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A Case Study of the Ambulatory Procedure Visit Process at Walter Reed Army Medical Center:
Methods for Improving Workload Accountability and Third Party Collections

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Abstract

This study analyzed how the ambulatory procedure visit process has functioned at Walter Reed in terms of data collection and workload accountability. The researcher conducted interviews with all key players in the process, collected data from the Composite Health Care System and patient records, and observed the users in the day-to-day operations of the ambulatory procedure visit process. The author determined no written process was in place and appointments were frequently not entered into the Composite Health Care System. Great differences existed between the process for ambulatory procedure visits on the wards and in the clinics. The failure to record ambulatory procedure visits in the Composite Health Care System resulted in decreased workload reporting and missed billing opportunities. A conceptual model of the recommended ambulatory procedure process was developed. With the increased emphasis on actual workload in administrative decisions and budget requirements, accurate workload tracking is of vital importance.
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A Case Study of the Ambulatory Procedure Visit Process at Walter Reed Army Medical Center:

Methods for Improving Workload Accountability and Third Party Collections

Introduction

Walter Reed Army Medical Center, known as Walter Reed, is a 261-bed tertiary care facility that utilizes 24 different specialty clinics to provide outpatient procedures to its beneficiary population. Some clinics send patients to ambulatory procedure units for the necessary preoperative and post-operative care. These units might be thought of as clinics within clinics. They are especially equipped, staffed, and designated to provide the increased level of care associated with ambulatory procedure visits. These ambulatory procedures performed in specialty clinics have the potential to generate a significant amount of money through third party collections, although historically the data collection for these procedures has been poor and the resulting collections presumably lower than they could be. According to Wagner (2004), third party collections for ambulatory procedure visits were only $132,634 for FY 2004, when 10,726 such procedures were performed.

1 Some clinics send patients to ambulatory procedure units for the necessary preoperative and post-operative care. These units might be thought of as clinics within clinics. They are especially equipped, staffed, and designated to provide the increased level of care associated with ambulatory procedure visits (DOD, 1986).

2 According to the third party collections office supervisor, about 14% of the beneficiaries that receive care at Walter Reed carry other health insurance that the military can bill as first line payers. Monies collected through this program, i.e., third party collections, provide another revenue stream in addition to the traditional budget.

3 These are visits that require a higher degree of care, than a regular clinic visit, before the procedure and after, but which do not require a stay in the hospital longer than 23 hours and 59 minutes (DOD, 1986).

4 The data concerning these procedures and visits were obtained from the Military Health System Management and Analysis Reporting Tool (M2). The M2 pulls data from the military health system data repository. The military health system data repository holds data pulled from (a) the Composite Health Care System (CHCS), a computerized order-entry system with capabilities that include patient registration, admission and dispositions, appointment scheduling, and ad hoc reporting (Eilenfield, 2004) and (b) the Medical Expense and Performance Reporting System (MEPRS)/Expense Accounting System version four (EAS IV) Repository, a system for healthcare cost identification and management (DOD, 2000). M2 is utilized by Medical Command to make administrative decisions. Data are entered into MEPRS, which provides uniform performance indicators; expense data classified by work center; human resources utilization by work center; and a standard methodology for cost assignment, through CHCS. Once the data are in CHCS, the information is transferred to the EAS IV Repository once a month. Accurate data collection from the EAS IV Repository is critical to enable the military health system administrators to make informed decisions. It is used to obtain information to enable system analysts to evaluate workload and costs associated with care provided at all medical treatment facilities in the Army. These data, if correct, can validate expansion projects, equipment needs, and even staffing requirements. The data entered into MEPRS are also utilized to set healthcare reimbursement rates and third party collection pricing activities (DOD, 2000).
Conditions that Prompted the Study

In 1996, the Department of Defense (DOD) directed the military health system to implement an ambulatory procedure visit process to eliminate the need to admit patients for certain procedures and to allow better comparability of cost data between military and civilian sources of care (DOD, 1986). In 2002, personnel of Walter Reed’s Patient Administration Directorate (PAD) analyzed the ambulatory procedure visit process. This analysis indicated that there was no standard process for managing patient records, resulting in missed billing opportunities and inconsistent patient management practices (Walter Reed Army Medical Center Patient Administration Directorate, 2002). Additionally, incorrect MEPRS codes were assigned for many of the ambulatory procedures. At the end of the analysis, the process depicted in Figure 1 was developed for managing patient records for all patients entering the healthcare system for an ambulatory procedure visit through the pre-admission and short stay units, generally referred to as wards 66/67 because of the combined administrative functions of the two areas.

Wards 66/67 make up one of the ambulatory procedure units at Walter Reed. Patients scheduled for ambulatory procedures from all clinics except for gastroenterology, cardiology, and dermatology report to ward 67 for the pre-operative interviews and laboratory work as much as to 30 days prior to the procedure. On the morning of the procedure, patients report to ward 66 for in-processing and frequently return for the second stage of recovery and discharge.

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5 This is ward 67 and is the location where the preoperative assessments and interviews for patients undergoing ambulatory procedures are performed.

6 This is ward 66 and is the location where the post-operative care for patients undergoing ambulatory procedures takes place.
Even though a standard operating procedure (SOP) was developed and written in 2002, it was not fully implemented, resulting in incomplete ambulatory procedure records (Wagner, 2004). From September to October 2004, 222 hard copy ambulatory procedure records were collected in the chart review and analysis section, but the appointments associated with these records were not entered into CHCS and the ambulatory data module as required.

At Walter Reed the gastroenterology, dermatology, and cardiology clinics function as ambulatory procedure units, similar to wards 66/67; therefore, patients there do not enter or exit through wards 66/67. Personnel of these clinics code their own charts for all ambulatory procedure visits. All other clinics have the ambulatory procedures coded by the professional coders located in the coding section of PAD. It is important to distinguish between the clinics

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7 This system automates the collection of ambulatory data to include the diagnosis and procedural codes, evaluation and maintenance codes, and the disposition of the patients (Lichtenstein, 2002).
that perform their own coding and those that utilize the professional coding services, because the actual process may be different from the administratively required process for handling the ambulatory procedure records.

Statement of Problem

Not all necessary data concerning ambulatory procedure visits are recorded at Walter Reed. The failure to appropriately document these procedures limits continuity of care to beneficiaries. Additionally, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) standards state that complete and accurate medical records will be maintained for every patient treated and will thoroughly document operative procedures (Joint Commission on Accreditation of Healthcare Organizations, 2004); this does not always occur. Moreover, administrative decisions involving budget and/or manpower may be flawed due to the incomplete data in CHCS. These flawed data can influence decisions at all levels, from Walter Reed to Medical Command.

The process for ambulatory procedure visits at Walter Reed is very complex. Ambulatory procedures are performed by 24 clinics, and many different processes have been created. As stated earlier some of these clinics do not utilize wards 66/67 to perform pre-operative screening and/or post-operative care. The clinics that do utilize ward 67 for pre-operative care have varying methods for entering ambulatory procedure appointments in CHCS. In addition to the different entry points for patients receiving ambulatory procedures, there are different processes in place for documenting clinical treatment and for sending that documentation to the medical records room. Some clinic personnel document care with pen and paper, while others document it by entering data into the Clinical Information System (CIS). According to the medical records

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8 This is the system in which clinical notes, e.g., nursing notes, physician orders, physician notes, and laboratory results, are entered.
supervisor, sometimes operative reports are found in CIS when no appointment was created in CHCS. These CIS records can be printed to create a medical record for those patients that have not been entered into CHCS; however, this does not account for the medical information potentially lost by clinics when appointments are not entered into CHCS and CIS is not utilized. Since CIS and CHCS do not have a bi-directional interface, patient appointment data do not transfer between the two systems, and CIS does not capture all workload.

The question that this study will address is: When patients come to Walter Reed for ambulatory procedure visits, how can Walter Reed personnel more accurately capture those visits in CHCS? If Walter Reed personnel can improve accountability with regard to ambulatory procedure visits by entering data into CHCS correctly and also receive all ambulatory procedure records in PAD, more correct billing data should be available, and third party funds should increase.

**Literature Review**

Over the past 3 decades, managed care, a system of healthcare delivery that tries to manage cost, quality, and access, has grown to become a prominent player (Gorin, 2003 and Kongstvedt, 2001). Health maintenance organizations (HMOs), seen as early as 1910, were the first major attempt at managing cost (Sullivan, 2002-2003; Kongstvedt). Before the 1970s, there was great opposition to HMOs from local medical societies and from consumers of healthcare (Kongstvedt). However, in 1973, Congress passed, and President Nixon signed into law, the HMO Act, 42 United States Code (U.S.C.) 300e, et seq. (Health Administration Responsibility Project, n.d.). It required large firms to offer HMO plans to their employees, and it overrode state anti-HMO laws (Federal Trade Commission & Department of Justice, 2004). Nonetheless, the United States continued to spend increasing amounts of its gross domestic product on healthcare.
From 1980 to 2004, the percentage increased from less than 9% to more than 13% (Weintraub & Shine, 2004).

Because of these continually increasing costs, the 1990s brought major changes in the delivery of healthcare (Shi & Singh, 2001). One of the most significant changes in healthcare delivery was the shift from inpatient to outpatient, or ambulatory, care (Shi & Singh). Reimbursement standards set by managed care organizations had a significant effect on hospital operations and the cost of providing the services.

As managed care became the standard, the number of ambulatory procedures, also known as outpatient procedures, increased; and the cost of providing the services also increased. From 1983 to 1989, hospital-based ambulatory procedures increased 108% (Horne, 1994). Key players from insurance companies and other managed care organizations thought outpatient surgery cost less than inpatient surgery, and they began to encourage patients to seek outpatient, rather than inpatient, surgical procedures (Grant, 1992). However, in 1988, the cost of healthcare for employers increased 20% to 30% with most of this increase coming from outpatient care, which rose about 25% (Paris, 1989). According to Kongstvedt (2001), insurance companies began to place controls, such as the requirement for pre-certification, on ambulatory procedures to keep the charges from exceeding the cost of an inpatient day. Controls were necessary because technological advances in healthcare that enabled physicians to perform procedures on an outpatient instead of an inpatient basis sometimes made the ambulatory procedures more expensive than the traditional inpatient procedures (Data Trends, 2004).

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9 Data from 2004 are not available, but according to the Department of Health and Human Services, in 2002, the percentage of the gross domestic product spent on healthcare represented about $5,440 per person in the United States (Pear, 2004).
Just as the concept of managed care was entering healthcare, Medicare rules were also changing. In 1983, Medicare implemented a prospective payment system for inpatient services; however, outpatient reimbursement standards remained unchanged (Shi & Singh, 2001). Since outpatient services were still being billed on a retrospective payment basis, hospitals had an incentive to perform more ambulatory procedures. In the 1980s, ambulatory procedures accounted for about 50% - 60% of all hospital expenditures (Pauly & Erder, 1993); and third party collections for outpatient services gained emphasis. In 1985, when the projected cost of ambulatory surgery reached approximately $1.8 billion for the entire Medicare population, Congress recognized the need for a prospective payment system for Medicare reimbursements for ambulatory services (Lion, Vertees, Malbon, Collard, & Mowschenson, 1990). The Omnibus Budget Reconciliation Act of 1986, Public Law 99-272, required the Health Care Financing Administration to develop a prospective payment system for ambulatory surgery, similar to the system for inpatient reimbursements (Lion et al, 1990).

The cost for outpatient care for the Medicare population is important to the military health system because the Tricare Management Activity uses dollar conversion factors similar to those used by Medicare, resulting in similar costs for services (TMA, 2002). The appropriate conversion factor is determined by the zip code of the provider (TMA, 2002) and is multiplied by the total relative value units (RVU)\textsuperscript{10} for the physician's work, practice costs, and malpractice insurance to determine the authorized payment for a current procedure terminology (CPT) code.\textsuperscript{11} The codes are updated annually; therefore, those individuals identifying the CPT codes

\textsuperscript{10} An RVU is a unit of measure that indicates the time, skill, and training required to perform specific procedures (Shi & Singh, 2001)

\textsuperscript{11} These are codes utilized by medical facilities to bill third party payers for medical expenses related to the care delivered (American Medical Association, 2005).
for the procedures are required to review the updates regularly. If the incorrect code is utilized it could result in nonpayment for services rendered.

The military health system has gone through changes similar to those of the civilian sector and Medicare reimbursement standards. In 1966, Congress passed the Military Medical Benefits Amendments, Public Law 89-614, which created the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), the first military healthcare benefit to charge fees for civilian services (The Retired Enlisted Association [TREA], n.d.). For almost 3 decades, it was utilized by the military health system to provide care to active duty family members, retired military personnel, and family members of retired or deceased military personnel, when space was not available in the military treatment facility (TMA, 2003a; TREA, n.d.). In 1988, Congress approved a demonstration project for CHAMPUS, known as the CHAMPUS Reform Initiative, to improve access to quality care while controlling costs and giving beneficiaries options for accessing healthcare (Powers, n.d.; TMA, 2003a). This initiative, along with other demonstration projects intended to give military medical facility commanders more control, led to the creation of Gateway to Care. Ultimately, Gateway to Care led to the current system of Tricare (Barrett, 1996).

Just as the system of healthcare was changing within the civilian community, military treatment facilities were given incentives to model themselves after civilian facilities. One of these incentives came in 1986, when Congress passed a Consolidated Omnibus Reconciliation Act, Public Law 99-272. Section 2001 (a)(1), of that law allowed the DOD to collect reasonable charges from third party payers for inpatient care provided in a military treatment facility. This provision was later codified as 10 U.S.C. 1095 (Collections from third party payers of reasonable costs of healthcare services, 1994). These monies collected from third party payers were returned
to the General Treasury. However, Congress believed that the third party collections for the DOD could be improved. In 1989, Title 10 U.S.C. 1095 was amended, Public Law 101-189, section 727 (Horne, 1994), to authorize individual medical treatment facilities to retain the monies collected from third party payers and to utilize the funds for the facilities (DOD, 1997).

Even with the new incentive to collect funds, Congress remained disappointed with the low level of collections for the DOD healthcare facilities (Collections from third party payers of reasonable costs of healthcare services, 1994). In 1990, Congress again amended 10 U.S.C. 1095 by Public Law 101-511, section 713, expanding the scope of the third party collections program to include outpatient services (Horne, 1994). Military treatment facilities could now collect from both inpatient and outpatient services (DOD, 1986).

Outpatient reimbursement was determined by a single rate per visit to a specialty provider. This per visit rate\textsuperscript{12} was representative of the average cost for most outpatient procedures performed in outpatient specialty clinics of the uniformed services (Collections from third party payers of reasonable costs of healthcare services, 1994). It included all ancillary services and treatments regardless of the intensity of the care required. However, ambulatory procedure visits were reimbursed differently: An exception to the single rate per visit rule allowed for separate charges based on the cost for pre-procedure, procedure, and post-procedure care required. The DOD was required to publish ambulatory procedure visit reimbursement rates on a yearly basis (Collections from third party payers of reasonable costs of healthcare services, final rule, 2000).

\footnote{12} \textit{"The per visit charge shall be equal to the outpatient full reimbursement rate for that clinical specialty or subspecialty and includes all routine ancillary services"} (Collections from third party payers of reasonable costs of healthcare services, final rule, 2000).
In 2002, the DOD once again changed the way that outpatient clinic visits and ambulatory procedure visits were to be billed. In October of that year, the DOD transitioned to an itemized outpatient billing process (TMA, 2003b). This change from a single rate per visit to itemized billing allowed the DOD to bill for each outpatient service or ambulatory procedure separately, to include, ancillary services such as pharmacy, radiology, and laboratory (TMA, 2003b). This change created multiple bills for a single visit, compared to a single bill that covered all ancillary services.

Even though many changes had been implemented to improve third party collections within the military health system, in February 2004, the Government Accountability Office published a study that illustrated the continued need to improve collections to aid in decreasing the DOD’s healthcare budget. When it evaluated third party collections, personnel identified problems in the billing process that had significant effects on the number of claims being reimbursed. It identified five common problems: (a) failure to collect and maintain insurance information, (b) missing or incomplete medical records and documentation, (c) incomplete or inaccurate coding, (d) not identifying billable care, and (e) not following up on denied claims. The Government Accountability Office (2004) estimated that the DOD could collect an additional $45,000,000 each year from third party payers. Even though all five problem areas identified are important, this paper will focus on the documentation of ambulatory procedure visits, because if the required documentation (to include all data entry into the electronic system) is incomplete no third party bills can be generated.

Purpose

This study evaluated how patient records flow through the ambulatory procedure process and whether the ambulatory procedures were entered into CHCS and the ambulatory data
module. This documentation is necessary to allow for coding of procedures. The objective of this study was to increase workload accountability related to ambulatory procedure visits and to potentially increase third party collections. The units of analysis for this study were the gastroenterology, dermatology, and cardiology clinics, and wards 66/67. These three clinics were identified as units of study for ambulatory procedures performed at Walter Reed because, ambulatory procedures are performed there, but patients are not processed through wards 66/67 for pre-operative and post-operative care. Most of the clinics where ambulatory procedures are performed use wards 66/67.

Methods and Procedures

Data Sources

This study was a qualitative case study; some descriptive statistics were used to show the frequency of incomplete ambulatory procedure records and the average number of ambulatory procedures performed at Walter Reed for FY 2004. The intent of the study was to identify whether the documented process for ambulatory procedures, as illustrated in Figure 1, had been implemented effectively to capture workload and billing information. All medical charts that arrived at the chart review and analysis section during a 20-day period were reviewed by the section supervisors. The information collected during the chart review included whether the appointment was entered into CHCS and whether it was entered under the correct MEPRS code.

In addition to the patient appointments entered into CHCS, data were collected on the number of walk-in procedures\(^{13}\) performed by personnel in the clinics. Data were also collected to determine the amount of revenue lost due to the inability to capture all ambulatory procedures within CHCS. These data were pulled from M2 and consisted of the total number of ambulatory procedures performed.

\(^{13}\) The term “walk-in” refers to procedures entered into CHCS on the day of the procedure when no appointment had been created previously.
Ambulatory Procedure Visit Process

procedures performed, the total number of RVUs, and the prospective payment system market value\textsuperscript{14} for Walter Reed. These values were utilized to obtain the average number of RVUs for an ambulatory procedure visit and the reimbursable cost per RVU for FY 04. The RVUs were then utilized to determine the cost of the procedure and workload based on intensity of care.

Interviews were conducted with key personnel in a number of different work areas in order to collect the required qualitative data. The work areas chosen for study included PAD, consisting of chart review and analysis, coding, and data quality; three different clinics; and wards 66/67. The clinics included in the study were gastroenterology, dermatology, and cardiology. Personnel in each area were interviewed to determine (a) individual knowledge of the process and its strengths and weaknesses and (b) what steps of the established process were being followed. The questions that were asked were:

1. How are appointments made for patients for ambulatory procedure visits?
2. How are walk-in ambulatory procedure visits documented?
3. What are some of the common obstacles you encounter that prohibit you from performing your duties related to ambulatory procedure visits?
4. Do you have a formal SOP in place for ambulatory procedure visits?
5. What training do your front desk receptionists receive related to this process? Do you have a formal SOP in place for ambulatory procedure visits?
6. Who is responsible for checking that all documentation is entered into CHCS?
7. Who codes for the ambulatory procedure visits?

In addition to the interviews, day-to-day operations of the personnel in chart review and analysis; the gastroenterology, dermatology, and cardiology clinics; and wards 66/67 were

\textsuperscript{14} The prospective payment system market value is the predetermined rate, or conversion factor, that will be paid for a service (American Medical Association, 2004 and Shi & Singh, 2001).
observed. Approximately 2 days were spent in each area in order to evaluate the entire
ambulatory procedure process. The researcher followed the patient record from the start of the
process at check-in, until the chart was returned to the medical records room, paying particular
attention to whether patient data were entered into CHCS and the ambulatory data module. Any
required step in the process not performed was noted. The researcher also attended CHCS
training to evaluate what the distance-learning center was teaching the medical records
technicians\textsuperscript{15}.

Validity

Robert Yin’s *Case Study Research: Design and Methods* (2003) was chosen as the
primary reference to aid in the case study design. To address the issue of construct validity,
principles considered by Yin 2003 were utilized. Data were collected from multiple sources:
minutes of meetings of the data quality committee, DOD regulations, TMA published guidance,
any available SOPs, data quality reports obtained from CHCS, observations, and interviews.
Lastly, key participants were asked to review the draft of the study.

Reliability

Reliability was addressed by comparing the results of this case study to those of the study
conducted in 2002 by PAD. The results were similar. The hypothesis tested during this study was
that the process for ambulatory procedure visits had not been fully implemented which would
result in incomplete records, the inability to accurately account for all ambulatory procedures
performed, and revenue lost to the third party collections program.

\textsuperscript{15} The medical records technicians are the front line staff who greet the patients and enter data into CHCS.
Ethical Issues

All patient data collected during chart reviews were collected by personnel from PAD, who removed patient identifiers. No human subject research was involved.

Limitations

As this study was conducted primarily utilizing qualitative research methods, some limitations must be addressed. The data collection for this study was dependent upon the cooperation of those individuals involved in the process on a daily basis. The ability to collect accurate data was limited by the recall bias of the personnel being interviewed. The questions selected for the interviews, page 12, supra, were open questions to allow the individuals being interviewed to give more comprehensive answers compared to yes/no questions. The questions were related primarily to how the process works, rather than why the process was not being followed. This line of questioning assisted in preventing the interviewees from becoming defensive. The meeting notes were analyzed with the knowledge that the information in the documents could be biased by the researcher’s interpretation. Collection of data from many different sources, page 13, supra, assisted in insuring that the results were valid.

Results

Major Finding

The most significant finding of this research study was that no hospital-wide SOP existed at Walter Reed. Other studies performed by PAD indicated an SOP had been established; however, during the research for this study, none could be located. While multiple attempts to write a SOP for the hospital were identified, the end result was apparently a process focused only on wards 66/67. A comprehensive process, beginning with the physician’s determination that an ambulatory procedure was necessary and ending once the ambulatory procedure record was
returned to the medical records room for filing, was not written. Each section had unique
processes that were not coordinated.

Terminology

When this research study was started it became evident that terminology was a point of
confusion in regard to ambulatory procedure visits. Frequently personnel used the terms
“ambulatory procedure visit” and “ambulatory procedure unit” interchangeably. However, the
terms are distinctly different; their misuse of the terms created confusion within PAD and the
clinical areas.

When a list of ambulatory procedure visits, was requested it was not provided. What was
provided was a list of MEPRS codes,\textsuperscript{16} which is different from both ambulatory procedure visits
and ambulatory procedure units. Interviews conducted with the MEPRS personnel in the
directorate for resource management revealed that only the dermatology, cardiology,
gastroenterology clinics, and wards 66/67 were identified as ambulatory procedure units. It
became clear that PAD personnel did not understand the difference between the terms.

In addition to the difficulties with terminology, there was confusion between the clinic
personnel and PAD as to what was considered an ambulatory procedure visit. While the
Department of Defense Instruction (DODI) 6025.8 provides a definition of an ambulatory
procedure visit, which requires immediate pre-operative and post-operative care, it does not
clearly define what constitutes pre-operative care. Since many of the hospital personnel were
utilizing very different definitions for pre-operative care there was a great deal of uncertainty as
to what was classified as an ambulatory procedure visit. A master list of all ambulatory

\textsuperscript{16} Different MEPRS codes are utilized for cost allocation purposes. The “B” MEPRS codes identify what service
performs a procedure so costs can be allocated correctly (interview with resource management MEPRS coordinator).
The “D” MEPRS codes identify the location in which the pre-operative and post-operative care took place. None of
the MEPRS codes identify what ambulatory procedures are performed at Walter Reed.
procedures authorized at an individual medical treatment facility is required under the DODI 6025.8. This list had been created at Walter Reed; however, it appeared to be inaccurate. One example of this inaccuracy was in the dermatology clinic in which the head nurse stated that only five of the procedures performed in dermatology could be categorized as ambulatory procedure visits according to DOD’s definition; yet, the master list had 43 dermatologic ambulatory procedures authorized. This list of approved ambulatory procedures can be seen in Appendix D.

Problems also existed with regard to the process for updating the master list of approved ambulatory procedures. The process that was documented in 2002 for creating a new ambulatory procedure unit and/or updating the existing approved ambulatory procedure lists can be seen in Figure 2. Even though the process was to begin with an ambulatory procedure coordinator, that position did not exist; therefore, the process was started by the data quality supervisor. She stated that a SOP, different from the one illustrated in Figure 2, was utilized to accomplish the annual update every January. This SOP has been included in Appendix A. According to her, the final list of approved ambulatory procedure visits was maintained in the data quality office. Then, the ambulatory data module of CHCS was updated with the new CPT codes and any new procedures were added to the list that the physicians use to code for procedures. When the third party collection program’s, assistant manager was interviewed, she stated that she knew data quality personnel started the process, but did not know who else was involved. In FY 2004, the final list was apparently not returned to the data quality office after being forwarded to the deputy commander for clinical services.

17 The head nurse “direct[s] nursing activities, primarily in hospitals. They plan work schedules and assign duties to nurses and aides, provide or arrange for training, and visit patients to observe nurses and to ensure that the patients receive proper care. They also may ensure that records are maintained and equipment and supplies are ordered.” (Bureau of Labor Statistics, 2004-2005).
Interviews and Observations

All of the key leaders expressed an interest in improving the ambulatory procedure visit process; however, a general lack of understanding became apparent. In addition to the inability to explain the ambulatory procedure visit process, personnel could not produce SOPs for the various clinics. In some cases, the head nurses and other administrative supervisors stated a SOP; it could not be located. Just as the head nurses and administrative supervisors did not have a good understanding of the entire process for ambulatory procedure visits; neither did the medical records technicians. Although they were responsible for entering patients into CHCS as having kept their appointments when they arrived, they frequently did not know any other part of the process, which was different for each of the areas studied. This illustrates the need for a hospital-wide SOP for the ambulatory procedure visit process.
Clinics

The gastroenterology clinic performed about one-third of all the ambulatory procedures at Walter Reed. Data from CHCS for FY 2004 showed that this clinic performed 3,416 ambulatory procedures, which is about 29% of all ambulatory procedures performed at Walter Reed. The interviews and observations illustrated an effective process to account for most patients in this clinic. A flowchart of the process is illustrated in Figure 3. All gastroenterology patients that had ambulatory procedures entered the clinic at the front desk. Upon their arrival, the medical records technician verified an appointment in CHCS and marked the patient as having kept the appointment. If the patient did not have an appointment, one was entered on a walk-in basis. According to data from CHCS ambulatory data module, the gastroenterology clinic entered only about 10% of patients as walk-in appointments.

Just as the gastroenterology clinic had an effective process for entering data into CHCS, the process for requesting medical records jackets was also effective. The ambulatory procedure records, known as extended ambulatory records,\(^\text{18}\) were requested from the PAD ambulatory procedure visit cell\(^\text{19}\) located within ward 67. If the appointment was in the system, that record was requested around 1400 hours the day prior to the procedure. For a walk-in patient, the record was requested upon the patient’s arrival. The creation of an extended ambulatory record is required by the Tricare Management Activity. These records are stored in a manner as the inpatient record (Sears, 1999). After the ambulatory procedure was completed all gastroenterology records were collected and stored, along with a list of all ambulatory

\(^{18}\) The extended ambulatory record is a special jacket that is created for ambulatory procedure visits that is stored and retired in the same way as inpatient records (Sears, 1999).

\(^{19}\) This is the section of PAD that is responsible for creating medical record jackets for all ambulatory procedure patients.
procedures performed that day, in the head nurse’s office. The seventh floor chart room personnel then collected the records every morning.

![Diagram of Ambulatory Procedure Visit Process](image)

**Figure 3.** Gastroenterology ambulatory procedure visit process based on observations of researcher.

The cardiology clinic also maintained accurate accountability of most ambulatory procedure visits; however, the process for requesting the proper record jacket for walk-in ambulatory procedures was demonstrated to be ineffective. Only about 7% of ambulatory procedure patients in cardiology were captured as walk-ins and, the clinical documentation was captured in outpatient record jackets instead of the extended ambulatory jackets. The use of the wrong type of record jacket was sometimes noted and corrected once the record was collected and turned over to the chart review and analysis section. However, this, along with having to enter appointments into CHCS, slowed down the process and created a backlog of records in the chart review and analysis section. In addition to the backlog of records, personnel there stated that they were not always sure if a procedure should be an ambulatory procedure or an outpatient
Ambulatory Procedure Visit Process

Frequently, when an individual was unsure of the status of a record, the chart was stacked in a corner for review at a later date. This resulted in many records not being coded within Medical Command’s 15 day requirement (Wagner, 2004).

Whereas the gastroenterology and cardiology clinics had effective processes in place to request most of the extended ambulatory records, the dermatology clinic did not have any system in place. Consequently, personnel there did not comply with the standards for handling and storing ambulatory procedure records. In fact, the level of understanding about the ambulatory procedure visit process was very limited or absent. In this clinic, the head nurse stated that no resources outside the clinic were utilized and all of the documentation for the ambulatory procedure encounters was maintained only in the clinic’s convenience records. According to the director of PAD, the convenience records should only contain copies of the clinical documentation and the extended ambulatory record should hold the originals.

In addition to not requesting the extended ambulatory record, personnel of the dermatology clinic used a process of entering appointments for ambulatory procedure visits which was very different from that of the other two clinics studied. During the interviews for this section, the medical records technicians indicated that a physician booked all of the procedures on his or her calendar and personnel at the front desk were not aware of the appointment until the patient walked in for the procedure. Once the patient checked in for the appointment, the medical records technician entered the patient as a walk-in for an ambulatory procedure visit. According to data from CHCS for FY 2004, an average of 68% of patients that entered the dermatology clinic for an ambulatory procedure visit were entered on a walk-in basis. However, in the first 4 months of FY 2005, all ambulatory procedure visits were entered on a walk-in basis.

20 Convenience records are records stored in the individual clinics to enable the providers to have quick access to clinical documentation of past procedures performed in the clinic.
As stated previously, in each area the process varied, but, generally, the responsibility for entering the appointment fell on a physician or registered nurse. However, for those patients that entered the system through wards 66/67, the process was not well defined and varied depending upon the point of origin. Some of the clinics utilizing the services of wards 66/67 entered the ambulatory procedure appointment prior to the pre-operative work-up performed on the ward. However, some of the clinics relied on the personnel on wards 66/67 to enter the appointments into CHCS. If the medical records technician on ward 67 entered the ambulatory procedure appointment into CHCS, the process provided many opportunities to miss ambulatory procedure visits. Each day the medical records technician reviewed the next day’s operating room schedule with the chart room nurse on ward 66. Then, the medical records technician would check for appointments for each of the scheduled patients. If an appointment was not booked in CHCS one would be entered. However, for many of the clinics the lack of available appointments in the individual clinic CHCS appointment template required the technician to wait until the day of the procedure to enter the appointment as a walk-in status. The percentage of ambulatory procedure visits entered as walk-ins by the ward 67 medical records technician was about 35%. While this over-all number appeared low compared to that of the dermatology clinic, seven of the clinics utilizing ward 67 entered 100% of their ambulatory procedure visits as walk-ins from October 2004 to January 2005. Table 1 provides an illustration of the percentage of procedures entered on a walk-in basis, broken down by clinic.

21 This is a computer-generated document used to indicate the availability of a provider to perform an ambulatory procedure and to create the clinic patients’ schedules.
Table 1.

<table>
<thead>
<tr>
<th>Clinic</th>
<th>% of Walk-ins FY 04</th>
<th>% of Walk-ins OCT 04 - JAN 05</th>
<th>% Change from FY 04 - JAN 05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Management</td>
<td>25.00%</td>
<td>90.00%</td>
<td>65.00%</td>
</tr>
<tr>
<td>Pulmonary</td>
<td>36.85%</td>
<td>100.00%</td>
<td>63.15%</td>
</tr>
<tr>
<td>Peripheral Vascular</td>
<td>39.13%</td>
<td>100.00%</td>
<td>60.87%</td>
</tr>
<tr>
<td>Gynecology</td>
<td>43.06%</td>
<td>100.00%</td>
<td>56.94%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>44.83%</td>
<td>100.00%</td>
<td>55.17%</td>
</tr>
<tr>
<td>Organ Transplant</td>
<td>50.00%</td>
<td>100.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Plastics</td>
<td>50.45%</td>
<td>100.00%</td>
<td>49.55%</td>
</tr>
<tr>
<td>General Surgery</td>
<td>53.38%</td>
<td>99.58%</td>
<td>46.20%</td>
</tr>
<tr>
<td>Family Planning</td>
<td>55.15%</td>
<td>100.00%</td>
<td>44.85%</td>
</tr>
<tr>
<td>Ortho Hand</td>
<td>6.05%</td>
<td>42.11%</td>
<td>36.06%</td>
</tr>
<tr>
<td>*Dermatology</td>
<td>68.26%</td>
<td>100.00%</td>
<td>31.74%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>35.41%</td>
<td>65.22%</td>
<td>29.81%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>3.12%</td>
<td>29.41%</td>
<td>26.29%</td>
</tr>
<tr>
<td>Neurosurgery</td>
<td>9.25%</td>
<td>32.94%</td>
<td>23.69%</td>
</tr>
<tr>
<td>Urology</td>
<td>12.20%</td>
<td>28.50%</td>
<td>16.30%</td>
</tr>
<tr>
<td>Orthopedics</td>
<td>8.75%</td>
<td>22.81%</td>
<td>14.05%</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>18.03%</td>
<td>24.21%</td>
<td>6.18%</td>
</tr>
<tr>
<td>*Cardiology</td>
<td>3.87%</td>
<td>8.64%</td>
<td>4.78%</td>
</tr>
<tr>
<td>Neurology</td>
<td>14.78%</td>
<td>8.42%</td>
<td>-6.36%</td>
</tr>
<tr>
<td>*Gastroenterology</td>
<td>11.86%</td>
<td>4.67%</td>
<td>-7.19%</td>
</tr>
<tr>
<td>Breast Care Clinic</td>
<td>45.50%</td>
<td>32.17%</td>
<td>-13.33%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>30.23%</strong></td>
<td><strong>61.37%</strong></td>
<td><strong>31.13%</strong></td>
</tr>
</tbody>
</table>

*Note. * Clinic does not utilize ward 66/67. Fiscal year (FY)

Another problem noted on wards 66/67 concerned the verification process intended to ensure that all necessary appointments had been created for all patients entering the system through this entry point for an ambulatory procedure. The only process in place involved reviewing the operating room schedule and matching appointments in CHCS to those patients listed on the schedule. However, only patients going to the central operating room and/or the urology clinic were listed on the operating room schedule. Not all patients entering through wards 66/67 would be listed on this schedule and the medical records technician could not
explain the process used to ensure that the required data for patients not on the operating room schedule were entered into CHCS.\textsuperscript{22}

\textit{Communication}

As stated earlier, the processes being utilized in the different clinics and wards were not in writing. The researcher had a difficult time evaluating (a) what steps were being taken to supervise the users and to communicate discrepancies noted between the process as understood by clinic and ward leadership and (b) the actual practice observed. In addition, to the lack of communication within areas, communication to areas outside the supervisor’s responsibilities did not appear to take place.

Another finding in this study was the lack of coordination between all areas involved in the process prior to implementing the separate policies utilized by the individual areas. An example of this disjointed effort was evident when the process for picking up ambulatory procedure records from the respective clinics or wards was observed. The SOP that addressed when records would be picked-up by seventh floor chart room personnel stated that they would be retrieved twice during the day, but no time was specified. During the observation phase, the primary individual responsible for retrieving records began records retrieval around 0830. This time was set by the seventh floor chart room personnel themselves to give personnel in the individual clinics or wards time in the morning to prepare the necessary documents. However, the individual responsible for preparing the ambulatory procedure records for pick-up on wards 66/67 did not arrive until 1000. Frequently, those records were not ready and could not be picked-up at the scheduled time. This lack of coordination created a backlog of ambulatory procedure records in the chart review and coding sections. The backlog became even larger when

\textsuperscript{22} Some procedures were to be performed in other areas, such as the pain clinic; some of these patient appointments were not entered into CHCS, and that workload was not captured.
the point of contact in the gastroenterology clinic went on leave and no one was identified to prepare the records for pick-up; therefore, records were not collected for a 2-week period. This lack of overlap in duties was evident on ward 66 as well.

In addition to not following the established SOP for the seventh floor chart room, i.e. not retrieving records twice a day, frequently appropriate personnel from the clinics and wards did not provide the end-of-day report\(^{23}\) that was necessary to reconcile all charts retrieved. In the case of wards 66/67, the end-of-day report was frequently turned in 48 hours later. After the seventh floor chart room personnel received the end-of-day report from wards 66/67, the status of the record was checked in CHCS to confirm that the charts had been retrieved; however, no delinquency list\(^{24}\) was created after the verification process was completed.

A process was established by the supervisor of the medical records section, in which the data quality personnel printed the incomplete ambulatory data module reports to show what records had not been coded. The medical records supervisor took this report and identified what records had not been collected by the seventh floor chart room staff. This list of delinquent records was then given to personnel in the chart review and analysis section so that they could retrieve the records from the appropriate clinics. If the records could not be found, new records were created using CIS for the clinical documentation. While this process can capture a large portion of records that have not been collected, it is only useful for those areas that utilized CIS and entered the patients into CHCS.

The ambulatory data module report is also not printed on a regular basis. According to the medical records supervisor the incomplete ambulatory data module report is printed between

\(^ {23}\) This is a CHCS report that shows all of the procedures performed and the disposition of the patient each day within each clinic.

\(^ {24}\) This is a list of records that have not been turned into the medical records section after a procedure has been performed.
once and twice a month. In addition to the irregular frequency of this report, it only addressed 15 out of the 24 services that provide ambulatory procedures.

**Accountability of Records**

Data were collected from December 1, 2004 - December 20, 2004 by the chart review and analysis supervisors to identify the number of procedure performed, for which no data were entered into CHCS. This required manual checks of every ambulatory procedure medical record retrieved by the seventh floor chart room personnel, because the information was not collected in any of the current electronic systems. The data showed that of 740 records, 648 or 84% corresponded to patients with ambulatory procedure appointments noted in CHCS. Of this 84%, only 19% were classified under the correct MEPRS code for ambulatory procedures, see Table 2. If 16% of the ambulatory procedure records were not captured in CHCS, as shown by the data in Table 2, about 2,043 ambulatory procedure visits were not accounted for in FY04.

Data from M2, including the total RVUs and total number of ambulatory procedure visits for FY 04, were utilized to calculate the average RVUs for an ambulatory procedure. The total RVUs were divided by the total ambulatory procedure visits resulting in an average of 5.89 RVUs for one ambulatory procedure visit. This equates to about 12,033 RVUs that were not captured in CHCS.

Perhaps more importantly, ambulatory procedures not entered into CHCS created an opportunity for personnel to lose medical records. However, there was no documentation to show how often records had been misplaced or lost.
Table 2.

<table>
<thead>
<tr>
<th>Date</th>
<th>Total APV Records Received</th>
<th>APV with CHCS Appointment</th>
<th>APV with Correct MEPRS Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Dec-04</td>
<td>122</td>
<td>80 (66%)</td>
<td>80 (66%)</td>
</tr>
<tr>
<td>2-Dec-04</td>
<td>83</td>
<td>62 (75%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>3-Dec-04</td>
<td>36</td>
<td>33 (92%)</td>
<td>4 (11%)</td>
</tr>
<tr>
<td>6-Dec-04</td>
<td>168</td>
<td>123 (73%)</td>
<td>11 (7%)</td>
</tr>
<tr>
<td>7-Dec-04</td>
<td>28</td>
<td>28 (100%)</td>
<td>10 (36%)</td>
</tr>
<tr>
<td>8-Dec-04</td>
<td>59</td>
<td>57 (97%)</td>
<td>31 (53%)</td>
</tr>
<tr>
<td>9-Dec-04</td>
<td>48</td>
<td>45 (94%)</td>
<td>-</td>
</tr>
<tr>
<td>10-Dec-04</td>
<td>38</td>
<td>36 (95%)</td>
<td>-</td>
</tr>
<tr>
<td>13-Dec-04</td>
<td>29</td>
<td>28 (97%)</td>
<td>-</td>
</tr>
<tr>
<td>14-Dec-04</td>
<td>62</td>
<td>60 (97%)</td>
<td>2 (3%)</td>
</tr>
<tr>
<td>15-Dec-04</td>
<td>16</td>
<td>16 (100%)</td>
<td>1 (6%)</td>
</tr>
<tr>
<td>16-Dec-04</td>
<td>45</td>
<td>44 (98%)</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>20-Dec-04</td>
<td>36</td>
<td>36 (100%)</td>
<td>2 (6%)</td>
</tr>
<tr>
<td>Total</td>
<td>770</td>
<td>648 (84%)</td>
<td>145 (19%)</td>
</tr>
</tbody>
</table>

Note. Ambulatory procedure visit (APV), Composite Health Care System (CHCS), Medical Expense and Performance Reporting System (MEPRS).

Workload was also lost due to the inaccurate data entry of 81% of ambulatory procedure visits. Since 81% of the ambulatory procedure visits were incorrectly entered as “routine” outpatient visits, the workload counted was less than it would have been if data had been entered under the correct MEPRS code, i.e., the one for ambulatory procedure visits. According to the resource management MEPRS coordinator, ambulatory procedure visits accrue a higher workload count than outpatient visits because the numbers of RVUs per visit are higher.

In addition to workload not being accurately accounted for in CHCS, potential third party collections were missed due to the lack of data entry. By pulling the prospective payment system market value for ambulatory procedures performed at Walter Reed, a rate per RVU was calculated. The average amount that could be reimbursed under the prospective payment system per RVU for Walter Reed was $71.04 for FY 04. This translates into approximately $119,675 of...
lost revenue for third party collections if, as estimated by third party collections personnel, only 14% of beneficiaries have other health insurance that can be billed.

In addition to utilizing different processes in all of the areas studied, many other inconsistencies were noted. First, there were inconsistencies in the medical records technicians’ training. While the technicians were sent to CHCS classes, the ambulatory procedure module was frequently not taught. They stated during the interviews that most of their training on entering ambulatory procedure visits was on-the-job training by other medical records technicians. The technicians who instructed new employees did not receive any form of train-the-trainer classes and were frequently taught on the job themselves. This created inconsistencies in the training received by medical records technicians and has increased the potential for incorrect training. Moreover, education was not provided to the clinic personnel before upgrades were made to CHCS. For example, in October 2004, the ambulatory procedure module was upgraded; training for entering data into this module was not provided until the upgrade had been released. During the interviewing process, the researcher found this to be common practice for new processes.

Another issue identified was that the clinics were not performing template management to ensure that all scheduled ambulatory procedure visits were entered into CHCS prior to the patient’s arrival for the procedure. The responsibility for appropriate template management remains with the individual clinics not with the staff of wards 66/67. For the dermatology and gastroenterology clinics, appointments are sometimes entered on the providers’ personal outlook calendars and given to a medical records technician on the day of the procedure. This means patients with appointments are being identified as walk-in patients and this increases the

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25 This is the process to ensure that appointment slots are created into CHCS showing when a provider will be available to perform a procedure.
likelihood of patients not being entered into CHCS. Frequently, walk-in patients did not receive the appropriate extended ambulatory record. Instead an outpatient medical jacket was used. This created a backlog in medical records when the charts had to later be converted to the correct extended ambulatory record jacket.

In addition, the process the medical records technicians used to check-in patients through CHCS varied greatly among the clinics and wards 66/67. When interviewed, the head nurse of wards 66/67 discussed the process she believed was in place for receiving patients for ambulatory procedure visits. However, the process she described and the one observed were very different. Similarly, in other areas, personnel believed that a certain process was being followed, but, in fact, it was not being followed or only being followed in part.

For ward 66, patients were checked-in by a registered nurse assigned to the pre-operative area. This nurse used a handwritten admissions sheet created from the operating room schedule; it noted the patient's name, sex, age, MEPRS code, clinic, time in and out; diagnosis and procedure, and other remarks. If patients who were not on the operating room schedule checked-in for a procedure, the nurse added their names to the list with all of the pertinent information. After all of the patients had checked-in for their procedures, this sheet was given to the medical records technician on ward 67 to allow her to verify that all patients who entered for a procedure on wards 66/67 were accounted for in CHCS. This sheet should have been used to complete the end-of-day reports; however, it was not. Further, the medical records technician was not able to explain the process used to ensure the patients added to the list were captured in CHCS.

Discussion

Interviews conducted with the key players for the ambulatory procedure visit process revealed the lack of an overarching hospital policy for Walter Reed. Due to the nature of the
military environment, turnover of personnel is constant at Walter Reed. While many of the physicians remain at the hospital for 10 to 15 years, the administrative and nursing staffs rotate about every 2 to 3 years. The turnover rate for the medical records technicians can be even higher. During the interview process all but one of six medical records technicians had been on the job for less than 6 months. This high degree of personnel turnover makes the requirement for a hospital-wide SOP imperative for continuity of processes and improved effectiveness. It needs to be detailed, establishing responsibility for all players for every step in the process. Without identifying responsibilities for each stage of the process, the roles of each individual will remain unclear and data collection will remain a problem for ambulatory procedure visits. The SOP should be prepared as a formal memorandum and approved by the hospital commander and implemented throughout all areas of the facility.

As stated in the results section of this paper, the current written process only covers wards 66/67 processes. A conceptual model for the ambulatory procedure visit process was developed with the help of the personnel from the data quality section of PAD. It could serve as the basis to develop a SOP. The model is illustrated in Figure 4 (Appendix B).

In addition to the turnover of personnel, the complexity and number of different players involved with the ambulatory procedure visit process creates a requirement for an overarching policy. Such a hospital policy would go a long way to enable personnel in the involved areas to understand their roles and responsibilities and the interconnectivity of the clinics, wards, and PAD. Currently, each area functions with little to no understanding of the entire process. For the process to work effectively, leaders in all of the areas need to improve their understanding and communication about the required documentation and the steps needed to accomplish it.
To improve the level of knowledge of hospital personnel, educational programs need to be implemented as well. All new medical records technicians should be taught the same skills regarding CHCS. This could be accomplished by having them attend formal classes (a) that address what an ambulatory procedure visit is compared to an outpatient clinic visit and (b) that teach the skills necessary to effectively enter data into CHCS for ambulatory procedure visits. In addition to training the medical records technicians, all clinic, ward, and PAD personnel need to understand the terminology related to ambulatory procedure visits and the process of capturing data. Following the hospital commander's approval of a written policy, training to implement the policy will be critical for its success. When training is established, guidelines for training new personnel and updating the current personnel on any changes or areas in need of improvement should be made part of the official hospital SOP.

While an approved hospital-wide process and improved training will enable personnel to improve the ambulatory procedure visit process and the data collection associated with the process, the assignment of an ambulatory procedure visit coordinator is critical. This position was mentioned in past studies of the process (Walter Reed Army Medical Center Patient Administration Directorate, 2002) but never became an official duty position. The individual in this position would be able to monitor the process and promote continuous quality improvement. He or she would need to have a working knowledge of the information systems utilized at Walter Reed, to include CHCS, CIS, and the ambulatory data module. This individual would be the primary point of contact for any questions related to ambulatory procedure visits. This would require a working knowledge of the official SOP for the hospital and communication among all the players involved.
The new leadership of Walter Reed has started to place increased emphasis on quality improvement. Furthermore, JCAHO has increased its emphasis on continuous quality improvement. To meet JCAHO standards, Walter Reed personnel need to improve their data collection methods and document all patient procedures. This is vital to Walter Reed.

During the last week of January 2005, two working groups were established based upon guidance from Walter Reed’s Deputy Commander for Administration. The teams included representatives from all activities involved in the ambulatory procedure process. This is different from all other attempts to create a process, which utilized primarily PAD functional areas. The goal of the two teams is to develop a hospital SOP for the ambulatory procedure process. The teams have taken data and recommendations from this study as a starting point for the SOP. While the process for the clinics that work independently from wards 66/67 will vary from those that utilize the ward, a single SOP should be created including the two variations. In reality, the only variances to the process should occur within the clinics and not with the interaction between sections involved in the process. After the SOP has been written, for implementation to be successful, the teams should be tasked with identifying required, related education. The key to effective implementation will be the education of all involved personnel and communication with the leadership within the clinics and wards. A good understanding of the process is required throughout the facility.

Conclusions and Recommendations

Conclusion

The ambulatory procedure visit process at Walter Reed has the potential to significantly improve with small changes. The primary changes needed include improved education of all personnel involved and assignment of responsibility for all steps in the process. Walter Reed
personnel are usually successful at completing the necessary documentation correctly, if the
encounters are entered into CHCS. The problem identified was that workload was not properly
captured because many ambulatory procedures were performed without an appointment being
entered into CHCS.

Correctly this problem is exceedingly important because in the future Walter Reed will
be budgeted based on what was actually produced, i.e., workload, accurately reporting it is vital.
Further, just as workload accountability has increased in importance, so have third party
collections. With the new generation of Tricare Management Activity contracts, more
responsibility is placed on the facilities to manage their budgets. By increasing what is collected
through third party billings, the facility will be able to invest more in infrastructure and patient
care areas.

Recommendations

The researcher's oral recommendation that these findings be utilized by the hospital
command as a basis for developing a new hospital-wide SOP has been accepted. As stated
previously, working groups have been formed to develop and implement a new, comprehensive
SOP. In addition, the researcher recommends that personnel should use the proposed conceptual
model, included in Appendix B, as a benchmark to ensure that all phases of the process are
addressed in the SOP, to include the assigning of responsibility for entering appointments into
CHCS. Changes to the ambulatory procedure process should be communicated to all concerned
personnel. Education should be required before the changes and after they are implemented.
Lastly, this study should be utilized to evaluate the effectiveness of the SOP once it has been
approved and implemented.

Need for Further Research
While this study focused on the data collection portion of the ambulatory procedure visit process, further studies would be beneficial in evaluating the lost revenue associated with ambulatory procedures. Emphasis on the accuracy of coding and the time it takes to code should also be evaluated. Hiring additional coders might produce revenue well in excess of the added personnel cost.

Finally, an evaluation of the productivity of the personnel involved in the ambulatory procedure visit process might be of value. Indications of poor performance and of the inability to complete duties and fulfill responsibilities were noted. If areas of weak productivity could be identified and quantified in future studies, the efficiency and accuracy of workload accountability for patient encounters might well be improved.
References


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MEMORANDUM THRU:

Mrs. Elmie Nesfield, Third Party Collections Program Manager, Directorate of Patient Administration, Walter Reed, Washington, DC 20307

Mr. Craig M. Mah, Third Party Collections Attorney, Office of the Center for Judge Advocate, Walter Reed, Washington, DC 20307

Ms. Regina Kydd, DRG Coordinator/Coding, Directorate of Patient Administration, Walter Reed, Washington, DC 20307

COL Sheila Hobbs, Chief, Patient Accountability Division, Directorate of Patient Administration, Walter Reed, Washington, DC 20307


COL Thomas M. Fitzpatrick, DCCS, Walter Reed, Washington, 20307

SUBJECT: Designation of Ambulatory Procedure Units (APU) and Ambulatory Procedure Visits (APV)

1. Request that [Service’s name] be designated as an Ambulatory Procedure Unit. 
   [(MEPRS code)]

2. The Ambulatory Procedure Visits that this service performs are described in the attachment.

3. During the APVs described in the attachment, the following criteria are met:

   a. A medical or surgical intervention for which the procedure, anesthesia, and/or nursing care requirements necessitate pre-procedure and/or post-procedure care, observation, or assistance is performed.

   b. A licensed or registered care practitioner is directly involved in the healthcare intervention.
c. The care of the patient during the APV is more appropriately rendered in a specialized area, rather than in the traditional outpatient clinic setting.

d. The nature of the procedure, the medical status, and/or the assessed nursing needs of the patient generate a requirement for short-term (but not inpatient) care.

e. The total length of time that care is provided is less than 24 hours.

f. Anesthetics, if used, allow for patient recovery and release in less than 24 hours.

Enclosure
Procedure list

Recommend: approval/disapproval

[Service chief’s name]
COL, MC
Chief, Nephrology Services

Thomas M. Fitzpatrick
COL, MS, FS
Deputy Commander for Clinical Services
Walter Reed
If patient becomes inpatient APV disposition as admitted and APV record is cancelled

NO

Patient D/C in < 24 hrs

YES

7th Floor Chart Room performs daily round to collect APV records-
checks for CHCS appointment and APV documentation (CIS)*

Clinic sends list of APV to APU
PAD cell day prior to procedure to create medical record, armband, and white card

APV appointment entered into CHCS (by clinic staff)

APV performed

Patient recovered

If patient becomes inpatient APV disposition as admitted and APV record is cancelled

NO

Patient D/C in < 24 hrs

YES

7th Floor Chart Room performs daily round to collect APV records-
checks for CHCS appointment and APV documentation (CIS)*

Physician Chart Room

Review & Analysis
reviews for necessary signatures

NO

Coding

Review & Analysis

Medical Records/TPCP

*Areas to collect charts: ward 66, pediatrics sedation, gastroenterology, cardiology, pulmonary/sleep lab

Ambulatory procedure visit (APV)
Ambulatory procedure unit (APU)
Composite Health Care System (CHCS)
Clinical Information System (CIS)
Patient administration directorate (PAD)
Third party collections program (TPCP)
Appendix C

Dermatology Clinic Approved Ambulatory Procedure Visits

12053 CLOSE LAY FACE 5.1-7.5
12041 CLOS LAY OTHER <2.5
12052 CLOSE LAY FACE 2.6-5.0
12051 CLOSE LAY FACE <2.5
12042 CLOSE LAY OTHER <2.5
2044 CLOSE LAY OTHER 7.6-12
15781 DERMABRASION
14060 FEET/EYELIDS/NOSE/EARS/LIPS <10.0CM
15240 FTSG, NON FACE
15260 NOSE/EAR/EYELID/LIP, TO 20CM
17108 LASER PHOTODERM >50 CM2
*17304 MOHS STAGE 1
*17305 MOHS STAGE 2
*17306 MOHS STAGE 3
*17307 MOHS STAGE 4
*17310 MOHS STAGE MORE THAN 5
12034 7.6 CM TO 12.5 CM
12035 12.6 CM TO 20.0 CM
12036 20.1 CM 30.0 CM
12037 OVER 30.0 CM
12055 12.6 CM TO 20.0 CM
12056 20.1 CM TO 30.0 CM
12057 OVER 30.0 CM
15261 FULL THICKNESS GRAFT, FREE, INCLUDING DIRECT CLOSURE OF DONOR SITE
12054 CLOSE LAY FACE 7.6 - 12.5
12031 CLOSE LAY TRUNK/EXT <2.5
14000 TRUNK <10.0CM
14001 TRUNK 10.1-30CM
14020 SCALP/ARMS/LEGS < 10.0CM
14021 SCALP/ARMS/LEGS < 10.1-30CM
14040 FACE/NECK/HAND <10.0CM
14041 FACE/NECK/HAND 10.1-30CM
14061 FEET/EYELIDS/NOSE/EARS/LIPS <10.1-30CM
13102 TRUNK,(EACH ADDITIONAL) <_5.0CM
13120 SCALP/ARM/LEG 1.1-2.5CM
13121 SCALP/ARM/LEG 2.6-7.5CM
13122 SCALP/ARM/LEG,(EACH ADD) _<5.0CM
13131 FACE/NECK/ACRAL 1.1-2.5CM
13132 FACE/NECK/ACRAL 2.6-7.5CM
13133 FACE/NECK/ACRAL,(e.ADD) _<5.0CM
13150 EYELID/NOSE/EARS/LIPS 0-1CM
13152 EYELID/NOSE/EARS/LIPS 2.6-7.5CM
13153 EYELID/NOSE/EARS/LIPS,(ADD) <5.0CM
15783 SUPERFICIAL, ANY SITE, (EG, TATTOO REMOVAL)

Data pulled from CHCS on 13 January 2005

Note: * Procedures that meet the criteria to be classified as ambulatory procedure visits.