

Running Head: PROFESSIONAL CODING AND REIMBURSEMENTS

U.S. ARMY-BAYLOR UNIVERSITY  
GRADUATE PROGRAM IN HEALTH CARE ADMINISTRATION

GRADUATE MANAGEMENT PROJECT:

THE IMPACT OF OUTPATIENT PROFESSIONAL CODING  
ON THIRD-PARTY COLLECTIONS  
AT WILFORD HALL MEDICAL CENTER

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## ABSTRACT

The purpose of this study was to determine if a dedicated coding staff improves outpatient third-party collections at Wilford Hall Medical Center. To accomplish this, a review of the current procedures was undertaken in three key areas: identification of third-party health care insurance carriers, coding, and claims processing.

Since the implementation of the Ambulatory Data System, there have been concerns over missed opportunities for third-party collections due to coding non-compliance. Providers and supporting staff were tasked with the additional administrative burden of coding patient visits. In 1999, Wilford Hall Medical Center hired ten coders and four clerks in an effort to improve ADS compliance and reduce this administrative burden. An additional benefit would be improving third-party collections.

The study was designed to compare specified metrics before and after the hiring of the dedicated coding staff. A comparison was also performed with the ambulatory areas that had no coding support for Fiscal Year 1999. Results showed that there were no differences in collection rates or days in accounts receivable. This was consistent when looking before and after the hiring of the coding staff and when comparing fiscal year 99 data that had no dedicated coding staff available. Coding compliance increased for all areas of the facility. The rate of identifying patients with “other health insurance” actually decreased hospital wide.

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## INTRODUCTION

### Conditions which Prompted the Study

Health care organizations are under constant pressure to maximize revenues while containing costs in a rapidly changing environment. The balance of meeting customer expectations while remaining financially viable is becoming increasingly difficult. The 1983 amendments of the Social Security Act changed the retrospective payment system to a prospective one based on diagnostic related groups. (Sultz, 1997) This reversed the incentives of providing medical care by shifting the financial risk from the insurers to the hospitals. The newly developed capitated contracts are likely to continue replacing fee-for-service arrangements in the years ahead, especially in the ambulatory setting. (Kovner, 1999) These issues are shaping the way health care is delivered and financed throughout the United States.

Health care in the military has been shielded from some of the financial issues that the private sector experienced. However, during the 1990's, numerous medical treatment facilities (MTFs) were either downsized or closed. TRICARE was enacted throughout the Department of Defense (DoD) in order to guarantee medical readiness for active duty personnel and their families throughout the armed forces. The downsizing of the military brought about a tremendous surge of restructuring. Medical treatment facilities searched for additional revenues to sustain current operations, but were often required to expand their mission requirements. The potential to collect additional revenues from third-party insurers offered a potential solution to some of these fiscal pressures.

In 1986, Title 10 of the United States Code, Section 1095 (10 U.S.C 1095) required MTFs throughout the DoD to collect monies from third-party insurers. (Horne, 1994)

But this legislation was specific for inpatient costs and reimbursements. It wasn't until 1990 that additional legislation was enacted that allowed MTFs to collect reimbursements for outpatient care as well. (Griffin, 1993)

The growth of Wilford Hall's outpatient third-party collections (TPCs) is similar to that of most other MTFs in the DoD. Since the early 1990's, TPCs in the DoD have grown substantially as administrative expertise and corporate knowledge has been gained from both military and civilian organizations. This growth now provides a substantial revenue stream for MTFs to offer new services, purchase necessary supplies, and enhance patient care. The looming capitated funding streams that the DoD faces makes the process of collections of even greater importance.

Upon the initiation of the Ambulatory Data System (ADS), physicians, providers, and hospital staff were tasked with additional administrative responsibilities of coding principal diagnoses and procedures. This information is critical for resource utilization and billing third-party payers. Quite often, providers lack the experience, time, or the training necessary to perform to an acceptable standard. This results in frequent errors, non-compliance, and untimely collections. Even when patient visits are coded, collection opportunities are sometimes entirely foregone due to unprocessed ADS forms and inadequate administrative support.

During February 1998, a workgroup was formed at Wilford Hall Medical Center that included key personnel from the medical records flight, the Composite Health Care System (CHCS), ADS, and clinic administrators. They were tasked with developing ways to improve ADS compliance. The workgroup recommended that the facility

consider adding a fully dedicated coding staff by outsourcing a part of the coding process to improve compliance. (Montplaisir, 1999)

A thorough business case analysis was performed prior to the proposal. The committee had developed several key assumptions when considering adding this administrative staff. One was that each clinic would be able to reach 100% ADS compliance of scheduled CHCS appointments. That is, there would be sufficient administrative staff to create an ADS encounter form and code for services and procedures for all the patients seen in that particular clinic. The next assumption was that improved ADS compliance would result in increased third-party collections. By capturing all patient visits when completing ADS encounter forms, there would be less chance that patients who had third-party insurance would be missed. A final assumption was that having professional coders would maximize collection performance. There was evidence that providers had a tendency to under code their patient encounters because of fear of mistakes or lack of sufficient time to thoroughly document the patient encounter. Physicians have their first priorities in the welfare of the patient, clinical excellence, and proficiency of documentation of the medical record. Finding the right codes that correspond to each patient visit often does not receive the needed attention it deserves.

It is important to note that the initial goal was to improve ADS compliance, not to increase third-party collections. (Montplaisir, 1999) As more processes become automated throughout the medical community, there will need to be adjustments in where administrative labor is placed to support these changes. The integration of the Ambulatory Data System is just one example of how automation requires additional

administrative support to maximize its potential. There is a cost associated with this automation.

In the summer of 1998, Wilford Hall awarded a contract to an outside party who would provide additional staff and “professional” expertise to the outpatient coding process. This included the hiring of six coders and four clerks. Additionally, four more civil service employees were hired as coders to bring the total staff dedicated to coding to ten. They were strategically placed in high volume and higher dollar reimbursement areas. This included the Emergency Department, Cardiology, General Surgery, Ambulatory Procedure Visits (APV), Observation Records, and many of the subspecialty clinics. ADS compliance would be improved and TPCs would benefit by having an expanded staff that could accurately and speedily capture information from the medical record. Also, physicians and other providers would be free from the burdensome administrative duties that existed with ADS.

As more and more hospitals consider reengineering their organizational structures, some will likely consider outsourcing particular functions. The need to evaluate outsourcing as a cost-effective solution must continually be examined. Health care administrators use these analyses to position their organizations for the future. Wilford Hall Medical Center has an excellent opportunity to evaluate the effects of outsourcing a significant part of their outpatient coding services function.

## Statement of the Problem

Does adding a dedicated outpatient coding staff at Wilford Hall Medical Center provide a cost-effective solution to improve outpatient third-party collections?

## Literature Review

### *Background*

Health care insurance in the United States had its origin in the state of Texas around the time of the Great Depression. Baylor University Hospital was the first to establish a pre-paid plan for medical expenses in 1929 for area schoolteachers. Teachers paid fifty cents per month for up to twenty-one days of hospitalization. At this point, the American Hospital Association (AHA) supported the growth of similar plans. These plans became known as Blue Cross and covered a certain portion of inpatient expenses. Blue Shield was developed shortly after and covered physician inpatient services. (Kovner, 1999)

Since this time, the complexity of payment mechanisms has grown immensely. A variety of payment mechanisms now exist. In the past, patients who had health care insurance were distant from the sophisticated mechanisms in which insurance companies reimbursed providers and health care institutions. However, managed care has made the health care consumer more cost-sensitive by imposing restrictions and limits.

The prospective payment system has fueled an interest in keeping the patient well, rather than focusing on treating the disease already present. The incentives of keeping people out of the hospital have benefited the patient, but there is much debate over whether this has controlled costs. Total health care expenditures have exceeded seven trillion dollars in 1995, 13.6% of the Gross Domestic Product. (Kovner, 1999)

The way in which outpatient care is billed and collected is constantly undergoing scrutiny and change. Fee-for-service payment systems have driven reimbursement mechanisms for decades. The Medicare inpatient prospective payment system changed the incentives for providing quality care. The Omnibus Reconciliation Act (OBRA) of 1986 directed HCFA to create a similar system for outpatient services. In the coming years, HCFA will reimburse providers on the basis of ambulatory-patient groups (APGs), which is similar to diagnosis-related groups (DRGs). This new system will establish a price for the type of visit, assign a standard outpatient cost, and include ancillary services. Physician services will still be variable. There will be a total of 297 APGs, almost 200 fewer classifications than the current DRG system. (Duncan & Servais, 1996) The goal of this system is to control costs and put financial incentives into place for the outpatient setting.

Managed care, through capitated funding, has already driven health care organizations to control costs in the inpatient arena, but reimbursement mechanisms for the ambulatory setting are lacking. Most major insurers are still reimbursing physician services on a charge-based system, rather than setting global payment and billing systems. (Schmitz, 1999) The Balanced Budget Act of 1997 authorizes HCFA to implement the hospital outpatient prospective system that will use APGs as the method for reimbursement. The implementation date is set for July 1, 2000. (DHHS, 2000)

### *Education*

Internal educational efforts are crucial in improving the understanding of the regulations and policies that guide reimbursement practices. Wilford Hall Medical

Center conducts extensive initial training for all new incoming employees. Areas emphasized during this initial training include third-party reimbursements, TRICARE, patient confidentiality/sensitivity, active-duty health care, commonly used DoD terminology and practices, and more. These educational efforts are extremely important in communicating changes to DoD policies as well. Employees know exactly what is expected, the goals, and the procedures to be followed. (See Appendix C)

There are also external education materials targeted to the patients and families. Brochures that explain the purpose and procedures of TPC Program can be found throughout the MTF. Likewise, the appointment check-in process has a key role in educating the customer by identifying OHI and then answering any questions about TPCs. Additionally, there are several outpatient coordinators dedicated to the billing process who daily interact with patients with OHI. They must dispel any misnomers and provide reassurance to patients about the benefits of TPCs. This is also an extremely important process because past practices have changed in the way MTFs bill insurance companies. Many patients who have OHI are concerned about the fear that their insurance premiums may go up by using a DoD medical facility, or that the MTF will require the patient to pay a deductible or co-payment. However, DoD policy states that patients with OHI will not be required to pay these fees. A patient brochure outlining these topics can be found in Appendix D.

### *Billing*

The DoD requires all MTFs to perform to a minimal set of standards with regard to TPCs. These include: identifying beneficiaries with other health insurance (OHI),

observing mandatory compliance guidelines for billing all eligible health insurance carriers, submitting claims to third-party payers, follow-up to ensure collections are made, and documenting and reporting collection activities. (DOD, 1997) Health plans not subject to collections include Medicare, Medicaid, CHAMPUS, and other income supplemental plans. Written verification from the patient must be obtained on DD Form 2569, Third Party Collection Program – Insurance Information, (See Appendix A) regarding the presence of OHI and updated within a 12-month period. (DOD, 1997) The Wing Policy for the Third Party Collection Program supports the Department of Defense Instruction. (Appendix B)

The Veteran's Administration (VA) is taking a very aggressive approach to TPCs. Dr. Kenneth Kizer, undersecretary for health for the VA, has provided new leadership for a system that has lacked incentives for efficiency. This has changed. Budget constraints have led Dr. Kizer to make a goal of funding ten percent of the entire budget through TPCs by the year 2002. Unfortunately, early projections show that it will be difficult to reach this goal. The Congressional Budget Office estimates that the VA's collections will be over \$100 million short of their goal, citing the trouble of maximizing collections from health maintenance organizations and Medicare. (Freedberg, 1998)

The Third Party Outpatient Collections System (TPOCS) is the software that the DoD uses to bill its insurers. This system allows the MTF to store patient and coding information pertinent to the patient encounter. This information will be used to communicate with various insurance companies. It is essential that all the information that goes into this database be accurate. Payments may be denied or delayed if it is inaccurate. Coding and other necessary information from ADS is transferred manually

into TPOCS by billing clerks in the Third Party Collections Office. Form UB-92 is the standard form used in billing insurers. (See Appendix E) TPOCS also has the capability of processing claims electronically and tracking accounts receivable by clinic location.

One new exciting trend in the area of billing is the development of contract management systems. These computer applications align the billing process with the multitude of insurance plans that are on the market. Wilford Hall Medical Center is not alone when considering the vast number of contracts and policies that must be understood for individual and group plans from which it is trying to collect reimbursements. Quite often, the complexity of these contracts and policies is causing serious payment errors and delays. These errors can lead to millions of dollars of improper or mispaid reimbursements. A key ingredient is the ability of billing personnel to speedily view policies and charges before sending them to the insurer for payment. If payment is not in full, billing personnel can immediately understand the reason or resubmit because of error. (Lippman et al, 1998) Contract management systems have shown to help organizations put their financial houses in order by tracking the multitudes of managed care plans which they bill periodically. These computer software applications are often linked to electronic billing and require that the user enter contract parameters. Once established, the program can track contracts and insurance policies to determine reimbursement rates and errors. Larger organizations can especially benefit from this technology, where it could take several full-time staff members to manually track and analyze the data. (Schneider, 1997)

### *Collections*

One way collection performance can be measured is by looking at the number of days it takes to receive reimbursements. Many factors affect this measure, both internal and external. These include different requirements by state insurance administrators, type of payor, type of hospital, and billing systems. The result is that there is a great deal of variability in collection performance between facilities and time-periods. Government reimbursements have often been viewed as slow. However, in a survey of 1,200 not-for-profit hospitals, Medicare and Medicaid were found to be timelier than most other types of third-party insurers. (Prince, 1992) MTFs are not authorized to collect reimbursements from Medicare. They are focused on collecting private third party insurance and must establish communication lines in an effort to speedily capture claims.

Looking at percent collection rates is another way collection performance can be measured. Quite often, performance differs with respect to each medical specialty or location. Emergency room departments present a unique challenge in collections. In a study of 786 patients treated at the emergency room of a 1,050-bed tertiary-care teaching hospital, only 57% of the total net charges had been collected. This compares to an inpatient collection rate of approximately 85% for the same facility. The uninsured patient seen accounted for 60% of the uncollected amount. (Saywell et al, 1992) For this reason, it is likely that most emergency room departments will have negative effects on collection performance.

Managed care has caused physicians to increase their fees at a much slower pace than the previous decade. Reimbursements are declining across the board. A survey of cardiologists, gastroenterologists, internists, and family practice physicians all saw

reimbursements for initial visits decline for 1998. Clearly, the business of managed care has kept physician reimbursements in check. (Crane, 1998) Also, managed care companies are stalling payments to better their own financial interests. In New York, insurance regulators have fined companies who repeatedly delay payments. Fines totaled \$91,800 against Oxford Health Plans for violating the 45-day prompt-pay law from January to April 1999. However, providers say that this is only a slap on the wrist when you consider that some facilities have \$300 million in revenues annually. Twenty-six states now have legislation that outlines the amount of time insurers have to pay a claim. Most stipulate 60 days as the specified time frame, although some states require insurers to pay within 15 working days after receiving the claim or face an 18% annual interest charge on late reimbursements. (Pallarito, 1999) DoD collection activities require MTFs to follow-up unpaid claims after 30 days. One additional follow-up is performed after the 60-day mark before referring outstanding claims to the legal office for payment. (DoD, 1997)

## *Coding*

There are two widely accepted coding systems in the United States: the International Classification of Diseases, 9<sup>th</sup> Edition, Clinical Modification (ICD-9-CM), and the Physicians' Current Procedural Terminology (CPT). They specify unique numeric codes that represent diagnoses, symptoms, procedures, services, and supplies. Both have published handbooks listing thousands of generic and specific codes. Coders must have a thorough knowledge of medical terminology in order to select the appropriate diagnosis observed or the procedure performed from these systems. (Toth, 1998)

The World Health Organization (WHO) was the organization originally responsible for classifying diseases because of the need to track morbidity and mortality. In the 1950s, the AHA and the American Association of Medical Record Librarians determined that the International Classification for Diseases, promulgated by the WHO, was an appropriate mechanism of indexing medical records. Since then, public and private organizations in the U.S. have embraced this need for standardization. The National Center for Health Statistics (NCHS) and the Health Care Financing Administration (HCFA) are now the organizations responsible for updating the ICD-9-CM system. The American Medical Association was the original publisher of the CPT coding system and still has the largest influences over changes and new editions. (Toth, 1998)

In the mid-1990s, the DoD began deploying ADS in effort to capture critical information about the medical care being delivered to its beneficiaries. Wilford Hall Medical Center implemented ADS by order of a DoD Directive in 1995. (Keiser, personal communication, February, 2000) CHCS information such as patient name, address, third-party insurance information, and appointment status are automatically

updated in ADS. When a patient encounter occurs, the ADS form requires information pertaining to the type of care provided to be documented by the coder. There must be at least one ICD-9 and evaluation & management code completed, however, since not all patients undergo a procedure, establishing a procedures code is optional. A copy of the ADS form can be found in Appendix F. The coded information is then compiled and sent to the Standard Ambulatory Data Report (SADR) each day and forwarded to Ft. Detrick, Maryland for further compilation. (Keiser, personal communication, February, 2000)

Recently, Wilford Hall Medical Center received KG-ADS. The term 'KG' represents the new link between CHCS and ADS. (CHCS II, 2000) KG-ADS automates the entire process and will replace ADS entirely. It eliminates scanning and prevents coders from establishing a patient visit within ADS without creating an appointment in CHCS. Therefore, the information contained in CHCS will be the same as ADS. This makes ADS compliance 100%. This change will improve data consistency and actually reduces the number of people to administer these computer systems. (Zoblosky, personal communication, January, 2000) However, TPOCS still does not communicate with either KG-ADS or CHCS. The Third Party Collections department billing personnel often have to manually draw information from ADS or CHCS in order to complete the billing process.

The need for data accuracy and record completion requires the professional coder to operate as an integral part of the health care team. Coders must be able to accurately describe what has taken place for the patient, often with poor documentation and untimely billing practices. The last two decades have evolved to create a demand that exceeds supply for this profession. The next two decades will broaden this demand by

requiring coding professionals to be technologically proficient and outcomes driven. The future professional coder will likely be more involved in the outpatient prospective payment systems as Medicare prepares itself for the new ambulatory payment classification system. (Scichilone, 1999)

Currently, there are two organizations that offer certification for physician and hospital based coding: the American Health Information Management Association (AHIMA) and the American Academy of Professional Coders (AAPC). The certification titles given are the ‘certified professional coder’ or the ‘certified coding specialist’, depending on the certifying organization. Coders can specialize by taking an examination based on either hospital or physician-based setting. (Medical Association of Billers, 2000)

Professional coders have expertise in the CPT and ICD-9-CM coding systems as well as medical terminology, data integrity, and health information documentation. To become credentialed, an individual must have a high-school diploma, submit letters of recommendation, have two years of coding experience, and successfully pass the certification examination. The exam is a five-hour, open-book test that challenges the individual on various coding scenarios. Once a coder is certified, they require 18 continuing education units each year. (AAPC, 2000)

AHIMA has offered the hospital-based credential since 1992 and the physician-based credential from 1997. (AHIMA, 2000) The professional coder is a relatively new profession, but has become an integral piece in the financial aspects of health care billing and reimbursements. They have not seen a reduction in salaries unlike many other

medical office functions. Table 1 shows 1998 Salaries by region for certified coders. (Medical Association of Billers, 2000)

Coding personnel are often frustrated with the lack of attention to documentation. Many physicians are not aware of the financial benefits of accurately painting a complete picture in the medical record. There is evidence that some health systems are responding to this development. Mississippi Baptist Medical Center has developed a program where physicians undergo an intensive two-day training program in which they are educated on the coding and billing process. They are then held accountable for their documentation by quarterly audits. Additionally, a physician is available each day for an hour to offer expertise to coders for interpretation. The result was improved documentation, closer communication ties between physicians and coding staff, and improved collections. (Stavely, 1999)

The trend is clearly moving towards automation of the coding process. Software is becoming more available to speedily capture the care that is given to patients. Automated coding allows users to match ICD-9 and CPT-4 numbers easily, negates unnecessary manual searching, and prompts users for more specific diagnoses and complications. This information is maximizing reimbursements and minimizing the amount of time necessary for coding. Most importantly, facilities are able to quantify workload according to diagnoses and procedures performed. (Heckler, 1996)

The computerized patient record may also have a profound effect on coding. Ideally, the assignment of a diagnosis and documentation of any procedures or tests will be automatically linked to the billing process. This may not be too far from happening. Health information management professionals will need to change their roles as well.

The skill of linking the diagnosis to the code will still be required. However, more time will be devoted to trouble-shooting and quality control monitors. (Beinborn, 1999)

The DoD is currently working on a computerized patient record as well. CHCS II is currently in the developmental stages of completion. There will be two increments prior to implementation. Increment one has already been completed; it was deployed and site-tested in three MTFs at Hawaii during May 1999. Increment two involves lessons learned from the first increment and is currently under way. A series of pilot tests will be conducted throughout the current calendar year in order to evaluate the potential for worldwide deployment. CHCS II will provide documentation for medical and dental encounters to include radiology, laboratory, and medication information. It will also automate the “Put Prevention Into Practice”, the Health Assessment Annual Review (HEAR), problem lists, and immunizations. (Dawkins, 2000)

### *Outsourcing*

Third-party administrators are often being called upon to manage a hospital’s claims-processing department. Reasons include a constant need to invest in technology to speedily perform the work, training needs of the staff, and a high turnover of employees who are pressured to process a certain number of claims per hour. (Ribka, 1997)

Constant reengineering, mergers, acquisitions, and the growing corporate nature of health care will likely increase the demand for these specialized business services.

Outsourcing affords the organization the opportunity to acquire specialized services, realize cost savings, and focus on core business strategies. The trend for the industry is to maintain its current amount of contracting, rather than increase outsourcing. (Sunseri,

1998) Three hundred senior executives were surveyed in 1998 as to the amount of outsourcing that is being initiated. Only 8.9% of claims processing / reimbursement were currently being contracted. The business services that were most likely to be outsourced include pest control, waste management, patient satisfaction management, and laundry. Of the claims processing / reimbursement services outsourced, 100% were either satisfied or very satisfied with the services they were receiving. (Sunseri, 1998)

### Purpose

The purpose of this study is to determine if a dedicated coding staff provides a cost-effective means of improving outpatient TPCs at Wilford Hall Medical Center

### Null Hypothesis:

A dedicated coding staff of ambulatory services does not have a positive impact on third-party collections at Wilford Hall Medical Center.

### Alternate Hypothesis:

A dedicated coding staff of ambulatory services does have a positive impact on third-party collections at Wilford Hall Medical Center.

## **METHODS AND PROCEDURES**

Previous studies have used various metrics in evaluating third-party collection programs at other DoD MTFs. Griffin (1993) used three key rates: percent collection rate, days in accounts receivable, and claims generation rate to measure the performance of the third-party collection program at Irwin Army Community Hospital. Other DoD studies have focused on other aspects of TPCs. These include determining predictors of payment in full (Moore, 1996) and the design of an optimal TPC program. (Horne, 1994)

This study consisted of an understanding of three critical steps in the outpatient third party collections process. First, methods by which patients are identified with OHI and how this information is managed by the organization were examined. Next, the coding process was evaluated in depth. This involved observing staff, reviewing standing operating procedures, and exploring how the multitude of variables affects the process along the way. An analysis of the coding contract was also conducted in order to collect information about the costs and areas affected. Finally, an understanding of the billing process was undertaken to establish the link between coding and the actual collection process.

The goal was to select metrics that would pertain to the three areas studied: identification of OHI, coding, and billing. The following measurements were selected: ADS completion percentage, the claims submission rate, average collection per bill paid, percent collection rates, days in accounts receivable (for pending claims), and total collections for FYs 1998 and 1999. These variables were compared before and after the implementation of the hiring of the coding staff. Also, FY 99 contract areas were compared with those areas that were not affected by the contract.

The following outlines the specific metrics used, how the data was analyzed, and what it represents.

#### Operational Definitions of Metrics

1. Percent Collection Rate = Total Collections / Total Amount Billed
2. Average Collection Amount = Total Collections / Total Bills Received
3. Claims Submission Rate = Bills Generated / Total ADS Visits

4. ADS Compliance Rate = ADS Visits / MEPRS Visits
5. Days in Accounts Receivable = Dollars per Time Period / Total Owed
6. Total Collections

#### Metric Significance

1. Percent Collection Rate – Coder ability to maximize collections
2. Average Collection Amount – Coder ability to maximize collections
3. Bill Submission Rate – Ability to identify OHI
4. ADS Compliance Rate – Ability to code all clinic visits
5. Days in Accounts Receivable – Billing Accuracy & Payer Performance
6. Total Collections – General measure; not a good indicator of performance.

A further review of the reasons why claims are not paid or not billed was conducted to provide a valuable retrospective analysis of collection performance. ‘Explanation of Benefit’ forms (EOB) were reviewed with a member of the TPC office in order to understand the circumstances of payments that are communicated between the insurer and the provider. Finally, accounting reports from previous years were reviewed to analyze trends and amounts of closed (unpaid) claims.

### Validity and Reliability

External validity concerns were addressed by a continued review of the literature, analysis of standing operating procedures, direct observation, interviews of key personnel, and historical perspectives. Reviewing the process from several different sources enforces internal validity. This review was accomplished through interviews, literature reviews, and attending presentations. (Cooper & Schindler, 1998)

Primary sources of data were required to ensure reliability. An assumption was made that the data provided by various departments was calculated with accuracy.

### Ethical Concerns

During the data collection process, the researcher did not maintain names, social security numbers, or other means of identifying patients. Sensitive information could not have been tracked or connected to individual patients or their family members. Every effort was made to conduct the investigation in an ethical manner with respect to patients, the MTF, and the DoD.

### Data Management

Third-Party Collections are reported at the end of the fiscal year. Although there have been many changes in personnel within the Third Party Collections Office, the data has been managed consistently from year to year. When a claim is not paid during the fiscal year in which services were provided, it is awarded to the following year. The result is the inability to isolate the performance of all the claims submitted in a given year. In other words, there will be payments within a fiscal year for which no claim

exists; likewise there will be claims for which payment has not been determined or received. Data calculations for the metric analyses reflect the same accounting principles used for managing data within the TPC Program

## **RESULTS**

### *Third Party Collections Overview -- Key Players*

The process of collecting reimbursements from OHI is cumbersome. It is also plagued with the potential for numerous administrative errors. Many hands play a part in the collections process. Without strong communication efforts, cooperation, and teamwork, third-party collections would be fruitless endeavor. Physicians, clinic receptionists, administrative staff, coders, billing clerks, and executive leadership all provide a critical role in this endeavor.

### Physicians

Physicians and providers must document accurately and with as much detail as possible. They must also be available to communicate routinely with coders when questions arise and be able to recall specifics on patient appointments. This can be challenging when considering the sheer volume of patients that are being seen on a weekly basis. Many physicians at Wilford Hall Medical Center still code for the services they provide to their patients. As mentioned before, the coding contract does not provide services for the entire hospital. For this reason, they must be knowledgeable about the process of filling in the appropriate diagnostic and procedural codes. The goal is to be 100% compliant in coding patient appointments, regardless of the presence of OHI.

Although this is mundane, physicians must be aware of the importance of making the medical record physically available to the next step in the process, coding. Many times physicians will hold onto medical records to study the history of a patient or confer with their colleagues. If this happens, coders will not be able to initiate an ADS encounter form.

#### Ambulatory Administrative Staff

Clinic administrators and receptionists have an equally critical role in the collections process. They interview most with the patients about the possibility of OHI. This is the rate-limiting step for the entire process of third-party collections. The lack of universal or automatic recognition of the presence of OHI makes their thoroughness with patients critical in the identification process. If patients are not routinely asked to complete and update DD Form 2903, many instances for collections will be entirely missed. They, like physicians, are also challenged by time. The volume of patient appointments demands that receptionists sometimes check-in a patient in a matter of seconds. To perform less, means longer waiting times for patients and leads to dissatisfied customers. Adding an additional task of updating insurance information is indeed a challenge, but cannot be pushed aside.

#### Coders

A dedicated coding staff brings professional expertise and allows the physician to more freely concentrate his skills on patient care. However, coders are often frustrated with poor or unspecific documentation on the part of the provider. When this occurs they

must revert to a general code rather than list the exact procedure. This lessens the chance that the MTF will maximize its ability to collect reimbursements. Coders must be willing to seek physician views on the type and level of care that was provided to the patient whenever possible. They are involved little with the detection of OHI. But, once identification has taken place, they play a crucial role in expediting the completed coded information to billing personnel.

### *Billing Clerks*

The final step in the process occurs when members of the TPCs office submit the ADS coded information to the insurance company. At this point, a billing clerk will prepare a bill by inserting the coding information that lists diagnoses, procedures, and level of care. A positive relationship between the MTF and the insurer will facilitate communication and avoid unnecessary delays in payment. Quite often, the billing clerk is the only contact that the insurer will have from the MTF. There are instances when insurers will want to verify the care the patient received. In this case, the insurer may request a copy of the medical record. Claims are also delayed because of administrative errors. These include the possibility of changes of insurers resulting from the lack of updating DD Form 2903, inaccurate identification numbers, or wrong mailing addresses. Billing personnel must be able to track all correspondence and communicate effectively in this dynamic environment.

### Leadership

Leadership is another critical aspect of the success of TPCs. The challenge is to communicate the importance and necessity of the program to employees while placing the needed resources that would maximize its potential. To fail at either aspect weakens the entire program. In the past, clinics at Wilford Hall Medical Center were rewarded a portion of their collections in the form of new equipment or furniture. It is the responsibility of leadership to establish these incentives and constantly include TPCs in the monitoring process.

A diagrammed view of the TPC process is depicted in Appendix G. Several common mishaps are presented in the diagram in an effort to show the complexity and frustration of the process that may negatively impact collections.

### *Barriers of Self-Reporting OHI*

The most critical piece of the information that the facility must obtain is the knowledge of the existence of third-party insurance of the patients treated at the MTF. However, there are many barriers to obtaining this information. Patients often feel that providing this information will produce a negative impact with their third-party insurance carrier or they may become financially responsible for various co-payments and deductibles. DoD policy states that patients will not be required to pay deductibles or co-payments at the MTF. This needs to be a part of the education effort.

Often, the last thing on the patient's mind is to update insurance information when they know it does not affect them financially. By the time they arrive at the MTF, most are focused on the care they are to receive for their illness. Updating insurance

information will not alter the care they receive. All of these notions negatively impact total third-party collections.

### *Metric Analysis*

The metric analysis is provided in Table 2 for the areas affected by the additional coding staff. Percent collection rates decreased from FY 98 to FY 99 by one percent. The average collection per bill received increased by approximately twenty percent. This is due primarily to the large increase in the amount charged for APVs, from \$737 in FY 98 to \$1765 in FY 99. Changes in DoD reimbursement rates can be found in Table 5. Results show that ADS completions improved, however, the number of bills generated for third-party collections did not improve proportionately. In other words, ADS compliance rose, but the facility does not appear to be improving its ability to identify those patients with third-party insurance.

The results are similar when comparing contract areas with those areas that were unaffected. (See Table 3) Percent collection rates actually increased by one percent from FY 98 to FY 99 for the areas not affected. The average collection amount was lower for the non-contract areas; this is due to having the dedicated coding staff placed in high-dollar reimbursement areas. ADS completion rates were higher, but the number of bills submitted per ADS visit recorded was remarkably low, at 3%.

Table 4 shows days in accounts receivable for pending claims. Claims are aged by clinic and were separated out for those areas affected by the dedicated coding staff. The analysis shows that collection performance appears better in the areas not affected. However, when pharmacy, radiology, and laboratory claims are taken out, the differences

between the two areas are almost indiscernible. These three services had a much larger proportion of claims that had been submitted within 60 days.

### *Contract Analysis*

Coding services were purchased through the Cooperative Administrative Support Unit (CASU) Program. The President's Council on Management Improvement developed this program in 1986. (CASU, 1998) The program is hosted by the General Services Administration (GSA) and has regional contacts. The ultimate goal is to decrease administrative costs throughout the government by centrally purchasing services that most institutions require. Contracts are awarded by the Department of Treasury, Bureau of Public Debt, on a competitive procurement basis. Most all CASU contracts require specific performance parameters.

A review of the salaries shows that Wilford Hall Medical Center paid approximately \$500,000 during FY 99 for dedicated coding support staff. These costs represent the contract costs and the additional in-house staff that were dedicated to coding in FY 99. There are no monetary incentives for improved contractor performance. The contract was renewed for FY 2000 and has expanded to include additional staff in the Third-Party Collections Department. Specifics of costs can be found in Table 6.

Currently, there are quality controls in place that monitor contract performance for coding services. The controls state that approximately 5% of each contract employee's output is to be performed monthly and then documented quarterly. Four areas were selected for monitoring. They include 1. 95% of all outpatient clinic visits are to be processed within 7 days of the patient visit, with specified daily minimum record rates

(absolute minimum of 100 daily), 2. Reviewing, abstracting, and coding ambulatory encounter sheets into the Ambulatory Data System with a daily minimum accuracy rate of 97%, 3. Coders are expected to keep abreast of changes in coding conventions guidelines and reference materials, and 4. Maintains effective interpersonal skills with no more than two valid complaints annually from physicians or staff members for unprofessional behavior. However, these controls have only been actively monitored since January 2000 and non-contract areas are not currently being measured. Thus, there is no opportunity to compare differences of volume and accuracy between contract areas and non-contract areas at this time.

### *Closed Claims*

A review of collections for FY 99 showed that Wilford Hall collected a total of approximately \$1.75 million. Only \$1.45 million of this amount was collected during the same fiscal year that services were provided; an additional \$300,000 was collected from services billed in FY 98. Claims not paid are either appealed or closed based on reasons for non-payment. Reasons include limits on amounts of coverage, restrictions on services, reducing payments by the amount of the co-payment or deductible, and lack of pre-authorization by the patient.

Table 7 shows FY 98 and 99 data for the distribution of closed claims. This provides valuable insight to overall collection rates. Two categories showed substantial variability, 'Medicare Supplement Plans' and 'Other'. The rise in closed claims for 'Medicare Supplement Plans' is largely impacted by the implementation of TRICARE Senior Prime during FY 99 at Wilford Hall Medical Center. The 'Other' code saw closed

claims go from \$1.2 million in FY 98 to \$681,866 in FY 99. The majority of closed claims within this category represent payments that are not paid for various reasons such as claims that are not filed before the deadline, differences in prevailing rates due to geographical allowances, and not obtaining pre-authorization and having elective surgeries that are not covered under the insurance plan. A previous contractor had been responsible for billing outpatient claims up to the beginning of FY 1998. Much of the differences seen in this category represent changes in the way civil service employees altered billing practices after the contractor had been removed.

## **DISCUSSION**

Establishing a link between coding and collections by evaluating the metrics identified presents several challenges. These include all the various elements that can either directly or indirectly have an impact on total outpatient TPCs. Payer performance, coding errors, billing errors, insufficient provider documentation, technology failures and changes, and changes in reimbursements and charges can influence outcomes. Additional factors such as clinic restructuring, a largely teaching hospital that attracts rare diseases, an extremely volatile corporate climate, and data restrictions with regard to not being able to isolate claim payments within each fiscal year affect the ability to measure the link between coding and the outpatient third-party collection program at Wilford Hall Medical Center.

Accounting for all these factors is overwhelming when evaluating performance. The result is a weakening of the ability to input or change factors that can have an impact on collections. In other words, it is extremely difficult to account for the all of the variables

in order to state exactly what it takes to make coding and a third-party collections program work successfully together.

None of the metric analyses show that the presence of coding staff has improved the ability to identify more patients with OHI, to improve collection rates, or collect reimbursements in a more efficient manner. Therefore, the null hypothesis is accepted and the alternate is rejected. This is a disappointment for those who had hoped to see an improvement in collection performance. However, the primary reason for hiring the coding staff needs to be revisited. It was to improve ADS compliance. This goal was achieved, however, ADS compliance has risen for the entire facility and cannot be claimed only for the areas with dedicated coding support.

Contract costs for professional coding services are substantial and deserve another year in which to improve performance. If there is no improvement, perhaps these resources could be better used in developing ways in which the TPC's office can manage the large number of insurance policies that are billed for reimbursement. Other possibilities include increasing the number of TPC office staff, purchasing an automated contract management system, or hiring a consultant to train billing personnel ways in which to maximize reimbursements. Reverting back to previous practices in which all providers code for their patient appointments should not be overlooked. In the next few years, CHCS II will likely change the way medical record documentation and claims submission is performed. If the investments being made to develop these medical information systems improve administrative efficiencies, the result will be a substantial savings in labor costs throughout the organization.

The need to collect additional data to track workload has a cost associated with it. This cost includes expensive technology development and upgrades. You don't need to look far to see that CHCS, ADS, TPOCS, the development of CHCS II, the implementation of KG-ADS, and an expected new release of TPOCS are some of the technology issues that add to the cost of data management. Hiring additional coding personnel is necessary to perform some of the data transfer between these systems. There is a great need for the entire process to be automated and integrated.

There are many other aspects to look at with regard to coding. One is a substantial medical education component. Many physician interns and residents obtain their professional clinical training in the outpatient environment at Wilford Hall. These physicians will be transferred to other facilities where they will be responsible for coding patient visits. Exposure to coding seems justified in this case. Health care executives will need to determine what the impact of a dedicated coding staff will have on physician knowledge of this process.

The key to obtaining insurance information is through a willingness of patients to self-report. It is the rate-limiting step to the entire process of maximizing third party collections. There will always be a problem in total recognition if this process is not altered. There are attempts to provide further means of identification. One movement is to obtain this information through DEERS enrollment. Collecting information about OHI may be perceived as non-threatening when conducted in a different environment. Also, there is good reason to believe that patients are less distracted if they are queried about OHI when they do not have immediate health concerns. (Ashby, personal communication, March, 2000) Also, there are few incentives for reporting this

information because, very often, the patient does not have to pay the DoD MTF for the care rendered. Past practices have conditioned patients to not report OHI. The lack of education and abundance of misinformation from insurers about the use of DoD MTFs further compounds the problem.

TPCs is still in its infancy. Many of the administrative practices have been reengineered in an effort to maximize collections. Coders have gained an additional year in the DoD environment and may realize efficiencies through understanding unique military processes and establishing professional relationships with staff. To date, the biggest impact may have been on the clinical areas where coding support has been furnished. However, this was not measured in this study.

## **CONCLUSION / RECOMMENDATIONS**

Many individuals feel that maximizing efforts to collect additional revenue from third-party payors is one of the keys to the continued success of military medicine. Investing in this concept is critical. The steps Wilford Hall Medical Center has made in obtaining additional coding support from a private contractor and hiring civil-service employees can certainly be viewed as an investment.

Findings suggest that additional coders are not cost-effective. That is, the cost of a dedicated coding staff does not yield a greater amount of collections for the areas involved. Two points need to be discussed. First, the greatest benefits may be unquantifiable in this case. Providers are now free to concentrate their skills on patient-care, rather than being consumed with additional administrative burdens. Further research could explain what savings were realized clinically from having additional

coding staff available. Perhaps fewer providers were able to see more patients in each ambulatory setting. Or, there may have been fewer clinical errors. Second, the initiative is only one-year old. Over time, the contractor and the MTF may realize efficiencies. Adjustments can be made in staffing, coding processes, billing methods, chart reviews, and technology that could dramatically change collections. Senior health-care executives will need to determine whether the unknown and sometimes unquantifiable benefits exceed the known costs associated with this contract.

The Third Party Collection Program throughout the DoD has made substantial achievements. Wilford Hall Medical Center has made great strides in the past three years with respect to understanding and executing sound business practices. There is an emphasis on educating staff and patients about TPCs. This will provide future rewards.

The following are specific recommendations that may continually enhance collection performance:

1. Close the loop between billing and coding. Provide written feedback to the coders directly from the Third Party Collections Office on an on-going basis. There should be an emphasis on outcomes that is quantitative in nature. Coding practices that are resulting in improved collections should be reinforced and monitored on a periodic basis. Likewise, areas of coding where collection performance is erratic can be isolated and improved upon using continuous quality improvement methods.

2. Continued staff and patient education. Universal identification of beneficiaries with OHI is not likely in the near future. For this reason, the barriers of self-reporting must be attacked through aggressive education efforts.
3. Build in contractual incentives for improving reimbursements. Goals should be measurable with attention to specific metrics that are identified by executive leadership within the facility. Tracking performance will likely produce a sentinel effect on collection performance.
4. Enhance physician involvement. With the implementation of the coding contract, many physicians were free to concentrate more on their clinical skills without the burden of coding every patient visit. But they must not lose sight of the impact of accurate documentation and the potential for positive financial gains for the MTF. Communication between the physician and the coder is a key part of maximizing reimbursements.
5. There are opportunities to start further collection activities on claims that have not been paid. Consistent follow-up communication efforts to insurers will provide information as to what is slowing down the process. Currently, more than \$500,000 of unpaid claims are greater than 120 days old. Legal avenues for collections need to be maximized.

Determining the cost-effectiveness of outsourcing efforts needs to be ongoing for all MTFs, whether it is before a contract is awarded or three years after implementation. This study may allow for appropriate conclusions to be made as to the potential for adding additional coding staff in the inpatient arena. Results need to be fitted into the

framework of other on-going analyses and trends within the facility to truly be an informative document.

## REFERENCES

- American Academy of Professional Coders (AAPC), [www.e-medbill.com/cpc-certification.htm](http://www.e-medbill.com/cpc-certification.htm). Mar 2000.
- American Academy of Professional Coders (AAPC), [www.aapcnatl.org](http://www.aapcnatl.org). Mar 2000.
- American Health Information Management Association (AHIMA), [www.ahima.org](http://www.ahima.org). Mar 2000.
- Beinborn, J., 1999, Automated Coding: the Next Step?. Journal of AHIMA 70:38-43.
- CHCS II Home Page, KG ADS: An Introduction And Migration Strategy, <http://cba.ha.osd.mil>, May 2000.
- Crane, M., 1998, Charge What You Will...Reimbursements are Shrinking. Medical Economics 75:128-138.
- Cooper, D., Schindler, P., 1998, Business Research Methods, 6<sup>th</sup> Edition. Boston: McGraw-Hill.
- Dawkins, B., Composite Health Care System II. <http://cba.ha.osd.mil..jects/other/>. Mar 2000.
- Department of Defense. Third Party Collection Program. DODINST 6010.15-M, 1997.
- Department of Health and Human Services, Program Memorandum Intermediaries, Change Request 1012, HCFA Publication 60A, March 2000.
- Duncan, D., Servais, C., 1996, Preparing for the New Outpatient Reimbursement System. Healthcare Financial Management 50:42-9
- Freedberg, S., 1998, Reiventing VA Hospitals. National Journal – [www.govexec.com](http://www.govexec.com)
- Griffin, M., 1993, A Study to Determine the Effects of Interventions Upon the Collection of Outpatient Claims. Waco, TX: U.S. Army – Baylor Graduate Management Project.
- Heckler, C., 1996, Improving Reimbursement with Coding. Healthcare Informatics 13:104-6.

Horne, K., 1994, A Study To Design An Optimal Outpatient Third Party Collection Program At Eisenhower Army Medical Center. Waco, TX: U.S. Army – Baylor Graduate Management Project.

Kovner, A., Jonas, S., 1999, Health Care Delivery in the United States. New York: Springer Publishing Company.

Lippman, M., McCoy, J., 1998. The Money Trap. Four Pitfalls of Contract Management System Integration and How to Avoid Them. Healthcare Informatics 15:109-14.

Medical Association of Billers, www.e-medbill.com. Mar 2000.

Montplaisir, D., 1999, Clinical Visit Coder Project, Wilford Hall Medical Center, TX: Staff Report.

Moore, L., 1996, Identification of Variables Predictive of Payment in Full of Third-Party Outpatient Claims. Waco, TX: U.S. Army – Baylor Graduate Management Project.

Pallarito, K., 1999, Falling Behind in the Payment Game. Modern Healthcare 29:104-8.

Prince, T., 1992, Collection Performance: An Empirical Analysis of Not-For-Profit Community Hospitals. Hospital & Health Services Administration 37:181-196.

Ribka, J., 1997, Cut Your Losses: Choose the Right Claims Processing System. Healthcare Informatics 14:115-8.

Saywell, R., Nyhuis, A., Cordell, W., Crockett, C., Woods, J., and Rodman, G., 1992, An Analysis of Reimbursement for Outpatient Medical Care in an Urban Hospital Emergency Department. American Journal of Emergency Medicine 10:8-13.

Schmitz, R., 1999, Building Global Billing and Payment Systems. Managed Care Quarterly 7:16-28.

Schneider, P., 1997, Contract Management, Providers Take Control. Healthcare Informatics 14:101-4.

Scichilone, R., 1999, Three Perspectives on Coding. Journal of AHIMA 70:44-9.

Sultz, H., Young, K., Health Care USA. Aspen Publishers, Inc. Gaithersburg, Maryland: 1997.

Sunseri, R., 1998, Outsourcing Loses its 'MO'. Our Annual Survey Points to a Plateau for Most Contract Services. Hospitals & Health Networks 72:36-40.

Stavely, S., 1999, Coders and Physician Liaisons: A Winning Combination. Journal of AHIMA 70:47-49.

Toth, A., 1998, Decoding the Codes, A Comprehensive Guide to ICD, CPT and HCPCS Coding Systems. New York: McGraw-Hill.

Table 1

1998 Certified Coders' Salaries by Region (AAPC, 2000)

| <u>Region</u> | <u>Salary</u> |
|---------------|---------------|
| Northeast     | \$48,646      |
| North Central | \$35,753      |
| Gulf          | \$45,500      |
| Mountain      | \$34,750      |
| Great Lakes   | \$37,846      |
| Central       | \$37,567      |
| Southeast     | \$40,895      |
| West          | \$44,828      |

Table 2

Comparison of Metrics, Fiscal Years 1998 & 1999 (Contract Areas Only)

| <u>Metric</u>             | <u>FY 98 (Before)</u> | <u>FY 99 (After)</u> |
|---------------------------|-----------------------|----------------------|
| % Collection Rate         | 37%                   | 36%                  |
| Average Collection Amount | \$106                 | \$126*               |
| ADS Completion Rate       | 88%                   | 92%                  |
| Bill Submission Rate      | 5.7%                  | 4.6%                 |
| Total Collections         | \$1,074,566           | \$1,067,236          |

\*This increase is affected by a 30% increase in Amt. Billed for these areas.

Table 3

Comparison of Metrics, Fiscal Years 1998 & 1999 (Non-Contract Areas Only)

| <u>Metric</u>             | <u>FY 98</u> | <u>FY 99</u> |
|---------------------------|--------------|--------------|
| % Collection Rate         | 35%          | 36%          |
| Average Collection Amount | \$74         | \$81*        |
| ADS Completion Rate       | 84%          | 97%          |
| Bill Submission Rate      | 4.3%         | 3.0%         |
| Total Collections         | \$771,882    | \$659,061    |

\*This increase is affected by a 7% increase in Amt. Billed for these areas.

Metric Defined (What it means)

% Collection Rate = Amt Collected / Amt Billed (Coder maximizing reimbursements)

Avg Collection Amt = Amt Collected / No of Collections (Coder maximizing reimb)

ADS Completion Rate = ADS Completions / MEPRS Visits (Coding all visits)

Bill Submission Rate = # of Claims / # of ADS Completions (3<sup>rd</sup> Party Identification)

Table 4

% of Dollars in Days in Accounts Receivables (Claims Pending), Jan 1999 – March 2000

|               | <u>Professional Coding</u> | <u>All Other Areas</u> |
|---------------|----------------------------|------------------------|
| < 31 Days     | 12.2                       | 20.5 (13.2)*           |
| 31 – 60 Days  | 7.8                        | 10.9 (7.5)*            |
| 61 – 90 Days  | 6.3                        | 7.9 (7.0)*             |
| 91 – 120 Days | 6.6                        | 7.9 (5.3)*             |
| > 120 Days    | 67.1                       | 52.8 (67.0)*           |

\*Excludes Pharmacy, Radiology, & Laboratory Claims

Table 5

Fiscal Year 1998 & 1999 DoD Outpatient Reimbursement Rates

| Medical Care      | MEPRS | FY98   | FY99   | '+ / - % |
|-------------------|-------|--------|--------|----------|
| Cardiology        | BAC   | 160    | 149    | -7%      |
| Pulmonary Disease | BAN   | 278    | 225    | -19%     |
| Internal Medicine | BAA   | 208    | 198    | -5%      |
| Endocrinology     | BAF   | 168    | 173    | 3%       |
| Gastroenterology  | BAG   | 216    | 219    | 1%       |
| Nephrology        | BAJ   | 338    | 261    | -23%     |
| Rheumatology      | BAO   | 166    | 160    | -4%      |
| Primary Care      | BHA   | 126    | 143    | 13%      |
| General Surgery   | BBA   | 235    | 314    | 34%      |
| Ophthalmology     | BBD   | 166    | 194    | 17%      |
| Otolaryngology    | BBF   | 173    | 237    | 37%      |
| Plastic Surgery   | BBG   | 196    | 247    | 26%      |
| Urology           | BBI   | 199    | 239    | 20%      |
| Pediatric Surgery | BBJ   | 175    | 174    | -1%      |
| Vascular          | BBK   | 165.05 | 165.05 | 0%       |
| APV               |       | 737    | 1765   | 139%     |
| Emergency Medical | BIA   | 211    | 218    | 3%       |
| Total             |       |        |        | 30%      |

Table 6

Outpatient Coding Contract Costs for Fiscal Year 1999

| <u>Amount</u>         | <u>Employee</u> | <u>Hourly Rate</u> | <u>Estimated Annual Cost</u> | <u>Total</u>     |
|-----------------------|-----------------|--------------------|------------------------------|------------------|
| 6                     | Coder           | \$21.74            | \$41,740                     | \$260,000        |
| 4                     | Clerk           | \$14.97            | \$28,742                     | \$115,000        |
| 4                     | GS-06 Coder     | \$13.19            | \$29,996                     | <u>\$120,000</u> |
| Total Contract Costs: |                 |                    |                              | \$495,000        |

Table 7

Distribution of Closed Claims, Fiscal Years 1998 & 1999

| <u>Reason</u>             | <u>FY 99 Total</u> | <u>FY 98 Total</u> |
|---------------------------|--------------------|--------------------|
| Amount of Coverage        | \$204,347          | \$234,946          |
| Patient Not Covered       | \$501,106          | \$451,075          |
| Champus / Income Supp     | \$10,707           | \$23,821           |
| Medicare Supplement Plans | \$745,626          | \$369,624          |
| HMOs                      | \$37,779           | \$70,155           |
| MTF Non-Compliance        | \$0                | \$1,233            |
| Co-Pays / Deductibles     | \$660,780          | \$715,615          |
| Other                     | \$681,867          | \$1,262,532        |