satisfaction with the system was extremely high. The entire section consists of 40 employees whose sole focus is inpatient or outpatient billing. The employees work in teams so that if one team member is absent the other can take over temporarily.

A review of Moncrief's FY 90 and 91 insurance company data revealed that in FY 90, 70 percent of the insurance claims billed went to three companies while in 91, 66 percent went to the same three, i.e., BC/BS, Mailhandlers and Aetna. See Figure 5. All three are in the ECI database.

Primary Carriers for Moncrief Hospital

FY 90		FY 91	
Blue Cross	51.3%	Blue Cross	41.6%
Mail Handlers	13.1%	Mail Handlers	15.8%
Aetna	5.6%	Aetna	9.0%
Others	7.5%	Others	4.0%
	77.5%		70.4%

Figure 5

During the Veteran's Administration Hospital study, the researcher was able to meet with the programmers of the hospital's information management office. The discussion centered around the similarity between their collection program and that of the DoD. This is not really remarkable since both are federal institutions bound by the same Title 10 requirements. What was remarkable was the excellent third party accounts receivable software available in their information management system. The researcher also discovered that the MUMPS system in which AQCESS is based is the same system the VA uses for their information management system.

The research at Eisenhower did not net the project any additional information. It was noted that the motivation behind the program was emanating from the patient accounts manager. Her successful program was based in the AQCESS output of UB-82s and manual ledgers. She personally monitored the collections process and performance.

The final study took place at Companion Technologies (CT), the automation arm of BC/BS. Originally, it was the researcher's intention to speak to the CEO of BC/BS. But as the research continued, it became evident that the better source might be CT. The researcher therefore chose to visit the Vice President for Sales for an interview. He was personally involved in the original Burch and Davis project. His firm's presentation to the government was given, according to him, because they felt they could assist the government in complying with the intent of Title 10. BC/BS determined that if they were going to have to make the payments, they felt they could offer the government a mechanism that would ease the transition for both parties. This is where the PAID system would have come in.

CT actually offers three levels of the PAID technology. The first is a simple no frills system that works as a remote terminal. Electronic claims can be accomplished by an operator and account inquiries can be made. The second is a "download" type of system that eliminates the operator by taking files directly from AQCESS but still operates from a PC. The third is the PAID IV Plus system and is virtually the same system CT wanted to implement for Burch and Davis. It is a total system maintaining all records, accomplishing re-bills if an automated account inquiry shows a payment has not been made. It too is a download system. The selling point of this system is that it can aid in the identification of insured patients by querying other companies as to the insurance status of a patient. Mr. Hartis made it clear that there is no "clearing house" for information on those who might have health insurance but the PAID IV Plus system was as close as one could come. No cost was discussed since the company had originally sought to gain a government contract in which they would handle all aspects of the collections program to include reimbursing the government for funds collected minus their processing fee.

Step Four: Placement of the Third Party Collections Office

As mentioned during the literature review, the third party collections office should be placed as near to the center of activity involving insurance as possible. This is, for the MTF, near the PAD.

During the study at local facilities, this was not the case. For the VA, the section was part of billing but was located outside the actual patient accounting area. In this case, sheer lack of physical space prevented it from being included. As for Richland Memorial Hospital, the same is true. The major consideration for a MTF will be the estimated size of the operation needed. Since our hospitals do not routinely do a massive amount of third party work like civilian facilities do, the third party branch should be able to site with the Coordinated Care Division in the future and remain in or near PAD for the present. In any case, the key to a successful program will be locating the branch where those activities collecting information about coverage or dealing with potential insurance situations are also located.

Discussion

Implications of the Results

Step one: Moncrief's performance.

The researcher's intention in conducting the interviews with the Chief, PAD and third party collections employees was to identify the need for education. The Chief was knowledgeable due to his association with other chiefs and the HSC consultants. However, there was a distinct difference in the depth of knowledge possessed by the collections clerk. The knowledge he had was basic in nature and originated primarily from association with the program. Although there seemed to be no outwardly identifiable inefficiency in the collections effort attributable to a lack of knowledge, it was observed that the second clerk (hired in December 90) could have profited by being formally trained on the AQCESS system rather than learning by trial and error. When a larger collections module is added to AQCESS, formal training will be a necessity for efficient operation of the collections program.

Reexamination of the flowchart in Figure 3 revealed that automation could certainly be applied at the manual ledger. Accounts receivable management

could be handled even more simply. As a result of my study at the Veterans Administration it appears that the accounts receivable and insurance portion of their medical information system could be easily removed, modified to accept data from the AQCESS database and reinstalled into AQCESS. In fact, the researcher discussed this option with the programmers at the VA. They were so familiar with AQCESS and the MUMPS system that they felt there would be no problem in making the needed modifications.

In analyzing Moncrief's poor performance in the first quarter of FY 91, a number of variables have influenced the collections. The major contributor seems to be the increase in the accounts receivable which, at the end of second quarter, stands at 57 percent of billed. In contrast to HSC's 52 percent not-collected of billed, Moncrief's not-collected percentage is only 11.1 percent. Additionally, the mean length of time for reimbursement from the two major payers increased from 51 days in first quarter FY 90 to 56 days for first quarter FY 91 slowing down the performance of the section.

The slow down might be attributable to two causes: the approach of the Christmas season

traditionally slows reimbursements and the country's preoccupation with the Gulf Crisis may have also had some effect that can not be quantified. No other variables could be isolated.

Part of the concern about the third party program has been the services' apparent lack of motivation to pursue the program as briskly as Congress had desired. It was hoped that by giving the facilities the authority to retain the funds collected this problem would be alleviated and healthcare in general enhanced by the presence of additional non-OMA funds. The data collected does not indicate this. The raw percentages calculated for the same 22 facilities revealed a decrease in performance but was of no statistical significance. What then could be the problem or rather, what seems to make some facilities better at collecting than others?

In the case of Eisenhower and Moncrief, support and monitoring of the program was definitely strong with emphasis at the supervisor and operator level. This fits well with the 3 winning traits discussed earlier. Two other facilities informally polled but not included in this study validated the importance of strong Command support and emphasis. One of the

facilities was doing poorly and attributed their performance directly to lack of support while the other stated their strong performance was due directly to the Commander's personal interest.

Another possible variable is education. The program was not initially well understood and the personnel hired to do the interface with the insurance companies came in at GS 4 or 5. Unfortunately, the job description for the collections clerks is just that, for a clerk. This researcher argues that the complexity of billing is underestimated by the Civilian Personnel Office. For example, at a local civilian hospital the average salary for a person in the insurance billing section was $22,646 as compared to $19,237 for a clerk in a military facility. Certainly the civilian facility must rely heavily on the billing section to do their job correctly or risk losing important revenue. The issue then becomes one of a question of the intent of Congress regarding the acceptable performance level of our facilities in collecting from insurance companies. Even more unfortunately, the clerk's experience with medical terminology is usually limited or nonexistent thereby drastically reducing any possible quality control.

Step two: the policy source.

The only real policy source issue remaining is: Can we or do we need to enforce some sort of punitive measures for a patient's failure to identify himself as insured? The real answer lies in determining whether we can identify those who are insured but tell the admitting clerk they are not. Once we can identify those individuals then, given legal authority to limit further benefits, we might be able to add the warning to admission forms or the admission briefing identifying the consequences of falsifying insurance information. As it stands now, potential patients are getting the word from other patients whose insured status is known that they best not volunteer the information otherwise they risk increased premiums. Since there is no real penalty and a small risk of discovery, we can only estimate how many are lying to the admitting clerk.

Step three: the local studies.

The research conducted at the civilian facilities was profitable since it identified electronic billing as a possible alternative to UB 82s produced by AQCESS. Adjunctly, since a major portion of Moncrief's billing is to three primary insurance

companies, electronic billing would certainly reduce or eliminate the current workload involved in "stuffing envelopes" and, according to one hospital, reduce the facility's payment turnaround time. No estimate of the actual reduction for Moncrief was available since no known military medical facility is on such a system However, average collection time under electronic interface for the three major companies bills is 35 days at a local civilian facility. Moncrief's current average is 56 days with UB 82s.

Step four: where does third party office fit.

The third party billing organization should, in the future, be placed in the Health Systems Branch/Coordinated Care Division since medical records are a critical portion of the insurance section's reliance on the record for pertinent medical information. The thought that it is a comptroller function is not valid since the majority of the third party billing is a medical record and patient accounting function. The actual collection of the funds and accounts receivable management seem to be comptroller functions also but are at such a simplistic level that no control by the RMD is

necessary. This argument also validates the idea that internal control will be served better if the function remains outside RMD with ultimate control of the funds themselves belonging to the comptroller.

In the future as Gateway is implemented at more MTFs, the billing function could be rolled into the Coordinated Care Division to ensure a "one stop shopping" concept. This will be especially true when outpatient collections are implemented.

Weaknesses of the Study

The weakness of this study resides primarily in its dependence on data provided by HSC for the quantitative analysis conducted in step one. Validity and reliability of the data could not be established beyond comparison of their information to that captured by Moncrief for the Moncrief account. Data provided was within +/- 2 percent of local figures. Figures for the rest of the command were assumed to be consistent with this error since AQCESS and local reports feed the HSC reports.

Conclusions and Recommendations

Conclusions

The purpose of this study was to determine a method by which Moncrief Army Community Hospital could increase its effectiveness in third party collections, make use of available or additional automation to manage the collections/accounts receivable, reduce the time spent in manually producing the UB-82 sent to the insurance companies, and employ simple TQM techniques to monitor the effectiveness of the program. As a result of the study, the study concludes the following:

1. The Moncrief third party collections program can be improved and automation can play a leading role in that improvement.

   a. The current lack of flexible automation in the third party collections branch is hindering better management of the program itself.

   b. The addition of basic automation to the third party branch will not only allow the program to make inroads into better management of the program itself, but of the collection effort in total.

2. Emphasis on the program by the Commander through the Chief, PAD (currently) and the Chief,

Coordinated Care (in the future) will motivate employees to investigate and pursue claims in a manner similar to civilian facilities.

3. The poor performance of the program in general (failure to attain higher collection rates of 60 percent or more) was not affected by the retaining of the funds at the local level. It is in fact the motivation and knowledge of the individuals involved that leads to an aggressive program.

4. Days in accounts receivables might be significantly decreased if the implementation of electronics claims were to occur in military treatment facilities.

5. Future placement of the third party collections branch in the Coordinated Care Division will ensure that a smooth flow of information and function will occur. This will be especially useful when outpatient billing is implemented.

Recommendations

The following recommendations are made to the Commander, Moncrief Army Community Hospital:

1. Continue to support and emphasize the importance of a strong collections program both personally and through the Chief, PAD.

2. Consider a management study into the appropriateness of the grades and job descriptions of the clerks involved in the collections process. Include in the study the variables of complexity (both present and future), knowledge of medical terminology, and basic accounting.

3. Immediately consider the use of a basic electronic claims interface to improve and speed the claims process. Regardless of the system chosen (CT, CSI, or other), training on the use of the system as an annual part of any contract must also be included.

4. Leave the third party collections section in PAD where it presently is located until such time as the Coordinated Care Division is implemented at Moncrief.

5. Consider and plan for the addition of at least one clerk as outpatient billing is implemented in accordance with the latest change in the law.

6. Consider and plan for a central outpatient registration center so that outpatients can be logged in and their insurance companies billed as medical services are provided in the outpatient clinics.

7. Within the confines of the current law, consider forming a partnership with the HMOs in the

area that will include Moncrief providers as preferred providers for military beneficiaries. This will allow Moncrief to bill the HMO in the future for outpatient visits that would not otherwise be covered.

The following recommendations are made to HSC or Department of Defense:

1. Consider the use of varying levels of electronic interface capability based on an MTF's complexity of care,patient volume, and past experience in billing workload.

2. Consider using the "high end" system offered by BC/BS or similar vendor for medical centers without turning over the collection process itself to the vendor. Since this recommendation would be exceptionally costly to the vendor, price negotiation will be necessary.

3. Examine the use of the VA's accounts receivable module in AQCESS. The system is already functional, based in MUMPS and available.

The recommendations abcve do not have unilateral applicability. Specifically, the placement of the Third Party Collections office must be facility specific. The central thought here is that the office must be placed where it is determined by the Commander to be most beneficial. The retention of the office in

either PAD or Coordinated Care Division could be argued equally well. Since we are moving into uncharted waters, time and experience will determine the ultimate correct decision. Additionally, level and complexity of the ECI process will be necessarily different according to the volume and capability of the insurance claims from the facility.

Another area of concern will be the grading of job areas. In each facility's locale, a knowledge of the patient mix and its impact of the third party collections program will be a valuable part of a more successful program.

In any case, the use of automation similar to that used in civilian facilities will certainly help DoD to improve its program. This, in contrast to the above, has unilateral application.

Further, we need to be sensitive to the fact that as health insurance becomes more costly, fewer of our beneficiaries will be able to afford it. This could spell the gradual decline of the program. The third party collections program must, therefore, ensure its viability by retaining its flexibility and continuing to look to the future for oncoming opportunities.

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Appendix

Calculations for the paired observation t-test are as illustrated below:

x	y	d	d^2
25	50	-25	625
62	36	26	676
77	67	10	100
59	76	-17	289
39	73	-34	1156
37	36	1	1
73	30	43	1849
86	31	55	3025
52	71	-19	361
23	37	-14	196
3	12	- 9	81
66	41	25	625
86	46	40	1600
64	48	16	256
69	35	34	1156
44	44	0	0
74	75	- 1	1
66	54	12	144
28	53	-25	625
45	69	-24	576
38	40	- 2	4
59	26	33	1089
		125	14435

s_d = standard deviation
n = # of paired observations

$\bar{d}$ = mean difference between observations

Calculation:

$n = 22 \quad \bar{d} = 5.68$

$$s_d = \frac{14,435 - \frac{(125)^2}{22}}{22 - 1} = 25.56$$

$$t = \frac{5.68}{\frac{25.56}{22}} = 1.04$$

$t\ (1,22) = 1.04$, cv = 2.819
$p = .01$
There is no improvement.