

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 13 APRIL 2001	3. REPORT TYPE AND DATES COVERED JULY 2000 TO JULY 2001
4. TITLE AND SUBTITLE A STUDY TO DETERMINE THE TRIPLER ARMY MEDICAL CENTER UROLOGY CLINIC'S FY 2001 OUTPATIENT SERVICE CHARGES TO THE VETERANS ADMINISTRATION			5. FUNDING NUMBERS
6. AUTHOR(S) MAJ PAUL M. SANDER			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) TRIPLER ARMY MEDICAL CENTER TRIPLER, HAWAII			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) US Army Medical Department Center and School BLDG 2841 MCCS-HFB (Army-Baylor Program in Healthcare Administration) 3151 Scott Road, Suite 1411 Fort Sam Houston, TX 78234-6135			10. SPONSORING / MONITORING AGENCY REPORT NUMBER 8-01
11. SUPPLEMENTARY NOTES			
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE
13. ABSTRACT (Maximum 200 words) The objective of this study was to determine the Tripler Army Medical Center (TAMC) Urology clinic's outpatient service charges to the Veterans Administration (VA) for fiscal year 2001. A sensitivity analysis was conducted using a six-month sample of TAMC Urology clinic VA beneficiary (VAB) encounters (509 clinic and ambulatory procedure visits) and six federal and civilian outpatient billing methodologies in order to determine fair and reasonable TAMC Urology clinic outpatient charges to the VA. The six outpatient billing rates used in this study were the full and relevant Medical Expense and Performance Reporting System (MEPRS), full federal third-party and Interagency, local Hawaiian usual, customary, and reasonable (UCR), and Medicare's Outpatient Prospective Payment System (OPPS). The Medicare OPPS, though projected to initially reimburse 40 percent less than the current TAMC outpatient billing methodology (relevant MEPRS), adheres to current joint VA/DoD outpatient billing guidelines, is competitive with local healthcare market rates, and it satisfies the 2000 National Defense Authorization Act directive to implement an itemized CPT outpatient billing methodology (by 2002) similar to civilian industry standards. Based on the results of this study, a recommendation was made to implement Medicare OPPS billing rates for the TAMC Urology clinic for FY2001.			
14. SUBJECT TERMS			15. NUMBER OF PAGES 63
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT N/A	18. SECURITY CLASSIFICATION OF THIS PAGE N/A	19. SECURITY CLASSIFICATION OF ABSTRACT N/A	20. LIMITATION OF ABSTRACT UL

20040226 187

Running head: Determination of TAMC Urology Clinic Outpatient Charges

**A Study to Determine the Tripler Army Medical Center Urology Clinic's FY 2001
Outpatient Service Charges to the Veterans Administration**

**A Graduate Management Project (GMP)
Submitted to:**

**Dr. David Mangelsdorff, Ph.D., M.P.H.
Professor, U.S. Army - Baylor University
Graduate Program in Health Care Administration**

13 April 2001

**MAJ Paul M. Sander
Administrative Resident
Tripler Army Medical Center
Honolulu, Hawaii 96859
paul.sander@amedd.army.mil
(808) 433-1813**

**DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited**

ACKNOWLEDGEMENTS

The author would like to thank COL Lee Briggs for his insight and wisdom throughout the development of this graduate management project, Ms. Brenda Horner and Ms. Michelle Morton for their invaluable expertise and time, the Tripler Army Medical Center Patient Administration and Resource Management Divisions for their continuous support, and finally, Dr. David Mangelsdorff, for his guidance and advice as my academic reader.

ABSTRACT

The objective of this study was to determine the Tripler Army Medical Center (TAMC) Urology clinic's outpatient service charges to the Veterans Administration (VA) for fiscal year 2001. A sensitivity analysis was conducted using a six-month sample of TAMC Urology clinic VA beneficiary (VAB) encounters (509 clinic and ambulatory procedure visits) and six federal and civilian outpatient billing methodologies in order to determine fair and reasonable TAMC Urology clinic outpatient charges to the VA. The six outpatient billing rates used in this study were the full and relevant Medical Expense and Performance Reporting System (MEPRS), full federal third-party and Interagency, local Hawaiian usual, customary, and reasonable (UCR), and Medicare's Outpatient Prospective Payment System (OPPS). The Medicare OPPS, though projected to initially reimburse 40 percent less than the current TAMC outpatient billing methodology (relevant MEPRS), adheres to current joint VA/DoD outpatient billing guidelines, is competitive with local healthcare market rates, and it satisfies the 2000 National Defense Authorization Act directive to implement an itemized CPT outpatient billing methodology (by 2002) similar to civilian industry standards. Based on the results of this study, a recommendation was made to implement Medicare OPPS billing rates for the TAMC Urology clinic for FY2001.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	2
ABSTRACT.....	3
LIST OF TABLES.....	5
INTRODUCTION.....	6
Conditions Which Prompted The Study.....	9
Statement of the Problem.....	11
LITERATURE REVIEW.....	12
Retrospective to Prospective Billing.....	12
Inpatient to Outpatient Prospective Payment Systems.....	13
Medicare Outpatient Prospective Payment System (OPPS) Billing Methodology...	16
Current Procedural Terminology (CPT) Codes.....	16
Ambulatory Payment Categories (APCs).....	19
Resource-Based Relative Value Scale (RBRVS).....	23
DoD Outpatient Billing.....	25
PURPOSE.....	27
METHOD AND PROCEDURES.....	27
Data Source.....	27
Validity.....	29
Reliability.....	29
Ethical Considerations.....	30
Calculation of Charges Using MEPRS & Other Billing Methodologies.....	30
Calculation of Charges Using Medicare OPPS.....	36
Comparison of Billing Methodologies.....	38
Determination of Urology Clinic FY 2001 Billing Rates.....	39
RESULTS.....	39
DISCUSSION.....	43
CONCLUSION/RECOMMENDATIONS.....	45
REFERENCES.....	48

APPENDIX A: List of CPT Modifiers

APPENDIX B: HFMC VA/DoD Sharing Agreement Cost Components

APPENDIX C: List of MEPRS Standard Expense Element Codes

APPENDIX D: List of APC Status Indicators

APPENDIX E: TAMC Urology Clinic Outpatient Billing Methodology Comparison

APPENDIX F: TAMC Urology Clinic Proposed FY 2001 Outpatient Billing Rates

LIST OF TABLES

Table 1: Sample CPT/HCPCS Codes

Table 2: Sample APC

Table 3: CPT/HCPCS Codes Organized Into An APC Group

Table 4: Sample APC Status Indicators, Relative Weights, & Payment Rates

Table 5: RBRVS Relative Value Units (RVUs)

Table 6: RBRVS Geographical Practice Cost Indices (GPCIs)

Table 7: Calculation of Average Full MEPRS Cost Per Encounter

Table 8: Calculation of Average Relevant MEPRS Cost Per Encounter

Table 9: Sample Honolulu 2000 Usual, Customary, and Reasonable Rates for CPT 52332

Table 10: Sample APC and Geographic Adjustment

Table 11: Sample RBRVS Calculation

Table 12: Original and Corrected Federal Charges

Table 13: Corrected Average Monthly Urology Clinic Outpatient Charges

Table 14: Projected 2000 Annual Urology Clinic Visit and APV Charges

A Study to Determine the TAMC Urology Clinic's FY 2001 Outpatient Service Charges to the VA

Introduction

Historically, a hospital's main purpose has been to provide treatment in an inpatient setting, which was usually accompanied by care in an outpatient clinic. During the past decade, however, the trend has been toward the delivery of health care in the outpatient setting, which has included not only emergency departments and clinics, but also ambulatory services and surgery. Sultz and Young (1999) show that in 1980, outpatient services revenue constituted only 13 percent of total voluntary hospital revenues in the United States. That figure rose to 29.9 percent in 1995, and 35.3 percent in 1997 (see Figure 1).

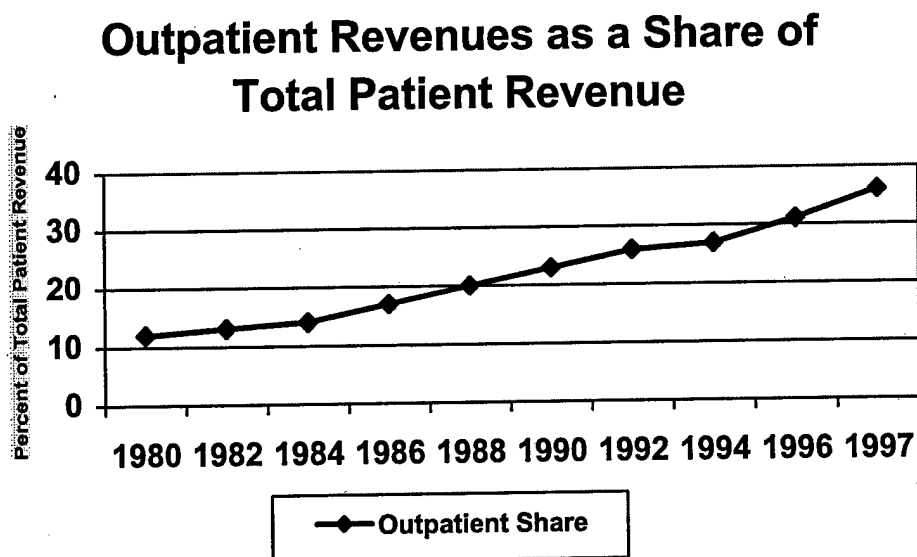


Figure 1. Outpatient Revenue as a Share of Total Patient revenue, 1980-1997. *Source: (Sultz & Young, 1999) [Reprinted with permission from Trend Analysis Group, National Hospital Panel Survey Reports, Monthly Reports from January 1980-September 1997, p.202, American Hospital Association.]*

Wolper (1999) presents similar findings; “between 1990 and 1995, community hospital outpatient visits in the United States increased at an annual growth rate of 8.3 percent, growing

from 214.6 million visits in 1990 to 319.6 million visits by 1995. During this same five-year period, community hospital inpatient days dropped approximately 2.4 percent" (see Figure 2).

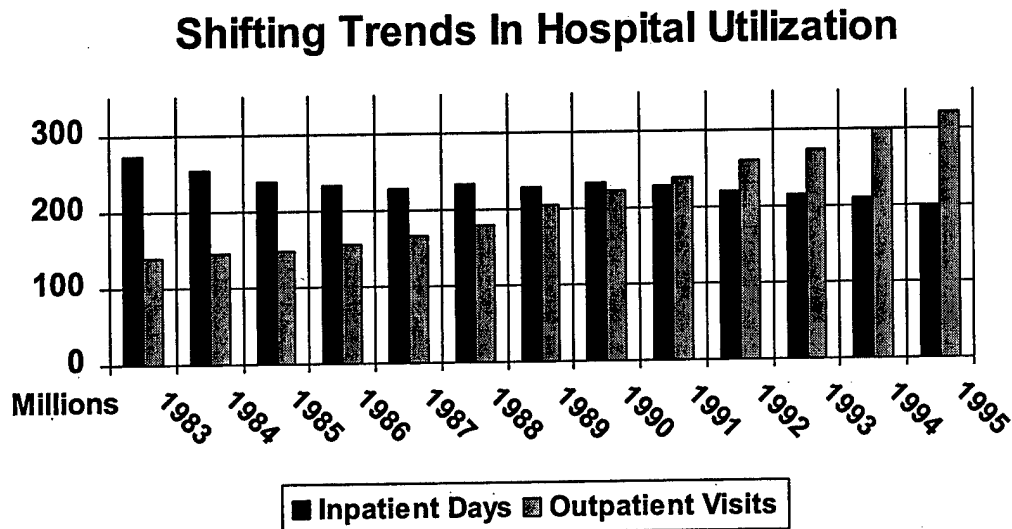


Figure 2. Shifting Trends In Hospital Utilization, All Community hospitals in the United States (Outpatient Data Exclude Emergency Department Visits). *Source:* (Wolper, 1999, p. 435) [Adapted with permission from 1984 Hospital Statistics, 1985 Hospital Statistics, and 1996/97 Hospital Statistics, Healthcare InfoSource, Inc., a subsidiary of the American Hospital Association, 1984, 1985, and 1996].

This growth in the number of outpatient visits can be attributed to three key developments in healthcare delivery over the past two decades: first, the introduction of Medicare's inpatient prospective payment system in 1983, second, the growth of managed care plan enrollment between 1990 to the present time, and lastly, technological innovations in outpatient surgery and diagnostic testing over the past 15 years (Austin & Boxerman, 1998; Getzen, 1997; Kongstvedt, 1997; Sultz & Young, 1999; Wolper, 1999). This increase in the number of outpatient visits has resulted in a reciprocal growth in Medicare outpatient-service payments to hospitals. It is this growth in Medicare payments that has proven to be a

significant force behind regulatory mandates to develop prospectively based reimbursement methodologies for ambulatory surgery and general outpatient services.

On April 7, 2000, the Health Care Financing Administration (HCFA) introduced a prospective payment system (PPS) for hospital outpatient services (Federal Register, April 7, 2000). Under a PPS, hospitals receive a fixed amount for treating patients diagnosed with a given illness, regardless of the length of stay or type of care received (Getzen, 1997; Kongstvedt, 1997; Sultz & Young, 1999; Wolper, 1999). This new billing methodology, implemented nationally on August 1, 2000, was designed for two reasons: first, to ensure that the Medicare program and its beneficiaries pay appropriately for outpatient services and second, to encourage hospitals to provide more efficient delivery of care through more detailed cost accounting (HCFA, April 2000).

Today, hospital administrators realize that establishing a firm position in the ambulatory care market is critical to the continued survival of their organizations, and that the shift to outpatient care is not simply a trend, it is the future of hospital care. As Medicare and other civilian third-party insurers adjust their business practices in an attempt to maintain their financial viability in this new market, so too must the military healthcare system (MHS). The Assistant Secretary of Defense-Health Affairs announced this year (Federal Register, February 16, 2000) that Department of Defense (DoD) medical treatment facilities (MTFs) will soon calculate reasonable charges, for both inpatient and outpatient services, by adopting a rate structure that is essentially the same as the Medicare fee-schedules.

This study will examine the potential benefit of implementing the Medicare outpatient prospective payment system (OPPS) as the DoD standard for outpatient billing. The goal of

this study is to determine the TAMC Urology Clinic's optimal outpatient billing rates for fiscal year (FY) 2001.

Conditions Which Prompted the Study

Several conditions exist which prompted this study. First, the February 16, 2000 Federal Register changed some key points in United States Code (USC) Title 10, section 1095 regarding DoD healthcare service billing methodology. It stated, that the DoD, in an effort to move closer to civilian industry practices, would issue a proposed rule to implement a prospective, itemized billing methodology as authorized by section 716 of the National Defense Authorization Act for FY 2000. This change will allow DoD MTFs to calculate reasonable and standardized charges for both inpatient and outpatient services (similar to Medicare). Each MTF will be challenged to develop rates that are competitive with civilian sector pricing and billing practices that conform to common methods used by the civilian healthcare industry. Essentially, DoD MTFs will use "standardized" procedure codes, which will facilitate easy comparisons between DoD and civilian-healthcare billing and coding procedures. The TRICARE Management Activity (TMA) is currently assessing the information system, coding, and procedural requirements necessary for a full DoD-wide implementation of an itemized outpatient billing methodology on or around October 1, 2002 (TMA/UBO, Oct 2000).

Second, on April 7, 2000, the Department of Health and Human Services, through the HCFA and the Office of the Inspector General, published in the Federal Register, its final rule implementing OPPTS, the Medicare standard for outpatient billing. This legislation implemented a PPS for hospital outpatient services furnished to Medicare beneficiaries, as set forth in section 1833(t) of the Social Security Act. This rule applies for all Medicare services furnished by all hospitals, including hospitals excluded from the inpatient PPS, and by

community mental health centers. With hospitals aggressively shifting inpatient costs to the outpatient setting as a means to offset declining patient income, this legislation will have a significant impact on how DoD third-party payers reimburse for outpatient services.

Third, DoD MTF leadership has been directed by TMA to maximize third-party reimbursements. Third-party payers are a major source of revenue for the DoD. Department of Defense third-party collections have grown from \$7.3 million in FY 1987 to over \$128.5 million in FY 1998 (Layman, 2000). Tripler third-party reimbursements totaled \$23 million in FY 2000, accounting for 20 percent of TAMC's total revenues (Dudevoir, 2000). Developing and implementing an outpatient billing methodology that enables prompt and efficient collection of third-party reimbursements, including a reduction in claim denials, will be critical across the spectrum of DoD MTF outpatient services.

Lastly, TAMC's VA/DoD Joint Venture partner, the Spark M. Matsunaga Veterans Administration Medical and Regional Office Center (VAMROC), has requested that TAMC change its current billing procedures and initiate billing for services by Current Procedural Terminology (CPT) code in order to allow the VAMROC to collect reimbursements from third-party payers for services provided by TAMC to its VABs. For several years prior to FY 1999, the VAMROC had been satisfied paying 65 percent of the DoD Interagency Rate (IR) to TAMC for outpatient services without consistent reimbursements from VAB third-party payers. The IR is a flat billing rate (published annually by the DoD) derived from Medical Expense and Performance Reporting System (MEPRS) data, which reflects the DoD-wide average cost for federal MTFs to provide care for specific outpatient services (Hazzard, 2000). In FY 1999, the VAMROC experienced a significant increase in TAMC's billable outpatient charges to the VA (Durkee, 2000). The increase, attributed to higher VA beneficiary (VAB)

utilization of TAMC services in FY 1999, as well as more accurate billing by TAMC during that same time period (Durkee, 2000), would prompt the VA to seek an alternative outpatient billing methodology.

The VA/DoD Health Resources Sharing and Emergency Operations Act of 1982 provides the VAMROC and TAMC leadership the flexibility to negotiate outpatient service billing rates that benefit both organizations (VA/DoD Health Care Resource Sharing Reimbursement Guidelines, 1989; VHA Directive 99-050, 1999). Tripler and VAMROC leadership concluded that an itemized CPT billing methodology would improve the VAMROC's opportunity to collect third-party reimbursements and support the spirit of the VAMROC/TAMC VA/DoD Joint Venture which advocates the implementation of business practices which provide a "win-win" situation for both organizations (MEDCOM MOU, August 1, 1997; VA/DoD HFMC Guiding Principles, 1997; VA/DoD Health Care Resource Sharing Reimbursement Guidelines, 1989).

Problem Statement

Medical Expense and Performance Reporting System (MEPRS) average-costing hinders the collection of third-party reimbursements to Tripler and to the VAMROC because MEPRS billing is not detailed enough to meet industry standards for third-party outpatient billing. Tripler needs an outpatient billing methodology that better reflects more detailed outpatient cost accounting, that complies with joint VA/DoD outpatient billing guidelines, and is competitive with or comparable to a civilian healthcare industry standards.

Literature Review

Retrospective to Prospective Billing

Before the 1960s, hospitals received their payments largely through a fee-for-service process. Individuals made healthcare payments either from personal resources or through privately obtained insurance coverage. Beneficiaries felt that they couldn't afford extensive inpatient hospital experiences so they stayed away from hospitals (Berman, Kukla, & Weeks, 1994). The inception of the Medicare and Medicaid programs in the mid-1960s increased access to health care, especially for the elderly and indigent populations. Hospitals enlarged their facilities and implemented more lines of services to accommodate their newly "empowered" customers. Retrospective "cost-based" reimbursement became the preferred payment methodology for both inpatient and outpatient services (Berman, et al., 1994; Getzen, 1997; Sultz & Young, 1999; Wolper, 1999).

Under retrospective cost-based reimbursement, hospitals were paid "reasonable" costs according to cost-allocation and appointment rules established by third-party payers. This payment system had two key characteristics: first, it was retrospective in nature, which meant that the amount of a hospital's final reimbursement was determined after the services had been provided and a full accounting of the hospital's operating costs had been assembled and second, the amount of payment varied by individual hospital (Berman, et al., 1994; Getzen, 1997; Sultz & Young, 1999). Even though the rules used to determine reimbursable costs were the same for all payers, the unique aspects of each hospital's cost structure resulted in cost variations between hospitals, even when the services provided were the same. Incentive was created for hospitals to maximize the allocation of costs to those services that offered the highest level of reimbursements. This led to hospitals providing higher volumes of "unnecessary" services,

regardless of their impact on a patients' health status (Berman, et al., 1994; Getzen, 1997; Sultz & Young, 1999; Wolper, 1999).

Faced with sharply escalating Medicare costs in the early 1980s, the federal government changed the way Medicare paid hospitals for treating the elderly and indigent. In 1983, section 601 of the Social Security Amendments of 1983 completely revised the cost-based payment system for most hospital inpatient services by enacting section 1886(d) of the Social Security Act, which provided for a prospective payment system (PPS) for acute hospital inpatient stays. "Although payment for most inpatient services became subject to the PPS, Medicare hospital outpatient services continued to be paid based on hospital-specific costs, which provided little incentive for hospitals to furnish outpatient services efficiently" (Federal Register, April 7, 2000, p.16). It was this amendment, advances in medical technology, and changes in provider practice patterns that brought about a shift in the provision of medical care, from the inpatient to the outpatient setting (Federal Register, April 7, 2000; Parvis, 2000).

Inpatient to Outpatient Prospective Payment Systems

As stated earlier, rising hospital costs during the 1980s were forcing the Medicare program to exceed all financial projections. In an effort to shrink Medicare growth, the Reagan administration implemented a prospective payment system based on diagnosis related groups (DRGs) (Berman, et al., 1994; Getzen, 1997; Kongstvedt, 1997; Sultz & Young, 1999; Wolper, 1999). Diagnosis related groups were fixed payments made based on a patient's diagnosis at discharge and covering the complete hospital stay, including all ancillary services (excluding surgery or other physician fees). In essence, DRGs were administered prices set by the government at what they thought was a "fair" rate.

This billing methodology was called a PPS because the DRG rates were set in advance, unlike the previous retrospective cost-based payments that were continually adjusted to match any change in individual hospital costs (Kongstvedt, 1997). With the adoption of this methodology, Medicare intended to make a fundamental change in its approach to paying for hospital inpatient services. This PPS would control costs through performance incentives, not through regulation (Berman, et al., 1994; Sultz & Young, 1999). The unit of payment was changed from days and procedures to inpatient admissions. The level of payment was changed from apportioned, hospital-specific operating costs to a nation-wide, fixed payment rate per DRG (Berman, et al., 1994).

The DRG payment system would provide hospitals with financial incentive to discharge patients as soon as possible. The patient's diagnosis determined how much the hospital would be paid, and the hospital knew that amount in advance. If the patient required less care or fewer days in the hospital than the DRG average, the hospital was paid the average cost regardless (i.e. the hospital made money). If the patient required a longer stay or more care than the DRG average, then the hospital lost money. This system was adopted quickly by almost all state and hospital insurance companies because it proved to be extremely effective at curbing cost growth (RAND Health, 2000).

A significant shortfall of the PPS approach was that it only applied to hospital inpatient services. The initial PPS left hospital outpatient-services, ambulatory care centers, and physician services outside of its controls. These areas continued to operate under varying payment incentives, the most notable of which was the fee-for-service payment methodology (Berman, et al., 1994). The inpatient PPS was, however, so successful in reducing Medicare

expenditures, that there was a legislative mandate from Congress to bring the same measure of control over outpatient Medicare costs (Parvis, 2000).

The introduction of DRGs encouraged hospitals to lower cost treatment options, leading to the transfer of diagnostic and therapeutic treatments from the inpatient environment to outpatient service departments and freestanding outpatient facilities. Congress realized they needed to do something to keep outpatient costs from escalating, and took action, requiring the HCFA to develop a prospective payment system for outpatient services (Parvis, 2000; Wolper, 1999). The Omnibus Budget Reconciliation Act of 1986 paved the way for the development of this new outpatient PPS (Federal Register, April 7, 2000). It did so by mandating that third-party payers require hospitals to report claims for outpatient services under the HCFA Common Procedure Coding System (HCPCS). The HCPCS, a listing of descriptive terms and identifying codes for reporting medical services, enabled HCFA to determine which specific outpatient procedures and services were being billed (Wolper, 1994). By adopting HCPCS, HCFA had taken the first step toward implementing itemized outpatient billing.

On March 17, 1995, the Assistant Secretary of Defense (Health Affairs) submitted a report to the Congress, summarizing the research HCFA conducted searching for a way to classify outpatient services for the purpose of developing an outpatient PPS (similar to the DRG inpatient PPS). The report cited ambulatory patient groups (APGs), developed by 3M-Health Information Systems under a cooperative grant with HCFA, as the most promising classification system for grouping outpatient services, and recommended that APG-like groups be used in designing a hospital outpatient PPS (Federal Register, April 7, 2000). The APG system continued to evolve into what we know today as the Ambulatory Payment Classifications (APCs).

Finally, on April 7, 2000, the Department of Health and Human Services published in the Federal Register the Medicare program prospective payment system for hospital outpatient services. This final rule, implemented on August 1, 2000, outlined HCFA's Medicare OPPS, which is based upon a combination of CPT/HCPCS coding and APC billing methodology.

Medicare OPPS Billing Methodology

Medicare OPPS billing consists of Current Procedural Terminology (CPT) and HCFA Common Procedure Coding System (HCPCS) codes used in conjunction with HCFA Ambulatory Payment Classification (APC) and Resource-Based Relative Value Scale (RBRVS) billing methodologies. Per section 220.8 of the February 16, 2000 Federal Register, outpatient billings may, but are not required, to be subdivided into two categories: 1) outpatient services, which refers to overhead and ancillary, diagnostic and treatment services, other than professional services provided in connection with the outpatient visit, and 2) professional charges, which refers to professional services provided by physicians and certain other providers (AAMC Government Affairs and Advocacy, 2000). Ambulatory Payment Classification and RBRVS charges are added together to constitute an aggregate OPPS charge. The APC methodology is used to calculate the hospital, or facility, portion of the outpatient charge, while the RBRVS is used to calculate the physician, or "professional" portion of the outpatient charge. Both methodologies will be discussed in greater detail in the Methods section of this study.

Current Procedural Terminology (CPT) and HCFA Common Procedure Coding System (HCPCS)

Five-digit Current Procedural Terminology (CPT) codes describe medical or psychiatric procedures performed by physicians and other health providers in a hospital (see Table 1). Current Procedural Terminology codes were developed by the American Medical Association

(AMA) in 1966 and then adopted by the HCFA to assist in the assignment of reimbursement amounts to providers by Medicare carriers. Since the early 1970s, HCFA has asked the AMA to work with physicians of every specialty to determine appropriate definitions for CPT codes and to try to determine accurate reimbursement amounts for each (AMA, 2000).

Table 1.

Sample of TAMC Urology Clinic CPT/HCPCS Codes

CPT Code	Description
00860	Lower abdomen, extraperitoneal (bladder)
50390	Aspiration and/or injection of renal cyst or pelvis by needle
50393	Introduction of ureteral catheter or stent into ureter
50590	Lithotripsy, extracorporeal shock wave
52000	Cystourethroscopy
52234	Cystourethroscopy w/fulguration and/or resection of; small bladder tumors
99212	Office/outpatient visit - problem focused history, problem focused exam, and straightforward medical decision making

Source: CPT Manual, 2000.

The first edition of the CPT manual helped encourage the use of standard terms and descriptors to document procedures into a patient's medical record. It also helped communicate accurate information on procedures and services to agencies concerned with insurance claims. In 1983, the CPT code was adopted as part of the HCFA Common Procedure Coding System (HCPCS). The HCPCS codes are grouped into three levels: Level I (regular CPT codes), Level II (more complex and descriptive codes), and Level III (codes not yet approved nationally). Level I HCPCS codes, the major portion of the HCPCS coding system, are referred to as "CPT codes;" they cover most outpatient services and procedures. Level II HCPCS codes supersede CPT codes for similar encounters, evaluation and management services, and/or other procedures. Level II codes are also used to report services, procedures,

supplies, materials, and injections when no CPT code is available. Should a coding situation occur in which both HCPCS Level I and II codes exist, Level II codes are given priority. The HCPCS Level III (local) codes are maintained by the local Medicare carrier and vary from carrier to carrier (ADS Coding Guidelines, 2000).

With the adoption of CPT codes in 1983, HCFA mandated the use of HCPCS to report services for Part B (outpatient services) of the Medicare Program. The OBRA 1987 mandated the use of CPT for reporting outpatient surgical procedures. Today, in addition to the Medicare program, CPT is used extensively throughout the United States as the preferred method of coding and describing health care services (AMA, 2000). The collection and use of CPT data assists in gathering information to plan future healthcare needs, forecasts future healthcare expenditures, and provides billing data for Medicare, CHAMPUS and other third party payers (Layman, 2000).

The first step in utilizing CPT codes is to select the name of the procedure or service listed in the CPT manual that most accurately identifies the outpatient service performed by the provider. In surgery, it may be an operation; in medicine, it can be a diagnostic or therapeutic procedure; in radiology, it might be a radiograph. Other additional procedures performed or pertinent special services are also listed in the CPT manual. When necessary, any modifying or extenuating circumstances are added to the medical record by the addition of a modifier code (AMA, 2000).

A CPT modifier is a two-position alpha or numeric code, added to the end of a HCPCS code, that is used to clarify the service(s) being billed. A modifier provides the means by which the reporting physician can indicate that a service or procedure that has been performed has been altered by some specific circumstance but not changed in its definition or code (for a

list of CPT modifiers, see Appendix A). They add more information, such as the anatomical site, to the HCPCS code and help eliminate the appearance of duplicate billing and/or unbundling. They are also used to recognize services or procedures performed by physicians that are not found in the CPT manual; a number of specific modifier code numbers have been designated for reporting unlisted procedures (Federal Register, April 7, 2000; St. Anthony's Publishing, 2000).

Ambulatory Payment Classifications (APCs)

Ambulatory payment classifications (APCs) are used to assign a facility charge to the CPT/HCPCS code (as compared to the professional charge assigned by the RBRVS, which will be discussed later). Under Medicare OPPS, outpatient services will be paid based on the four-digit ambulatory payment classification (APC) that they are assigned to (see Table 2).

Table 2.

Example APC Based on CPT 52334

APC 162

CPT/ HCPCS Code	Description	APC Group	Relative Weight	Payment Rate	Status Indicator
52334	Cystourethroscopy	162	17.49	\$848.04	T

Source: APC Payment Manual, 2000.

A total of 451 APCs are included in HCFA's year 2000 final rule. In developing these APCs, HCFA attempted to group services (identified by CPT and HCPCS code descriptors) in such a way that the services within each APC would be similar both clinically and in terms of resource utilization (Federal Register, April 7, 2000; St. Anthony's Publishing, 2000).

Essentially, APCs organize CPT/HCPCS procedure codes into groups (see Table 3) that are assigned a fixed reimbursement amount. For example, CPT code 52334 (a cystourethroscopy with insertion of ureteral guide wire through kidney to establish a percutaneous nephrostomy, retrograde) is listed in APC 162, *Level III Cystourethroscopy and Other Genitourinary Procedures*, and is reimbursed \$848.04. Several other CPT procedure codes (40 to be precise) are listed in APC 162, and each of them receives the same fixed dollar amount of reimbursement (St. Anthony's Publishing, 2000).

Table 3.

APCs Organize CPT/HCPCS Into Groups

APC 162: Level III Cystourethroscopy and Other Genitourinary Procedures	
<u>CPT/HCPCS Code</u>	<u>Description</u>
50953	Ureteral Endoscopy
51020	Cystotomy or Cystostomy
52234	Cystourethroscopy with fulguration
52317	Litholapaxy
52334	Cystourethroscopy with insertion of ureteral guide wire

Source: APC Payment Manual, 2000.

Each APC group's relative weight was calculated based on the median cost (operating and capital) of the services within the group. Median costs were developed from a database of calendar year (CY) 1996 hospital outpatient claims using the "most recent" cost report data available. Hospital specific and department specific cost-to-charge ratios were used to convert

billed charges to median costs for each group. Weights were then converted to payment rates using a conversion factor, which takes into account group weights, the volume of services for each group, and expenditure targets specified in the law (Federal Register, 2000; St. Anthony's Publishing, 2000).

Section 1833(t)(2)(C) of the Social Security Act requires the establishment of relative payment weights for covered outpatient services. A conversion factor is a monetary value that converts the relative weights of APC payment groups into payment amounts. In order to convert the relative weights for each APC into payment rates, HCFA calculated a conversion factor that would result in payments to hospitals under the APCs in 1999 equaling the total projected payment allowed by federal law. The prospective payment rate set for each APC is calculated by multiplying the APC's relative weight by a conversion factor. The conversion factor is a national dollar amount on which the weights will be multiplied in order to establish payment amounts. The adjusted conversion factor for CY 2000 is \$48.487. For example, APC 162, "Level III Cystourethroscopy...", has a relative weight of 17.49 (see Table 2). The conversion factor of \$48.487 is multiplied by the relative weight of 17.49 to equal the national payment rate of \$848.04. The HCFA is required to update annually the conversion factor used to determine APC payment rates (Federal Register, April 7, 2000; Parvis, 2000; St. Anthony's Publishing, 2000). This national payment rate of \$848.04, the unadjusted APC payment, is then subject to geographic adjustments (discounts) which will be discussed further in the Methods section.

Charges for services under the OPSS are calculated based on grouping outpatient services (CPTs/HCPCS) into APC groups. The payment rate calculated for an APC apply to all of the services within the APC. A hospital may bill for a number of APC payments furnished

to an individual patient on a single day. The calculation of the OPPS payment amount is computed on an APC-by-APC basis. Medicare requires that if multiple surgical procedures are furnished to a patient in a single day, APC payments are subject to discounting. Provided below is an example of a Medicare beneficiary encounter representing multiple services provided in a single day, including multiple surgical procedures (see Table 4).

Table 4.

Sample Medicare Beneficiary APC Status Indicators, Relative Weights, & Payment Rates

APC	Status Indicator	Relative Weight	Payment Rate
162	T	17.49	\$848.04
160	T	5.43	\$131.64 *
600	V	.98	\$47.52

Note. * Under Medicare rules, APC 160 is a second surgical procedure performed on the same day and its relative weight is less than APC 162 therefore 50 percent of APC 160's payment rate is charged ($5.43 \times \$48.487 = \$263.28 \times .5 = \$131.64$).

Source: Complete Guide to APCs, St. Anthony's Publishing.

Under Medicare rules, the full APC amount is computed for the surgical procedure with the highest weight (APC 162 with a relative weight of 17.49) (see Table 4). The status indicator "T" identifies those surgical procedures that are subject to discounting. Fifty percent of the APC amount would be computed for any other surgical procedures performed at the same time (see Table 4 Note: 50 percent of APC 160's full payment amount would be \$131.64). The status indicator "V" of APC 600 represents an office visit and is not subject to discounting, therefore, the full payment amount for that APC will be warranted. A complete list of APC status indicators with descriptions is provided in Appendix D.

Resource-Based Relative Value Scale (RBRVS)

One of the most important events for CPT in recent years was Medicare's transition to the Resource-Based Relative Value Scale (RBRVS) physician payment system beginning in January, 1992 (Dickey, 1998). The HCFA introduced the RBRVS concept in an attempt to control rapidly escalating Medicare Part B expenditures (Zwolak, 1997). The RBRVS is used to assign a professional charge to the outpatient CPT/HCPCS code.

The RBRVS is a system of physician compensation that is based on the amount of resources expended to produce medical services (PFSS, 2000). The RBRVS model, developed for Medicare in 1991, contained four resource inputs for the provision of physician services: physician time, intensity of effort, practice costs, and costs of advanced specialized training. Work, overhead, and malpractice units (RVUs) are assigned to medical and surgical procedures as measures of their value. Geographic modifiers (GPCIs) are then employed to account for variations in costs in different parts of the United States. Based upon the successful development of this conceptual framework, the HCFA adopted this scale in 1992 to be used as the basis of payment for physician services to Medicare beneficiaries.

Under the formula set forth in section 1848(b)(1) of the Social Security Act, the payment amount for each service paid under the physician fee schedule is the product of three factors: 1) A nationally uniform relative value for the service, 2) a geographic adjustment factor (GAF) for each physician fee schedule area, and 3) a nationally uniform conversion factor (CF) for the service. The CF converts the relative values into payment amounts. The 2000 Medicare physician fee-schedule conversion factor (CF) under the Medicare Supplementary Medical Insurance (Part B) program, as required by section 1848(d) of the Social Security Act is \$36.6137 (Federal Register, November 2, 1999).

For each physician fee schedule service, there are three relative values (see Table 5): 1) A relative value unit (RVU) for physician work, 2) a RVU for practice expense (PE), and 3) a RVU for malpractice expense.

Table 5.

Example Relative Value Units (RVUs) and Related Information Used in Determining Medicare (Professional) Payments for 2000

CPT/ HCPCS	Status	Description	Physician Work RVUs	Transitional Facility PE RVUs	Malpractice RVUs
52334	A	Cystourethroscopy	4.83	2.61	0.28
50395	A	Intro of guide into renal pelvis	3.38	2.28	0.13
99212	A	Office visit, established patient	1.28	0.59	0.05

Source: Federal Register, November 2, 1999.

For each of these components of the fee schedule there is a geographic practice cost index (GPCI) for each fee schedule area (see Table 6). The GPCIs reflect the relative costs of practice expenses, malpractice insurance, and physician work in an area compared to the national average for each component (Federal Register, November 2, 1999).

Section 1848(e) of the Social Security Act requires the development of GAFs for all physician fee schedule areas. The total GAF for a fee schedule area is equal to the weighted average of the individual GPCIs for each of the three components of the service. Thus, the GPCI's reflect the relative practice expenses, malpractice insurance, and physician's work in an area compared to the national average (Federal Register, November 2, 1999).

Table 6.1999/2000 Geographic Practice Cost Indices (GPCIs) By Medicare Carrier and Locality

Carrier No.	Locality No.	Locality Name	Work	Practice Expense	Malpractice
00833	01	Hawaii/Guam	0.998	1.183	0.954

Source: Federal Register, November 2, 1999, p. 59583.

Significant to note about the RBRVS is that the BBA 1997 provided for a revision in the way practice expense RVUs will be calculated from 1999 to 2001. Section 4505(e) enacted a provision that the practice expense RVUs for the year 1999 will be the sum of 75 percent of the charge-based RVUs and 25 percent of the resource-based RVUs. For the year 2000, the percentages will be 50 percent charge-based RVUs and 50 percent resource-based RVUs. For the year 2001, the percentages will be 25 percent charge-based RVUs and 75 percent resource-based RVUs. For subsequent years, the RVUs will be totally resource based (Federal Register, November 2, 1999). Adjustments to RVU values due to transitional corridors are accounted for under the column titled '*Transitional Facility PE RVUs*' of the RBRVS RVU tables (see Table 5).

DoD Outpatient Billing

As authorized by Title 10 USC 1095(f)(2), the computation of reasonable costs for purposes of collections for most DoD outpatient services shall be based on a per visit rate for a clinical specialty or subspecialty. The per-visit charge shall be equal to the outpatient full reimbursement rate for that clinical specialty or subspecialty including all routine ancillary services. A separate charge will be calculated for cases that are considered ambulatory procedure visits (APVs). Ambulatory procedure visits are same day surgery visits and other

outpatient visits provided by designated, special treatment units in facilities of the Uniformed Services. The rates for both ambulatory services and APVs will be updated and published annually by the DoD (Federal Register, February 16, 2000).

The reimbursement rate enacted in VA/DoD sharing agreements is the negotiated price for the specific health care resource to be provided. The law states that the rate methodology should be sufficiently flexible to allow facilities concerned to take into account local conditions and needs, and the "actual costs" to the providing facility. The VA/DoD guidelines state that the negotiated reimbursement rate may be less than the actual cost in order to account for local conditions and needs, but may not be more than the actual cost (MEDCOM MOU, February 7, 2000; VA/DoD HFMC Guiding Principles, 1999; VA/DoD Sharing Guidelines, 1989). "Actual cost" is described as including the cost of communications, utilities, services, supplies, salaries, depreciation, and related expenses connected with providing health care resources (VA/DoD Sharing Guidelines, 1989). The DoD reimbursement guidelines add that the negotiated rates can be less than, but not exceed the facility's MEPRS developed cost factors.

The underlying principle regarding the establishment of outpatient billing methodology is to allow the providing facility to recover all additional costs incurred in providing the resources, while at the same time to enable the purchasing facility to pay less than procuring the resource from an alternate source. An important consideration is that the providing facility must not incur any obligations that would represent a use of its own appropriations to supplement the appropriations of the purchasing facility (VA/DoD MOU, 1983; VA/DoD Sharing Guidelines, 1989).

Purpose

The purpose of this study is to determine the optimal billing methodology for Urology clinic outpatient services provided to the VA by TAMC for FY 2001. The objective of this study is to compare several outpatient billing methodologies, identify the 'best' billing method amongst those compared, and to implement that methodology in the TAMC Urology clinic for FY 2001.

Methods

Data Sources

Outpatient charge rates, fee schedules, and billing codes were gathered and utilized from several publicly available sources. Federal Interagency (IR) and full third-party outpatient reimbursement rates were available through the Office of the Under Secretary of Defense (Comptroller) web-site (www.dtic.mil/comptroller/rates/), FY 2000, Tab I. Current Procedural Terminology (CPT) codes, were available through the American Medical Association (AMA) in their annually published CPT™ 2000 Professional Edition Current Procedural Terminology manual. The HCFA Common Procedural Coding System (HCPCS) codes were available under "HCPCS" via the HCFA public utilization files web-site (www.hcfa.gov/stats/pufiles.htm) and/or from the U.S. Department of Commerce National Technology Information Service web-site (www.ntis.gov).

The APC coding guidance was found in the April 7, 2000 Federal Register via the GPO web-site (www.access.gpo.gov/su_docs/aces/aces140.html) and the St. Anthony's Publishing Complete Guide to APCs 2000. The RBRVS rates were found in the November 2, 1999 Federal Register via the GPO web-site (www.access.gpo.gov/su_docs/aces/aces140.html) as well as the HCFA public utilization files web-site (www.hcfa.gov/stats/pufiles.htm) under "FY 2000 Physician Fee-schedule."

Honolulu (Hawaii) outpatient charge rates by CPT code were determined using the *Customized Fee Analyzer: Custom Report for TAMC, April 28, 2000* (Medicode/Ingenix Publishing Group), a commercially published usual, customary, and reasonable (UCR) local benchmark.

The Tripler Medical Expense Performance Reporting System (MEPRS) was the source of TAMC cost/expense data. The MEPRS is a Congressionally mandated Tri-service system for health care cost identification and management. The MEPRS defines a set of functional work, prescribes a cost assignment methodology, applies uniform performance measurements, and provides a standard format for reporting information for each fixed DoD MTF. Corporate standards for MEPRS data dictate timeliness, completeness, and accuracy. The MEPRS Expense Accounting System (EAS) data is the basis for all DoD health care reimbursement rates, third part collection prices, marginal cost transfer prices, and interagency reimbursements (Sears, 1999).

Tripler service utilization data was extracted from the Worldwide Workload Report (WWR) generated by the Office of the Secretary of Defense, Health Affairs. The WWR is a system for the collection of inpatient, outpatient, and ancillary medical workload data for each of its respective DoD MTFs that is summarized monthly for upward reporting. The WWR tabulates TAMC Ambulatory Data System (ADS) workload data. The purpose of ADS is to collect outpatient encounter information from the provider at the diagnosis and procedure (CPT) levels. The ADS provides data that gives an accurate picture of what procedures are being used, and the level to which they are being used, by provider or by patient. Ambulatory Data System workload and patient treatment code data was extracted and manually entered into Microsoft Excel, a commercial database and spreadsheet software that will allow for data analysis and manipulation.

The Urology clinic was selected for this study for several reasons: first, it is a smaller service, therefore easier to study, second, once a billing methodology is selected, billing templates for a outpatient billing 'beta-site' will be more easily developed as the Urology clinic has a lesser number of procedures to code and monitor, and lastly, the TAMC Urology clinic has a consistent VAB workload for which to test the viability of the selected billing methodology.

Validity

Validity is defined by Cooper & Schindler (1998) as "...the extent to which a test (or study) measures what we actually wish to measure" (p. 166). This study is exploratory (it has not been done), observational in nature (no testing of hypothesis), and of ex post facto design (retrospective). This study attempts to replicate accepted and practiced federal and civilian healthcare industry outpatient billing standards, guidelines, and methodologies published by reputable healthcare organizations ((the Health Care Financing Administration (HCFA), the Department of Defense (DoD), St. Anthony's Publishing, and the American Medical Association (AMA)) which would suggest a high degree of criterion-based validity.

Reliability

Reliability is defined by Cooper & Schindler (1998) as "...the accuracy and precision of a measurement procedure" (p. 166). Tripler Urology clinic workload and cost data were collected from the TAMC MEPRS, a federally recognized source of DoD cost and workload accounting data within uniformed services' MTFs. Tripler MEPRS data was analyzed without attempting to elicit a response from either of the involved subjects (the TAMC Urology Clinic or the VAMROC). Tripler MEPRS cost data are reconciled and validated monthly as part of the DoD MTF Internal Management Control (IMC) program (Sears, 1999). MEPRS workload

data was reconciled against Composite Healthcare System (CHCS) patient encounter data through the use of the Ambulatory Data System (ADS) and its administrative ad hoc report capabilities. In order to minimize researcher error in extracting data by hand, all data was imported directly to Microsoft Excel®, a widely used business spreadsheet software used for data manipulation, calculation, and presentation. The calculations for this study were repeated several times over a six-month period by the researcher and the Managed Care Division resident expert on VA third-party billing, in order to test the stability of the measurements produced. No major data discrepancies were identified.

Ethical Considerations

The use of MEPRS and CHCS/ADS patient encounter data presented two ethical considerations: first, the protection of patient information, and second, the acknowledgement of potentially suspect MEPRS/CHCS data quality. The CHCS/ADS contain sensitive patient data that require protection. Tripler CHCS administrators restrict access through the assignment of network login and passwords. For this study, only the closed CHCS network was used to access patient data. Patient names were neither printed nor transmitted over email. In addition, coordination with the TAMC Urology clinic and the Managed Care and Patient Administration Divisions ensured that data and study results did not contain sensitive information. The MEPRS/CHCS data quality issues will be addressed in the Discussion section.

Calculation of Charges Using MEPRS & Other Billing Methodologies

Charges were determined using a cost-based system as a starting point. A Graduate Management Project completed by CPT Robert Durkee in 2000 provided the methodology for calculating both the MEPRS and relevant MEPRS costs of providing Urology services to VAMROC VABs. The first step in the process was to define the unit of service to which

payments are attached and to define 'reasonable and allowable' costs (Durkee, 2000; Gapenski, 1998; Wolper, 1999, Zelman, McCue, & Millikan; 1998). The unit of service for this study was defined as a VAB patient encounter as identified by DoD level four MEPRS code (Durkee, 2000). The TAMC Urology clinic has two level four MEPRS code to which workload and cost data are assigned: BBIA (clinic visits) and BBI5 ((ambulatory procedure visits (APV)). Tripler Urology clinic VAB utilization data were extracted from the Worldwide Workload Report (WWR) ('utilization' in this study is defined as synonymous with 'patient encounter') (Durkee, 2000). Veterans Administration patient encounters are distinguishable from other TAMC Urology clinic patient encounter data on the WWR, MEPRS, and CHCS/ADS ad hoc reports by the alpha-numeric patient category designator "K61."

The total monthly charges for TAMC Urology clinic VAB encounters were calculated for each of the six billing rates/methodologies used in this comparison for the months of July through December 2000 (six months). These calculations produced projected costs to the VA for which were compared to the Medicare OPPS billing methodology for that same time period.

Calculation of Full MEPRS Charges

The full MEPRS unit cost was calculated using the methodology described by Durkee (2000). Average unit costs per service were calculated for TAMC Urology clinic outpatient visits (BBIA cost center) and TAMC Urology clinic APVs (BBI5 cost center). An average unit cost per outpatient visit provided was determined by dividing TAMC Urology clinic FY 2000 total BBIA MEPRS expenses (\$2,138,135.04) by FY 2000 MEPRS total number of Urology clinic outpatient visits for FY 2000 (6179). The average full MEPRS cost per TAMC Urology clinic outpatient visits for FY 2000 is \$346.03. An average unit cost per APV was determined by dividing TAMC Urology clinic FY 2000 total BBI5 MEPRS expenses (\$539,665.10) by FY

2000 MEPRS total number of Urology clinic APVs for FY 2000 (275). The average full MEPRS cost per TAMC Urology clinic APV for FY 2000 is \$1,962.42 (see Table 7).

Table 7.

Calculation of TAMC Urology Clinic FY 2000 Average MEPRS Cost Per Encounter

Total Expenses	/	Total # Outpatient Clinic Visits (MEPRS Code BBIA)		
	=	Average Full MEPRS Cost Per Clinic Visit		
\$2,138,135.04	/	6179	=	\$346.03
Total Expenses	/	Total # APVs (MEPRS Code BBI5)		
	=	Average Full MEPRS Cost Per APV		
\$539,655.10	/	275	=	\$1,962.42

Source: (Durkee, 2000) [From "DoD Medical and Dental Rates," by B. Hazzard, 1999, 1999 UBO Conference, Crystal City, VAA; August 2-6, 1999; p. 5.]

The total VAB full MEPRS outpatient clinic visit charges for the months of July through December 2000 were calculated by multiplying the average full MEPRS cost (\$346.03) by the total number of VAB outpatient clinic visits for those six months (496). The same calculation was repeated for VAB APVs multiplying the average full MEPRS cost for a Urology clinic APV (\$1,962.42) by the total number of VAB APVs for the months of July through December 2000 (13). The total TAMC Urology clinic full MEPRS cost of all VAB patient encounters for the months of July through December 2000 was derived by adding together the outpatient clinic visit costs to the APV costs (\$192,274.93) (see Appendix E).

Calculation of Relevant MEPRS Charges

The Healthcare Financial Management Committee (HFMC) VA/DoD sharing agreement guidelines (Durkee, 2000; VA/DoD HFMC Guiding Principles, 1997) specifically address the criteria for inclusion or exclusion of both direct and indirect costs associated with discounted MEPRS costing (Appendix B). This marginal MEPRS cost (or relevant MEPRS cost) was calculated using only those Standard Expense Element (SEEC) codes (Appendix C) that meet the definition of marginal cost as defined by the HFMC (see below definition) and were agreed upon by a TAMC panel of subject matter experts comprised of the TAMC Chief of Staff, and representatives from TAMC's Resource Management, Patient Administration, and Managed Care Divisions (Durkee, 2000).

Healthcare Financial Management Committee Definition of Marginal Cost:

Marginal cost is based on the principle of incremental changes in cost as it relates to the additional units produced. Marginal cost should be the lowest price charged for a good or service in the VA/DoD sharing agreements since less than the marginal cost may be interpreted as an augmentation of an appropriation issue.

The sum of those relevant costs was totaled representing the total cost for TAMC Urology outpatient clinic visits (BBIA) for FY 2000 (\$1,472,252.91). The total relevant MEPRS cost was then divided by the total number of FY 2000 outpatient clinic visits to the TAMC Urology clinic (6179) to get the average relevant MEPRS cost per outpatient clinic visit (\$238). The sum of those relevant SEEC code costs were also totaled for TAMC Urology outpatient APVs (BBI5) for FY 2000 (\$529,083.52). The total relevant MEPRS APV cost was

then divided by the total number of FY 2000 VAB APVs (275) to get the average relevant MEPRS APV cost per visit (\$1924) (see Table 8).

Table 8.

Calculation of TAMC Urology Clinic FY 2000 Average Relevant MEPRS Cost Per Patient Encounter

Relevant MEPRS Costs /		Total # Outpatient Clinic Visits (MEPRS Code BBIA)			
		=		Average Relevant Cost Per Clinic Visit	
\$1,472,252.91	/	6179	=	\$238	
Relevant MEPRS Costs /		Total # APVs (MEPRS Code BBI5)			
		=		Average Relevant Cost Per APV	
\$529,083.52	/	275	=	\$1,924	

The total relevant MEPRS charges for the months of July through December 2000 were then calculated by multiplying the average relevant MEPRS cost (BBIA \$238 and BBI5 \$1,924) by the total number of outpatient clinic visits (496) and APVs (13) respectively for those six months. The respective totals were then added to get the total relevant MEPRS cost of all VAB Urology clinic patient encounters for the months of July through December 2000 (\$140,102) (see Appendix E).

Calculation of Federal Interagency (IR) Charges

The federal Interagency (IR) rate of \$209 for an outpatient clinic visit and \$1740 for an APV is a fixed charge per encounter, not an average. The total IR charges for July through December 2000 were calculated by multiplying the FY 2000 IR rates (BBIA \$209 and BBI5 \$1740) by the total number of TAMC Urology clinic VAB clinic visits (496) and APVs (13)

for the months of July through December 2000. These totals were then added together for the total VAB IR charges for July through December 2000 (\$121,691) (see Appendix E).

Calculation of Federal Full Third-Party Charges

The federal full third-party rate of \$221 for an outpatient clinic visit and \$1836 for an APV is also a fixed charge per encounter, not an average. The total full third-party charges for July through December 2000 were calculated by multiplying the FY 2000 full third-party rates (BBIA \$221 and BBI5 \$1836) by the total number of TAMC Urology clinic VAB clinic visits and APVs for the months of July through December 2000. These totals were then added together for the total VAB full third-party charges for July through December 2000 (\$127,639) see Appendix E).

Local Usual, Customary, and Reasonable (UCR) Rates

Ingenix Publications publishes local outpatient charge data for 2000 in their MEDICODE 2000 Customized Fee Analyzer. MEDICODE rates constitute the total charge (both professional and facility charges) for an outpatient visit and/or APV. Tripler is located in Honolulu, Hawaii so the appropriate local charge rates were used for this study. Usual, customary, and reasonable (UCR) charges for each 2000 TAMC Urology clinic VAB patient encounter for the months of July through December were assigned for the 50th, 75th, and 95th percentiles (see Table 9). Based on MEDICODE's methodology and databases, a charge for a given service at the 50th percentile indicates that 50 percent of the MEDICODE provider population charges higher fees, a charge for a given service at the 75th percentile indicates that 25 percent of the MEDICODE provider population charges higher fees, and a charge for a given service at the 95th percentile indicates that 5 percent of the MEDICODE provider population charges higher fees.

Table 9.

Sample Honolulu 2000 Usual, Customary, and Reasonable (Rates) for CPT 52332

CPT/HCPCS	Description	MEDICODE Charge Rate		
		50th	75th	95th
52332	Cystoscopy	\$764	\$955	\$1,197

Source: Customized Fee Analyzer: Custom Report for TAMC, April 28, 2000

Calculation of Charges Using Medicare OPPS Billing Methodology

The total Medicare OPPS charge for each VAB patient encounter was calculated by adding the APC rate (facility charge) to the RBRVS rate (professional charge). The first step in calculating the APC payment amount was to identify the status indicator, relative weight, and unadjusted payment rate for each TAMC Urology clinic CPT/HCPCS code (Federal Register, April 7, 2000; St. Anthony's Publishing, 2000). Once the unadjusted APC payment rate is obtained, the labor portion (60 percent of the unadjusted APC payment) is subject to geographic adjustment (see Table 10).

Table 10.

Example APC Based With Geographic AdjustmentAPC 162

CPT/ HCPCS Code	Description	APC Group	Relative Weight	Payment Rate	Status Indicator
52334	Cystourethroscopy	162	17.49	\$848.04	T

Geographic Adjustment Formula:

$$\text{APC Payment Rate} * \text{Labor Percentage } (.60) = \text{Labor Portion of APC Payment Rate}$$

$$\begin{aligned}
 & \$848.04 \quad * \quad .60 \quad = \quad \$508.82 \\
 \text{APC Payment Rate} - \text{APC Labor Portion} & = \text{APC Non-labor Portion} \\
 & \$848.04 \quad - \quad \$508.82 \quad = \quad \$339.22 \\
 \text{APC Labor Portion} * \text{Hawaii Wage Index} & = \text{Wage Adjusted Labor Portion} \\
 & \$508.82 \quad * \quad 1.1479 \quad = \quad \$584.08 \\
 \text{Wage Adjusted Labor Portion} + \text{Non-labor Portion} & = \text{Adjusted APC Payment} \\
 & \$584.08 \quad + \quad \$339.22 \quad = \quad \$923.30 \\
 \textbf{Geographically Adjusted APC Payment Rate:} & \quad \textbf{\$923.30}
 \end{aligned}$$

Source: Federal Register, April 7, 2000; St. Anthony's Publishing, 2000

The second step in calculating the Medicare OPPS billing rate was to calculate the RBRVS charge. The general formula for calculating the RBRVS charge amount for a given service is provided in Figure 3.

Figure 3.

Determination of Medicare's Physician Fees Schedule Using the Resource-Based Relative Value Scale (RBRVS)

Formula

$$\begin{aligned}
 \text{PAYMENT} &= (\text{Work} + \text{Practice Expense} + \text{Malpractice}) \times \text{CF} \\
 &= [(\text{RVU}_W \times \text{GPCI}_W) + (\text{RVU}_{PE} \times \text{GPCI}_{PE}) + (\text{RVU}_M \times \text{GPCI}_M)] \times \text{CF}
 \end{aligned}$$

Where:

RVU_W	=	Physician work relative value units for the service
RVU_{PE}	=	Practice expense relative value units (overhead costs) for the service
RVU_M	=	Malpractice expense relative value units for the service
GPCI_W	=	GPCI value reflecting geographic variation in physician work applicable in the fee schedule area
GPCI_{PE}	=	GPCI value for practice expense applicable in the fee schedule area
GPCI_M	=	GPCI value for malpractice expense applicable in the fee schedule area
CF	=	Conversion factor (dollar denominated)

Source: Federal Register, November 2, 1999; Wolper 1999.

Work, practice expense, and malpractice RVUs are multiplied by their respective Hawaiian geographic practice cost indices (GPCIs) to get the adjusted relative value units. The sum of these relative unit values was then multiplied by a conversion factor (CF) chosen by the user (for the purpose of this study, the Medicare CF of \$36.6137 was used) (see Table 11).

Table 11.

Sample RBRVS (Professional) Charge Calculation Using CPT 52334/Hawaii GPCIs

Formula

$$\text{Payment} = [(\text{RVU work} \times \text{GPCI work}) + (\text{RVU practice expense} \times \text{GPCI practice expense}) + (\text{RVU malpractice expense} \times \text{GPCI malpractice expense}) \times \text{CF}]$$

$$\text{Where: CF} = \$36.6137$$

$$\text{Payment} = [(4.83 \times 0.998) + (2.61 \times 1.183) + (.28 \times .954) \times \$36.6137]$$

$$\text{Payment} = \$299.32 \text{ (is the professional fee charged for providing CPT 52334 in Hawaii)}$$

Total Medicare OPPS billing rate for the CPT 52334, Cystourethroscopy, is the sum of the adjusted APC rate (\$923.30) constituting the facility portion of the total fee, and the adjusted RBRVS charge (\$299.32) constituting the physician charge, for a total OPPS charge of \$1222.62.

Comparison of Billing Methodologies

Each billing methodology rate was compared using the TAMC Urology clinic's VAB patient encounters for July through December 2000. This was done using a Microsoft Excel spreadsheet. The criteria used to determine the most optimal outpatient billing methodology

for the TAMC Urology clinic for FY 2001: 1) the methodology should provide rates that are comparable to, if not better than, the local Hawaiian usual, customary, and reasonable rates which for this study were defined as the MEDICODE 75th percentile, 2) the methodology should provide rates that are close to, without going over, the relevant MEPRS (marginal) cost of providing the service(s), 3) the methodology should account for local and geographic healthcare market conditions, and lastly, 4) the methodology would optimally be based upon civilian industry outpatient billing guidelines that utilize itemized and standardized procedural codes.

Determination of Urology Clinic FY 2001 Billing Rates

Once the optimal outpatient billing methodology was identified by comparing the results of the sensitivity analysis between billing methodologies and giving consideration to the criteria listed above, proposed FY 2001 billing rates for all TAMC Urology clinic services by CPT/HCPCS code were developed (see Appendix F).

Results

Results of the study were as expected: 1) full MEPRS charges were the highest of all billing methodologies examined, 2) relevant MEPRS charges were approximately 25 percent less than full MEPRS (accounting for less direct and indirect facility costs than full MEPRS), 3) both federal Interagency and full Third-Party charges were each less than relevant MEPRS (11 percent and 6 percent respectively), both of which are set according to national rates that don't account for geographic or local market conditions, 4) local usual, customary and reasonable charges (MEDICODE UCR) reflected a wide range of charges with the 75th percentile being considered the most "competitive" to which TAMC was compared; these were approximately 39 percent less than TAMC relevant MEPRS charges, and lastly 5) the Medicare

OPPS methodology (RBRVS + APC) was less than relevant MEPRS (40 percent less) and within one percent of the discount offered by using the MEDICODE 75th percentile. MEDICODE 50th and 95th percentiles were both respectively too low or too high to be considered, and therefore will not be discussed further. A full comparison of all billing methodologies is provided (see Appendix E).

Veteran Administration beneficiaries constituted 509 TAMC Urology clinic outpatient visits and APVs during the months of July through December 2000 (an average of 85 outpatient clinic visits and five APVs per month). Ambulatory procedure visits (APVs) for that time period, a total of 13, constituted only 2.55 percent of the total VAB Urology clinic encounters. Upon closer examination of the ADS billing and MEPRS coding data, several billing and coding errors, a total of eighteen entries over the six-month time period (3.5 percent), occurred constituting a significant monetary difference in the total monthly full MEPRS, relevant MEPRS, Interagency, and full Third-party charges. Upon correction of erroneous MEPRS codes and procedure charges, corrected APVs constituted 6.9 percent of the total VAB Urology clinic encounters and an average difference of \$34,104.05 in charges across each of the four federal billing methodologies (full MEPRS, relevant MEPRS, Interagency, and full Third-Party). Examples of billing and coding errors included miscoding APVs as clinic visits, and vice versa, coding clinic visits as APVs, which triggered erroneous charges per encounter (see Table 12).

Table 12.

Original and Corrected Full MEPRS, Relevant MEPRS, Interagency, and Full Third-PartyVAB Urology Clinic Visit and APV Costs

Month	Number of Clinic Visits	Number of APVs	FY00 Full MEPRS Cost	FY00 Relevant MEPRS Cost	FY00 Interagency (IR) Cost	FY00 Full Third - Party Cost
July	44	1	\$ 17,187.74	\$ 12,396.00	\$ 10,936.00	\$ 11,560.00
Corrected	43	2	\$ 18,804.13	\$ 14,082.00	\$ 12,467.00	\$ 13,175.00
August	80	3	\$ 33,569.66	\$ 24,812.00	\$ 21,940.00	\$ 23,188.00
Corrected	73	10	\$ 44,884.39	\$ 36,614.00	\$ 32,657.00	\$ 34,493.00
September	110	3	\$ 40,717.78	\$ 28,580.00	\$ 25,148.00	\$ 25,588.00
Corrected	108	5	\$ 47,183.34	\$ 35,324.00	\$ 31,272.00	\$ 33,048.00
October	94	1	\$ 34,489.24	\$ 24,296.00	\$ 21,386.00	\$ 22,610.00
Corrected	88	7	\$ 44,187.58	\$ 34,412.00	\$ 30,572.00	\$ 32,300.00
November	76	3	\$ 30,569.15	\$ 24,274.00	\$ 19,573.00	\$ 20,689.00
Corrected	75	4	\$ 33,801.93	\$ 27,646.00	\$ 22,635.00	\$ 23,919.00
December	92	2	\$ 35,759.60	\$ 25,744.00	\$ 22,708.00	\$ 24,004.00
Corrected	91	3	\$ 37,375.99	\$ 27,430.00	\$ 24,239.00	\$ 25,619.00
Total	496	13	\$ 192,293.17	\$ 140,102.00	\$ 121,691.00	\$ 127,639.00
Corrected	478	31	\$ 226,237.36	\$ 175,508.00	\$ 153,842.00	\$ 162,554.00
Delta	18	18	\$ 33,944.19	\$ 35,406.00	\$ 32,151.00	\$ 34,915.00

Average monthly charges for each billing methodology were then determined based on the corrected ADS and MEPRS data (see Table 13) and then multiplied by the average number of TAMC Urology clinic VAB clinic visits and APVs for the six month time period to project the average annual charges, by billing methodology, for a twelve month time period based on 2000 rates (see Table 14).

Table 13.

2000 Average Monthly TAMC Urology Clinic VAB Clinic Visit and APV Charges

	Full MEPRS	Relevant MEPRS	Interagency (IR)	Full Third Party	MEDICODE 50th Percentile	MEDICODE 75th Percentile	MEDICODE 95th Percentile	RBRVS + APC
Clinic Visit	\$346.03	\$238	\$209	\$221	\$101.38	\$127.95	\$136.11	\$143.80
APV	\$1,962.42	\$1,924	\$1,740	\$1,836	\$1,177.16	\$1,439.66	\$2,370.68	\$1,146.89

Table 14.

2000 Projected TAMC Urology Clinic VAB Average Annual Clinic Visit and APV Charges

	Full MEPRS	Relevant MEPRS	Interagency (IR)	Full Third-Party	MEDICODE 50th Percentile	MEDICODE 75th Percentile	MEDICODE 95th Percentile	RBRVS + APC
Avg. Monthly Charges* Clinic Visits	\$27,682.40	\$19,040	\$16,720	\$17,680	\$8,110.40	\$10,236	\$10,888.80	\$11,504
APVs	\$9,812.10	\$9,620	\$8,700	\$9,180	\$5,885.80	\$7,198.30	\$11,853.40	\$5,734.45
Total	\$37,494.50	\$28,660	\$25,420	\$26,860	\$13,996.20	\$17,434.30	\$22,742.20	\$17,238.45
Avg. Annual Charges	\$449,934	\$343,920	\$305,040	\$322,320	\$167,954.40	\$209,211.60	\$272,906.40	\$206,861.40

Note. * Average Monthly Charges are based upon the mean number of TAMC Urology clinic visits (80) and mean number of APVs (5) for the period July through December 2000 multiplied by the average charges per visit for each billing methodology (see Table 13).

Corrected average APV charges constitute between 26 to 52 percent of the total reimbursable charges for each billing methodology. The results of the projected average annual charges for TAMC Urology clinic VAB outpatient encounters highlights the variability in potential recoverable third-party revenues. An example of that variability is the difference

between the Medicare OPPS methodology (projected annual charges of \$206,861.40) and the Relevant MEPRS charges (\$343,920), a difference of \$137,058.60 a year.

Discussion

Does TAMC need the VA workload? As stated earlier in the Methods section (calculation of TAMC Urology clinic full MEPRS charges), TAMC had 6,454 Urology clinic outpatient encounters in FY 2000, of which 509 were VABs (.91 percent) and would have potentially accounted for \$343,920 of third-party collection reimbursables (based on projected relevant MEPRS charges). These numbers suggest that TAMC would not lose a considerable amount of workload (though possibly a significant number in the over-65 demographic, which could affect GME). Based on projected relevant MEPRS charges, Tripler VAB Urology clinic encounters would constitute 1.43 percent of the FY 2000 total third-party reimbursables (which was \$24 million). The significance of the loss of these revenues can be magnified when applied over the full spectrum of VA outpatient services that may be affected should the VA chose to seek services elsewhere due to perceived inequitable outpatient service charges.

Federal outpatient billing methodologies (MEPRS, Interagency, and Third-Party) are higher than what the VA can seek on the local economy by as much as 40 percent. Federal billing methodologies are significantly higher than what the local market can offer, which would suggest that if TAMC would continue to bill according to either of the four federal billing methodology options, the VA would have a strong business case to seek alternative local sources for outpatient urology services for their beneficiaries. The counterpoint to this assumption is that the VA may find the alternative sources less expensive but would sacrifice economies/efficiencies gained in proximity, beneficiary comfort and satisfaction gained through the utilization of a familiar healthcare platform, and the proven quality of a JCAHO

accredited (with commendation) medical center; these intangibles would have to be considered by the VA should they consider alternative sources of Urology services based solely on probable service discounts.

Local usual, customary, and reasonable charges (MEDICODE) and Medicare OPPS rates are much lower than relevant MEPRS (marginal costs). As stated earlier, if (based on FY 2000 Urology clinic outpatient VAB workload) TAMC should adopt either local MEDICODE rates (at the 75th percentile) or Medicare OPPS (RBRVS + APC), it would have incurred a decrement of approximately \$70 thousand (or 40 percent) of anticipated revenues collected under relevant MEPRS (the current method of TAMC VAB outpatient billing). Due to the fact that reimbursements projected under the MEDICODE 75th percentile and Medicare OPPS are so much lower than TAMC's relevant MEPRS (marginal) costs of providing Urology services to the VA, it is for this reason that no discounts will be discussed.

A possible means to close the gap between TAMC's marginal costs and the MEDICODE and Medicare reimbursements might be through more accurate service (CPT) coding and/or the billing of ancillary services (which is warranted under both MEPRS billing and Medicare OPPS). It is the assumption of TAMC experts in both its Managed Care and Patient Administration Divisions that the majority of TAMC physicians grossly undercode their services. These physicians may be adhering to a pre-existing and outdated CPT billing template that under-reports the intensity, frequency, technical difficulty, or duration of the services provided, which ultimately leads to unrealized revenues due to undercoding. An aggressive training program designed to improve coding accuracy and awareness, routine audits of coding accuracy by organic or external coding experts, and performance based incentives (i.e. revenues returned to those departments who maximize third-party collections

through more accurate coding) are only a few of the means to improve coding accuracy and possibly increase defensible revenues.

Ancillary services provide another cost center from which to possibly increase TAMC third-party revenues and better close the gap between relevant MEPRS charges and Medicare OPPS. Under current Medicare OPPS guidelines, there is only minimal "packaging" under APCs, which means that payments for a procedure or medical visit do not include payment for the related ancillary services, such as laboratory tests or x-rays. These payments, in addition to the clinic and ambulatory procedure visit charges, better represent the actual costs TAMC incurs in the provision of services to the VA, and should be included in the total encounter charges.

Conclusion/Recommendations

Medicare OPPS is the optimal outpatient billing methodology for the TAMC Urology clinic to utilize in FY 2001 for several reasons. First, TAMC benefits from providing services to VABs because TAMC needs the reimbursements. DoD resources and funding are becoming more and more limited, therefore, TAMC must maximize available third-party reimbursements (including those generated by VAB utilization of TAMC services) in order to bolster reduced annual funding. Medicare OPPS offers a significant discount to the VA for outpatient services compared to the current method of outpatient billing (relevant MEPRS); the VA should realize the benefits of continued business with TAMC and not be inclined to seek alternative sources of Urology services.

Second, Medicare OPPS is the current civilian industry standard for outpatient billing and TAMC needs to be proactively exploring civilian industry outpatient billing standards. By adopting Medicare OPPS in FY 2001, TAMC can take the lead in complying with the 2000

National Defense Authorization Act directive that requires all DoD MTFs to not only implement some form of itemized CPT billing by 2002, but to also charge reasonable and standardized outpatient prices that are competitive with the civilian healthcare industry.

Third, Medicare OPSS supports the spirit of joint VA/DoD partnership guidelines, which advocate the implementation of initiatives that purport a “win-win” situation for both organizations. The VA would benefit from TAMC implementing Medicare OPSS in the form of significantly discounted outpatient service charges and enhanced opportunity to collect third-party reimbursements on those VABs treated at TAMC who possess other forms of valid health insurance.

Fourth, MEPRS average-costing hinders the collection of third-party reimbursements to Tripler and to the VA because MEPRS billing is not detailed enough to meet industry standards for third-party outpatient billing. Medicare OPSS reflects more detailed outpatient cost accounting.

Lastly, even though adopting Medicare OPSS will initially result in reduced revenues compared to relevant MEPRS, resident experts at TAMC actually believe this to be a temporary effect of physicians undercoding services provided to VABs, which will eventually be remedied with training and initiatives designed to improve coding quality. That coupled with charges for ancillary services should at least close the gap between Medicare OPSS charges and relevant MEPRS costs.

This study presents several other research opportunities. It must be determined what types of automation and billing software requirements and/or modifications are necessary to implement Medicare OPSS. It must also be determined what the physician and coder training requirements will be to ensure improved CPT coding and subsequent increases in defensible

revenues. Lastly, a broader study should be conducted to examine the financial impact of implementing Medicare OPPS across the full spectrum of TAMC outpatient services, especially those which constitute the greatest portion of TAMC's third-party reimbursements.

References

AAMC Government Affairs and Advocacy (2000). Issue briefs: Medicare hospital outpatient prospective payment system: proposed rule, AAMC summary and analysis. [Online] Available: <http://www.aamc.org/advocacy/issues/mediacre/outppsum.htm>

Ambulatory Data System (ADS) Coding Guidelines (May 1, 2000). Available: Tri-Service Medical System Support Center Help Desk, phone: 1-800-600-9322.

American Medical Association (2000). Current procedural terminology (CPT) professional edition.

Austin, C. J. & Boxerman, S. B. (1998). Information systems for health services information, fifth edition. Chicago, Illinois: Health Administration Press.

Berman, H. J., Kukla, S. F., & Weeks, L. E. (1994). The financial management of hospitals. Ann Arbor, Michigan: Health Administration Press.

Cooper, D. R., & Schindler, P. S. (1998). Business research methods, sixth edition. Boston, MA: Irwin/McGraw-Hill.

Dickey, N. W. (1998). Medicare: Cures for billing code complexity. Statement of the AMA to the Subcommittee on Human Resources of the House Committee on Government Reform and Oversight. Available: American Medical Association, Public information Office, phone: 1-312-464-5970.

Dudevoir, M. (2000). Resource management overview [slide presentation]. Tripler Army Medical Center. Honolulu, HI: Resource Management Division.

Durkee, R. P. (2000). [Graduate Management Project] Determination of TAMC outpatient service and ambulatory procedure charges to the VA for FY 2000.

Available: U.S. Army Medical Department Center and School, MCCA-HRA (Rene Pryor), Fort Sam Houston, Texas.

Federal Register. Medical care collection or recovery, final rule. Department of Veterans Affairs. Vol. 64, No. 80, April 27, 1999, 22676. 38 CFR Part 17, RIN 2900-AJ30.

Federal Register. Medicare program; revisions to payment policies under the physician fee schedule for calendar year 2000, final rule. Department of Health and Human Services. Vol. 64, No. 211, 59379-59428. November 2, 1999. 42 CFR Parts 410, 411, 414, etc.

Federal Register. Collection from third party payers of reasonable costs of healthcare services, final rule. Office of the Assistant Secretary of Defense (Health Affairs), DoD. Vol. 65, No. 32. February 16, 2000, 7724 – 7732. 32 CFR Part 220 RIN 0790-AG51.

Federal Register. Medicare program; prospective payment system for hospital outpatient services, final rule. Department of Health and Human Services. Vol. 65, No. 68. April 7, 2000. 42 CFR Parts 409, 410, 411, 412, 413, 419, 424, 489, 498, and 1003. RIN 0938-AI56.

Gapenski, L. C. (1998). Healthcare finance: An introduction to accounting and management. Illinois: Health Administration Press.

Getzen, T. E. (1997). Health economics: Fundamentals and flow of funds. New York: John Wiley & Sons, Inc.

Hazzard, B. (2000). DoD Medical and Dental Rates. [On-Line] Available: http://www.tricare.osd.mil/ebc/rm_home/fai/ubo

Health Care Financing Administration . (March 2000). Hospital outpatient services prospective payment system (PPS) background. Program Memorandum Intermediaries, Transmittal A-00-09, Change Request 1012. [On-Line] Available:
<http://www.hcfa.gov/facts/fs0004b.htm>

Health Care Financing Administration . (April 2000). Medicare hospital outpatient payment system. HCFA Press Office. [On-Line] Available:
<http://www.hcfa.gov/facts/fs0004b.htm>

Health Resource Sharing and Emergency Operations Act (1983). Pub. L. No. 97-174, 96 Stat. 71.

Ireland (1998). MEPRS management improvement initiative [information paper]. Available: U.S. Army Medical Command, 2050 Worth Rd., Fort Sam Houston, TX, 78234-6000.

Kongstvedt, P. R. (1997). Essentials of managed health care, second edition. Gaithersburg, MD: Aspen Publication.

Layman, R. (2000). Uniform Billing Office. [On-Line] Available:
http://www.tricare.osd.mil/ebc/rm_home/fai/ubo

MEDCOM MOU (August 1, 1997). Joint Venture Operations. Available: Headquarters, U.S. Army Medical Command, Directorate of Clinical Operations, Skyline Six, Suite, 5111 Leesburg Pike, Falls Church, VA 22041-3200.

Medicode (2000). Customized fee analyzer: Customized report for TAMC, April 28, 2000. Salt Lake City, UT: Ingenix Publishing Group.

Microsoft Corporation (1994). Microsoft excel user's guide, version 5.0.

Office of the Under Secretary of Defense (Comptroller) (2000). DoD Financial Management Regulation (DoD 7000.14) Volume 11A, Chapter 1. [On-Line]

Available: <http://www.dtic.mil/comptroller/fmr/>

Parvis, S. R. (2000). APC reference manual: official guidelines for Medicare's outpatient prospective payment system. Reston, VA: St. Anthony Publishing.

Patient Administration Systems and Biostatistics Activity (2000). Worldwide workload report user's manual. [On-Line] Available: <http://pasba.amedd.army.mil>

PFSS (2000). The RBRVS: History of the RBRVS. [On-Line] Available: <http://www.pfss.com>

RAND Health (2000). Research Highlights: Effects of Medicare's Prospective Payment System on the Quality of Hospital Care. [On-Line] Available: <http://www.rand.org/publications/RB/RB4519/>

Sears, H. J. T. (December 21, 1999). Memorandum for Surgeons General
Subject: Policy for implementation of the MEPRS/Expense Assignment System (EAS) data validation and reconciliation. Available from Office of the Assistant Secretary of defense, Health Affairs, Skyline Five, Suite 810, 5111 Leesburg Pike, Falls Church, VA 22041-3200.

St. Anthony's Publishing (2000). Complete guide to APCs. Reston, VA: Ingenix Publishing Group.

Sultz, H. A. & Young, K. M. (1999). Health care USA: Understanding its organization and delivery, second edition. Gaithersburg, MD: Aspen Publishers, Inc.

Tricare Management Activity, Uniform Business Office (October 2000). [On-Line] Available: http://www.tricare.osd.mil/ebc/rm_home/fai/ubo/

VA/DoD Health Care Resource Sharing Guidelines (1983). Memorandum of Understanding Between the Veterans Administration and the Department of Defense. Available: U.S. Army Medical Command, 2050 Worth Rd., Fort Sam Houston, TX, 78234-6000.

VA/DoD Health Care Resource Sharing Reimbursement Guidelines (1989). Available: Office of the Secretary of Defense (Health Affairs), Washington, D.C., 20301-1200.

VA/DoD Healthcare Financial Management Committee Guiding Principles (1997). Available: Office of the Secretary of Defense (Health Affairs), Washington, D.C., 20301-1200.

VHA Directive 99-050, November 10, 1999. Department of Veterans Affairs, Veterans Health Administration, Washington D.C. Interagency Billing Rates for FY 2000

Wolper, L. F. (1999). Health care administration: Planning, implementing, and managing organized deliver systems, third edition. Gaithersburg, MD: Aspen Publishers, Inc.

Zelman, W. N., McCue, M. J., & Millikan, A. R. (1998). Financial management of health care organizations: An introduction to fundamental tools, concepts, and applications. Malden, MA: Blackwell Publishers.

Zwolak, R. M. (1997). Resource-based relative value scale (RBRVS), coding, and Medicare reimbursement. Seminars in Vascular Surgery, 10-2, 119-127.

Appendix A

HCFA Recommended CPT and HCPCS Level II Modifiers for Outpatient Services

Modifier	Description
-25	Significant, separately identifiable evaluation and management service by the same physician, on the same day of the procedure or other service
-50	Bilateral procedure
-52	Reduced service, used in the hospital outpatient department to identify a procedure not requiring anesthesia that was terminated after the patient was prepared for the procedure (including any sedation)
-58	Staged or related procedure or service by the same physician during the post operative period
-59	Distinct procedural service
-73	Discontinued outpatient hospital/ASC procedure prior to the administration of anesthesia
-74	Discontinued outpatient hospital/ASC procedure after the administration of anesthesia
-76	Repeat procedure by the same physician
-77	Repeat procedure by another physician
-78	Return to the operating room for a related procedure during the post operative period
-79	Unrelated procedure or service by the same physician during the post operative period
-91	Repeat clinical diagnostic laboratory test
-E1	Upper left, eyelid
-E2	Lower left, eyelid
-E3	Upper right, eyelid
-E4	Lower right, eyelid
-FA	Left hand, thumb
-F1	Left hand, second digit
-F2	Left hand, third digit
-F3	Left hand, fourth digit
-F4	Left hand, fifth digit
-F5	Right hand, thumb
-F6	Right hand, second digit
-F7	Right hand, third digit
-F8	Right hand, fourth digit
-F9	Right hand, fifth digit
-LC	Left circumflex coronary artery
-LD	Left anterior descending coronary artery
-LT	Left side
-QM	Ambulance service provided under arrangement by a provider of services
-Q	Ambulance service furnished directly by provider of services
-RC	Right coronary artery
-RT	Right side
-TA	Left foot, great toe
-T1	Left foot, second digit
-T2	Left foot, third digit
-T3	Left foot, fourth digit
-T4	Left foot, fifth digit
-T5	Right foot, great toe
-T6	Right foot, second digit
-T7	Right foot, third digit
-T8	Right foot, fourth digit
-T9	Right foot, fifth digit

Source: *Federal Register*, April 7, 2000; *St. Anthony's Publishing*, 2000

Appendix B

HFMC Guidance: Cost Components to be Included In Local Sharing Agreements

1. Direct Costs: Direct costs included in the finished product, direct costs used only in the manufacture of the product or service, or direct costs easily traceable to the product or service. This includes:
 - a. Direct Labor: Gross cost of labor directly associated with the product or service.
 - b. Direct Materials: Consumables that become used in the product or service.
 - c. Maintenance: Repairs made to equipment used directly in the product or service.
 - d. Depreciation Expense: Costs directly associated with the wear and tear of equipment used to produce the service or product.
2. Indirect Costs/General Administrative Costs: Costs at the host facility that are unrelated to the direct production of the activity, good or service that must be incurred but cannot be traced to the units produced or service provided and should be assigned to cost objects using an allocation method. Examples include:
 - a. Indirect Labor, indirect materials, operating and maintenance costs, depreciation expenses, and utilities.
3. Costs to be Excluded: Are general management support costs which are comprised of resources required for general high-level management functions such as planning and establishing policies related to the organization or oversight of the organization. These costs include:
 - a. Cost of the secretary's office, other headquarters functions, and other National Support Centers.

Source: Durkee, 2000; HFMC, 1997

Appendix C

List of Relevant Standard Expense Element Codes

SEEC Code	Description
11.10	CIVILIAN PERSONNEL COMPENSATION
11.16	BORROWED CIVILIAN LABOR
11.50	FOREIGN NATIONAL DIRECT HIRE
11.70	READINESS LABOR
11.71	RESERVE MILITARY PERSONNEL COMPENSATION
11.72	MILITARY PERSONNEL COMPENSATION
11.74	BORROWED MILITARY LABOR
12.10	CIVILIAN BENEFITS
12.20	MILITARY BENEFITS
13.00	FORMER PERSONNEL BENEFITS
21.00	TRAVEL AND TRANSPORT OF PERSONS
21.15	CIVILIAN PCS TRAVEL
22.00	TRANSPORTATION OF THINGS
23.05	RENTAL PAYMENTS
23.10	COMMUNICATION
23.15	PURCHASED UTILITIES
24.00	PRINTING AND REPRODUCTION
25.05	AMC MISSION ACCOUNT
25.10	C-9 CONTRACT LOGISTICS SUPPORT
25.15	PURCHASE MAINTENANCE EQUIPMENT
25.20	LAUNDRY AND DRY CLEANING
25.25	CUSTODIAL SERVICES
25.30	EDUCATION AND TRAINING
25.36	FOREIGN NATIONAL INDIRECT HIRE
25.40	RECURRING REAL PROPERTY MAINTENANCE
25.45	DESIGN ARCHITECTURAL & ENGINEERING SVCS
25.50	CONTRACT HEALTH CARE
25.55	SUPP AND COOP HEALTH CARE
25.60	UNIFORMED SVCS TREATMENT FACILITIES
25.62	CIVILIAN CONTRACT LABOR
25.63	BORROWED CIVILIAN CONTRACT LABOR
25.65	OTHER MISC CONTRACTS
25.70	OFFICIAL ARMY REPRESENTATION
25.75	CHAMPUS
26.05	VAVPOL
26.10	FUELS
26.15	MEDICAL/DENTAL SUPPLIES
26.20	OTHER SUPPLIES
26.25	PHARMACY SUPPLIES
31.10	INFORMATION PROCESSING EQUIPMENT
31.15	MEDICAL/DENTAL EQUIPMENT
31.20	OTHER EQUIPMENT
31.30	DEPRECIATION (EQUIPMENT)
32.00	LANDS AND STRUCTURES
32.10	CONSTRUCTION/REPAIR PROJECTS
41.00	GRANTS, SUBSIDIES, & CONTRIBUTIONS
41.05	GRANTS AND FIXED COSTS
41.10	FREE RECEIPTS/UNFUNDED/NON-REIMBURSABLES
41.15	FOREIGN NATIONAL FREE RECEIPT
42.00	INSURANCE CLAIMS AND INDEMNITIES
43.00	INTEREST AND DIVIDENDS
44.00	REFUNDS

Source: (Durkee, 2000)

Appendix D

APC Status Indicators: How Various Services Are Treated Under the Hospital OPPS

Indicator	Service	Status
A	Pulmonary Rehabilitation Clinical Trial	Not Paid Under OPPS
C	Inpatient Procedures	Admit Patient; Bill as Inpatient
A	Durable Medical Equipment, Prosthetics and Orthotics	DMEPOS Fee Schedule
E	Non-Covered Items and Services	Not Paid Under OPPS
A	Physical, Occupational, and Speech Therapy	Rehabilitation Fee Schedule
A	Ambulance	Ambulance Fee Schedule
A	EPO and ESRD Patients	National Rate
A	Clinical Diagnostic Laboratory Services	Laboratory Fee Schedule
A	Physician Services for ESRD Patients	Not Paid Under OPPS
N	Incidental Services, Pakaged Into APC Rate	Packaged
P	Partial Hospitalization	Paid Per Diem APC
S	Significant Procedure, Not Discounted When Multiple	Paid Under OPPS
T	Significant Procedure, Multiple Procedure Reduction Applies	Paid Under OPPS
V	Visit to Clinic or Emergency Department	Paid Under OPPS
X	Ancillary Service	Paid Under OPPS
F	Acquisition of Corneal Tissue	Paid at Reasonable Cost
G	Current Drug/Biological Pass-Through	Additional Payment

Source: Federal Register, 42 CFR Parts 409, et al., April 7, 2000, p. 74.

Appendix E
TAMC Urology Clinic Outpatient Billing Methodology Comparison

Month	Number of Clinic Visits (BIA)	Number of Ambulatory Procedure Visits (BBIS)	MEDICODE Cost										Delta: (RBRVS+APC) Relevant MEPRS	Delta: (RBRVS+APC) - MEDICODE 75th Percentile
			FY00 Full MEPRS Cost	FY00 Relevant MEPRS Cost	FY00 Interagency (lit) Cost	FY00 Full Third Party Cost	Local 50th Percentile	Local 75th Percentile	Local 95th Percentile	FY00 RBRVS + APC Cost				
July (corrected)	44	1	\$ 17,187.74	\$ 12,396.00	\$ 10,936.00	\$ 11,560.00	\$ 7,332.00	\$ 9,160.00	\$ 11,970.00	\$ 10,111.46			\$ (2,264.54)	\$ 951.46
	43	2	\$ 16,004.13	\$ 14,082.00	\$ 12,467.00	\$ 13,175.00	NA	NA	NA	NA			\$ (3,970.54)	NA
August (corrected)	80	3	\$ 33,569.66	\$ 24,812.00	\$ 21,940.00	\$ 23,188.00	\$ 17,298.00	\$ 21,137.00	\$ 27,746.00	\$ 18,973.47			\$ (5,838.53)	\$ (2,163.53)
	73	10	\$ 44,804.39	\$ 36,614.00	\$ 32,657.00	\$ 34,493.00	NA	NA	NA	NA			\$ (17,640.53)	NA
September (corrected)	110	3	\$ 40,717.78	\$ 28,580.00	\$ 25,148.00	\$ 25,588.00	\$ 18,827.00	\$ 23,634.00	\$ 30,885.00	\$ 24,000.09			\$ (4,579.91)	\$ 346.09
	108	5	\$ 47,183.34	\$ 35,324.00	\$ 31,272.00	\$ 33,048.00	NA	NA	NA	NA			\$ (11,323.91)	NA
October (corrected)	94	1	\$ 34,489.24	\$ 24,296.00	\$ 21,386.00	\$ 22,610.00	\$ 16,671.00	\$ 20,106.00	\$ 27,062.00	\$ 17,896.07			\$ (6,399.93)	\$ (2,209.93)
	88	7	\$ 44,187.58	\$ 34,412.00	\$ 30,572.00	\$ 32,300.00	NA	NA	NA	NA			\$ (16,515.93)	NA
November (corrected)	76	3	\$ 30,569.15	\$ 24,274.00	\$ 19,573.00	\$ 20,689.00	\$ 12,722.00	\$ 16,021.00	\$ 20,970.00	\$ 16,235.24			\$ (6,036.76)	\$ 214.24
	75	4	\$ 33,801.93	\$ 27,646.00	\$ 22,635.00	\$ 23,910.00	NA	NA	NA	NA			\$ (11,410.76)	NA
December (corrected)	92	2	\$ 35,759.60	\$ 25,744.00	\$ 22,708.00	\$ 24,004.00	\$ 12,101.00	\$ 15,709.00	\$ 20,312.00	\$ 17,074.31			\$ (8,669.69)	\$ 1,365.31
	91	3	\$ 37,375.99	\$ 27,430.00	\$ 24,239.00	\$ 25,619.00	NA	NA	NA	NA			\$ (10,355.69)	NA
Total	496	13	\$ 192,293.17	\$ 140,102.00	\$ 121,691.00	\$ 127,639.00	\$ 84,951.00	\$ 105,767.00	\$ 138,553.00	\$ 104,290.64			\$ (35,811.35)	\$ (1,496.36)
Total (corrected)	470	31	\$ 228,237.30	\$ 175,508.00	\$ 153,842.00	\$ 162,554.00	NA	NA	NA	NA			\$ (71,217.36)	NA

PROPOSED TAMC UROLOGY CLINIC 2000/2001 REIMBURSEMENT RATES		As of 21 FEBRUARY 2001						
CPT CODE	DESCRIPTION	CY00 ADJ RBRVS	CY00 ADJ APC	CY00 ADJ RBRVS + APC	CY01 ADJ RBRVS	CY01 ADJ APC	CY01 ADJ RBRVS + APC	Delta
PROCEDURE CODES								
00860	Lower abdomen, extraperitoneal (bladder)						\$130.00 hr	\$130.00 h
00862	Renal procedures						\$130.00 hr	\$130.00 h
00873	ESWL						\$130.00 hr	\$130.00 h
00910	Anesthesia for transurethral procedures, other						\$130.00 hr	\$130.00 h
00912	TURBT						\$130.00 hr	\$130.00 h
00920	Male external genitalia						\$130.00 hr	\$130.00 h
00926	Radical orchiectomy						\$130.00 hr	\$130.00 h
11420	Excision, benign lesion, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; lesion diameter 0.6 to 1.0 cm	\$64.05	\$211.16	\$275.21	\$71.87	\$220.60	\$292.47	17.26
11421	Excision, benign lesion, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; lesion diameter 0.6 to 1.0 cm	\$89.20	\$211.16	\$300.36	\$99.85	\$220.60	\$320.25	19.89
11422	Excision, benign lesion, except skin tag (unless listed elsewhere), scalp, neck, hands, feet, genitalia; lesion diameter 0.6 to 1.0 cm	\$101.85	\$211.16	\$313.02	\$112.98	\$220.60	\$333.58	20.57
11980	Subq hormone pellet implant (estradiol/testoster)	\$82.61	\$0.00	\$82.61	\$87.69	\$57.35	\$145.04	62.43
50390	Aspiration and/or injection of renal cyst or pelvis by needle	\$125.96	\$285.60	\$411.56	\$121.11	\$298.36	\$419.47	7.91
50392	Introduction of intracatheter or catheter into renal pelvis	\$203.85	\$286.64	\$490.49	\$201.60	\$299.45	\$501.05	10.56
50393	Introduction of ureteral catheter or stent into ureter	\$253.32	\$286.64	\$539.96	\$249.16	\$299.45	\$548.61	8.65
50394	Injection procedure for pyelography through nephrostomy	\$46.58	\$0.00	\$46.58	\$45.81	\$0.00	\$45.81	(0.77)
50395	Introduction of guide into renal pelvis and/or ureter	\$226.80	\$286.64	\$513.45	\$213.43	\$299.45	\$512.88	(0.57)
50396	Manometric studies through nephrostomy/pyelostomy tube	\$104.20	\$205.35	\$309.55	\$118.46	\$214.52	\$332.98	23.43
50398	Change of nephrostomy or pyelostomy tube	\$76.67	\$266.06	\$342.72	\$81.48	\$277.95	\$359.43	16.70
50551	Renal endoscopy through est nephro/pyelostomy	\$308.06	\$577.52	\$885.59	\$312.75	\$603.33	\$916.07	30.49
50553	Renal endoscopy through est nephrostomy w/ureteral cath	\$313.57	\$577.52	\$891.09	\$328.75	\$603.33	\$932.08	40.99
50555	Renal endoscopy through est nephrostomy w/biopsy	\$408.15	\$577.52	\$985.67	\$391.43	\$603.33	\$994.76	9.09
50557	Renal endoscopy through est nephrostomy w/fulguration	\$413.78	\$577.52	\$991.31	\$395.65	\$603.33	\$998.98	7.67
50561	Renal endoscopy through est nephrostomy w/removal of foreign body/calculus	\$467.00	\$577.52	\$1,044.52	\$450.25	\$603.33	\$1,053.58	9.06
50590	Lithotripsy, extracorporeal shock wave	\$687.73	\$2,466.34	\$3,154.08	\$650.84	\$2,576.56	\$3,227.40	73.32
50684	Injection procedure for ureterography	\$46.06	\$0.00	\$46.06	\$44.93	\$0.00	\$44.93	(1.13)
50688	Change of ureterostomy tube	\$84.35	\$124.58	\$208.93	\$108.05	\$130.15	\$238.20	29.27
50690	Injection procedure for visualization of ileal conduit and/or ureteropyelography	\$59.64	\$0.00	\$59.64	\$63.52	\$0.00	\$63.52	3.87
51000	Aspiration of bladder by needle	\$46.71	\$205.35	\$252.05	\$45.59	\$214.52	\$260.11	8.05
51005	Aspiration of bladder; by trocar or intracath	\$58.69	\$114.57	\$173.26	\$58.86	\$119.69	\$178.55	5.29
51010	Aspiration of bladder; by trocar or intracath w/insertion of suprapubic cath	\$196.88	\$205.35	\$402.23	\$214.48	\$214.52	\$429.00	26.77

BEST AVAILABLE COPY

PROPOSED TAMC UROLOGY CLINIC 2000/2001 REIMBURSEMENT RATES		As of 21 FEBRUARY 2001						
CPT CODE	DESCRIPTION	CY00 ADJ RBRVS	CY00 ADJ APC	CY00 ADJ RBRVS + APC	CY01 ADJ RBRVS	CY01 ADJ APC	CY01 ADJ RBRVS + APC	Delta
51600	Injection procedure for cystography or voiding urethrocytography	\$45.68	\$0.00	\$45.68	\$48.62	\$0.00	\$48.62	2.94
51610	Injection procedure for retrograde urethrocytography	\$53.54	\$0.00	\$53.54	\$56.77	\$0.00	\$56.77	3.23
51700	Bladder irrigation, simple lavage and/or instillation	\$43.00	\$114.57	\$157.57	\$47.64	\$119.69	\$167.33	9.76
51705	Change of cystostomy tube; simple	\$68.82	\$124.58	\$193.41	\$84.23	\$130.15	\$214.38	20.98
51710	Change of cystostomy tube; complicated	\$92.24	\$124.58	\$216.82	\$108.92	\$130.15	\$239.07	22.25
51715	Endoscopic injection of implant material	\$234.44	\$1,111.76	\$1,346.19	\$224.59	\$1,161.44	\$1,386.04	39.84
51720	Bladder instillation of anticarcinogenic agent	\$95.39	\$205.35	\$300.73	\$103.59	\$214.52	\$318.11	17.38
51725	Simple cystometrogram (CMG)	\$103.11	\$205.35	\$308.46	\$250.56	\$214.52	\$465.08	156.62
51726	Complex cystometrogram	\$121.52	\$205.35	\$326.86	\$225.32	\$214.52	\$439.84	112.98
51736	Simple uroflowmetry (UFR)	\$41.79	\$114.57	\$156.36	\$62.95	\$119.69	\$182.64	26.27
51741	Complex uroflowmetry	\$71.65	\$114.57	\$186.22	\$111.02	\$119.69	\$230.71	44.49
51772	Urethral pressure profile studies (UPP)	\$108.33	\$205.35	\$313.68	\$220.52	\$214.52	\$435.04	121.36
51784	Electromyography studies (EMG) of anal or urethral sphincter	\$105.49	\$114.57	\$220.06	\$175.39	\$119.69	\$295.08	75.02
51792	Stimulus evoked response	\$131.46	\$205.35	\$336.81	\$132.68	\$214.52	\$347.20	10.39
51795	Voiding pressure studies (VP); bladder voiding pressure, any technique	\$127.25	\$114.57	\$241.82	\$227.43	\$119.69	\$347.12	105.30
51797	Intra-abdominal voiding pressure (AP)	\$108.40	\$114.57	\$222.97	\$222.55	\$119.69	\$342.24	119.27
51845	Abdomino-vaginal vesical neck suspension	\$758.61	\$0.00	\$758.61	\$732.29	\$0.00	\$732.29	(26.32)
52000	Cystourethroscopy	\$107.61	\$286.64	\$394.25	\$110.79	\$299.45	\$410.25	15.99
52005	Cystourethroscopy w/ureteral cath	\$160.44	\$577.52	\$737.97	\$148.07	\$603.33	\$751.40	13.43
52007	Cystourethroscopy w/brush biopsy of ureter and/or renal pelvis	\$204.65	\$577.52	\$782.17	\$188.46	\$603.33	\$791.78	9.61
52010	Cystourethroscopy w/ejaculatory duct cath	\$160.90	\$577.52	\$738.43	\$166.38	\$603.33	\$769.71	31.28
52204	Cystourethroscopy w/biopsy	\$164.34	\$577.52	\$741.86	\$150.28	\$603.33	\$753.60	11.74
52214	Cystourethroscopy w/fulguration of trigone, bladder neck, prostatic fossa	\$236.03	\$577.52	\$813.55	\$223.65	\$603.33	\$826.98	13.43
52224	Cystourethroscopy w/fulguration or treatment of MINOR w or w/o biopsy	\$212.42	\$577.52	\$789.94	\$195.68	\$603.33	\$799.01	9.07
52234	Cystourethroscopy w/fulguration and/or resection of; SMALL bladder tumors	\$322.93	\$923.30	\$1,246.23	\$293.56	\$964.56	\$1,258.12	11.89
52235	Cystourethroscopy w/fulguration and/or resection of; MEDIUM bladder tumors	\$391.03	\$923.30	\$1,314.32	\$350.83	\$964.56	\$1,315.39	1.07
52260	Cystourethroscopy w/dilation of bladder for interstitial cystitis w general/conduction anesth	\$229.32	\$577.52	\$806.84	\$226.26	\$603.33	\$829.59	22.75
52265	Cystourethroscopy w/dilation of bladder for interstitial cystitis w/local anesthesia	\$151.05	\$286.64	\$437.69	\$159.36	\$299.45	\$458.81	21.11
52270	Cystourethroscopy w/internal urethrotomy; female	\$236.33	\$577.52	\$813.85	\$214.41	\$603.33	\$817.74	3.89
52275	Cystourethroscopy w/internal urethrotomy; male	\$295.95	\$577.52	\$873.48	\$281.57	\$603.33	\$884.89	11.42
52276	Cystourethroscopy w/direct vision internal urethrotomy	\$337.07	\$577.52	\$914.59	\$310.91	\$603.33	\$914.24	(0.35)

BEST AVAILABLE COPY

PROPOSED TAMC UROLOGY CLINIC 2000/2001 REIMBURSEMENT RATES		As of 21 FEBRUARY 2001						
CPT CODE	DESCRIPTION	CY00 ADJ RBRVS	CY00 ADJ APC	CY00 ADJ RBRVS + APC	CY01 ADJ RBRVS	CY01 ADJ APC	CY01 ADJ RBRVS + APC	Delta
52281	Cystourethroscopy w/calibration and/or dilation of urethral stricture or stenosis	\$155.55	\$577.52	\$733.07	\$157.21	\$603.33	\$760.53	27.46
52282	Cystourethroscopy w/insertion of urethral stent	\$401.06	\$923.30	\$1,324.36	\$382.94	\$964.56	\$1,347.50	23.14
52283	Cystourethroscopy w/steroid injection into stricture	\$206.80	\$577.52	\$784.32	\$209.78	\$603.33	\$813.11	28.79
52285	Cystourethroscopy for treatment of the female urethral syndrome	\$200.32	\$577.52	\$777.84	\$203.06	\$603.33	\$806.39	28.54
52310	Cystourethroscopy w/rem of foreign body/calculus/ureteral stent from urethra/bladder, simple	\$199.23	\$577.52	\$776.75	\$180.10	\$603.33	\$783.43	6.68
52315	Cystourethroscopy w/rem of foreign body/calculus/ureteral stent from urethra/bladder, complex	\$334.69	\$577.52	\$912.22	\$315.73	\$603.33	\$919.06	6.84
52317	Litholapaxy, simple or small	\$453.74	\$923.30	\$1,377.03	\$418.35	\$964.56	\$1,382.91	5.87
52318	Litholapaxy, complicated or large	\$606.49	\$923.30	\$1,529.79	\$565.03	\$964.56	\$1,529.59	(0.20)
52320	Cystourethroscopy w/rem of ureteral calculus	\$329.31	\$923.30	\$1,252.60	\$299.23	\$964.56	\$1,263.78	11.18
52325	Cystourethroscopy w/frag of ureteral calculus	\$441.76	\$923.30	\$1,365.05	\$396.84	\$964.56	\$1,361.40	(3.65)
52330	Cystourethroscopy w/manipulation, w/o remo of ureteral calculus	\$312.97	\$923.30	\$1,236.27	\$299.63	\$964.56	\$1,264.19	27.92
52332	Cystourethroscopy w/insertion of indwelling ureteral stent	\$202.99	\$923.30	\$1,126.28	\$182.63	\$964.56	\$1,147.19	20.91
52334	Cystourethroscopy w/insertion of ureteral guide wire through kidney	\$299.32	\$923.30	\$1,222.62	\$287.41	\$964.56	\$1,251.97	29.35
52335	Cystourethroscopy w/ureteroscopy and/or pyeloscopy	\$378.55	\$923.30	\$1,301.85	Codes deleted in 2001			(1,301.85)
52336	Cystourethroscopy w/removal or manipulation of calculus	\$493.29	\$923.30	\$1,416.58				(1,416.58)
52337	Cystourethroscopy w/lithotripsy	\$570.73	\$923.30	\$1,494.02				(1,494.02)
52338	Cystourethroscopy w/biopsy and/or fulguration of lesion	\$475.62	\$923.30	\$1,398.92				(1,398.92)
52339	Cystourethroscopy w/resection of tumor	\$543.68	\$923.30	\$1,466.97				(1,466.97)
52351	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic	Codes established in 2001			\$355.44	\$603.33	\$958.77	958.77
52352	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic with removal or manipulation of calculus (ureteral catheterization is included)				\$442.31	\$964.56	\$1,406.87	1,406.87
52353	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic with lithotripsy (ureteral catheterization is included)				\$512.43	\$964.56	\$1,476.99	1,476.99
52354	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic with biopsy and/or fulguration of lesion				\$445.87	\$964.56	\$1,410.43	1,410.43
52355	Cystourethroscopy, with ureteroscopy and/or pyeloscopy; diagnostic with resection of tumor				\$522.18	\$964.56	\$1,486.74	1,486.74
52606	Transurethral fulguration for postoperative bleeding occurring after the usual f/up time	\$513.17	\$923.30	\$1,436.46	\$559.53	\$964.56	\$1,524.09	87.63
53000	Urethrotomy or urethrostomy, external; penulous urethra	\$177.43	\$536.87	\$714.30	\$192.52	\$560.86	\$753.38	39.08
53020	Meatotomy, cutting of meatus; except infant	\$101.00	\$536.87	\$637.87	\$102.62	\$560.86	\$663.48	25.61
53060	Drainage of Skene's gland abscess or cyst	\$163.89	\$536.87	\$700.76	\$211.05	\$560.86	\$771.91	71.15
53200	Biopsy of urethra	\$144.93	\$536.87	\$681.79	\$149.20	\$560.86	\$710.06	28.26
53260	Excision or fulguration; urethral polyp, distal urethra	\$186.56	\$536.87	\$723.43	\$210.27	\$560.86	\$771.14	47.71
53265	Excision or fulguration; urethral caruncle	\$209.44	\$536.87	\$746.31	\$222.54	\$560.86	\$783.40	37.09
53600	Dilation of urthral stricture by passage of sound or urethral dilator, male; initial	\$59.65	\$114.57	\$174.22	\$67.09	\$119.69	\$186.78	12.56

PROPOSED TAMC UROLOGY CLINIC 2000/2001 REIMBURSEMENT RATES		As of 21 FEBRUARY 2001						
CPT CODE	DESCRIPTION	CY00 ADJ RBRVS	CY00 ADJ APC	CY00 ADJ RBRVS + APC	CY01 ADJ RBRVS	CY01 ADJ APC	CY01 ADJ RBRVS + APC	Delta
53801	Dilation of urethral stricture by passage of sound or urethral dilator, male; subsequent	\$48.73	\$114.57	\$163.30	\$55.33	\$119.69	\$175.02	11.72
53605	Dilation of urethral stricture or vesical neck by passage of sound or urethral dilator, male, general or conduction (spinal) anesthesia	\$69.92	\$577.52	\$647.45	\$71.43	\$603.33	\$674.75	27.31
53620	Dilation of urethral stricture by passage of filiform and follower, male; initial	\$80.45	\$205.35	\$285.79	\$85.96	\$214.52	\$300.48	14.69
53660	Dilation of female urethra including suppository and/or instillation; initial	\$36.00	\$114.57	\$150.57	\$41.25	\$119.69	\$160.94	10.37
53665	Dilation of female urethra, general or conduction anesthesia	\$43.81	\$536.87	\$580.68	\$43.50	\$560.86	\$604.36	23.68
53670	Catheterization, urethra; simple	\$25.38	\$0.00	\$25.38	\$28.49	\$0.00	\$28.49	3.10
53675	Catheterization, urethra; complicated	\$78.52	\$114.57	\$193.08	\$80.78	\$119.69	\$200.47	7.39
54015	Incision and drainage of penis, deep	\$288.30	\$324.66	\$612.96	\$325.03	\$339.17	\$664.20	51.23
54050	Destruction of lesion(s), penis (eg, condyloma, papilloma, molluscum contagiosum, herpetic vesicle), simple; chemical	\$62.92	\$48.04	\$110.95	\$68.88	\$50.18	\$118.86	7.91
54055	Destruction of lesion(s), penis (eg, condyloma, papilloma, molluscum contagiosum, herpetic vesicle), simple; electrodesiccation	\$81.24	\$186.35	\$267.59	\$98.38	\$194.67	\$293.05	25.46
54057	Destruction of lesion(s), penis (eg, condyloma, papilloma, molluscum contagiosum, herpetic vesicle), simple; laser surgery	\$104.93	\$657.23	\$762.16	\$108.75	\$686.60	\$795.36	33.20
54060	Destruction of lesion(s), penis (eg, condyloma, papilloma, molluscum contagiosum, herpetic vesicle), simple; surgical excision	\$132.41	\$657.23	\$789.63	\$142.62	\$686.60	\$829.22	39.59
54065	Destruction of lesion(s), penis (eg, condyloma, papilloma, molluscum contagiosum, herpetic vesicle), extensive, any method	\$162.70	\$657.23	\$819.93	\$179.31	\$686.60	\$865.92	45.98
54100	Biopsy of penis; cutaneous (separate procedure)	\$102.37	\$343.66	\$446.03	\$108.12	\$359.02	\$467.14	21.11
54105	Biopsy of penis; deep structures	\$200.28	\$553.77	\$754.05	\$221.04	\$578.51	\$799.55	45.50
54115	Removal foreign body from deep penile tissue (eg, plastic implant)	\$463.83	\$324.66	\$788.49	\$508.40	\$339.17	\$847.57	59.08
54161	Circumcision, surgical excision other than clamp, device or dorsal slit; except newborn	\$217.52	\$718.99	\$936.51	\$222.96	\$751.12	\$974.08	37.57
54200	Injection procedure for Peyronie disease	\$52.96	\$205.35	\$258.30	\$56.61	\$214.52	\$271.13	12.83
54220	Irrigation of corpora cavernosa for priapism	\$147.89	\$205.35	\$353.24	\$149.09	\$214.52	\$363.61	10.37
54230	Injection procedure for corpora cavernosography	\$77.31	\$0.00	\$77.31	\$76.81	\$0.00	\$76.81	(0.51)
54231	Dynamic cavernosometry, including intracavernosal injection of vasoactive drugs (eg, papaverine, phentolamine)	\$127.94	\$205.35	\$333.29	\$125.87	\$214.52	\$340.39	7.10
54235	Injection of corpora cavernosa with pharmacologic agent(s) (eg, papaverine, phentolamine)	\$59.79	\$114.57	\$174.36	\$63.68	\$119.69	\$183.37	9.01
54240	Penile plethysmography	\$96.94	\$114.57	\$211.51	\$105.63	\$119.69	\$225.32	13.81
54250	Nocturnal penile tumescence and/or rigidity test	\$128.81	\$205.35	\$334.15	\$215.98	\$214.52	\$430.50	96.34
54450	Foreskin manipulation incl lysis of preputial adhesions and stretching	\$67.63	\$205.35	\$272.97	\$68.51	\$214.52	\$283.03	10.06
54505	Biopsy of testis, incisional (separate procedure)	\$229.92	\$963.94	\$1,193.86	\$245.12	\$1,007.01	\$1,252.13	58.27
54510	Excision of local lesion of testis	\$353.52	\$963.94	\$1,317.46	\$368.20	\$1,007.01	\$1,375.21	57.75
54520	Orchiectomy, simple (incl subcapsular) w or w/o testicular prosthesis, scrotal or inguinal approach	\$399.80	\$963.94	\$1,363.73	\$390.47	\$1,007.01	\$1,397.48	33.75
54600	Reduction of torsion of testis, surgical, w or w/o fixation of contralateral testis	\$465.38	\$963.94	\$1,429.32	\$475.71	\$1,007.01	\$1,482.72	53.40
54620	Fixation of contralateral testis (separate procedure)	\$331.88	\$963.94	\$1,295.62	\$337.02	\$1,007.01	\$1,344.03	48.41
54700	Incision and drainage of epididymis, testis and/or scrotal space (eg, abscess or hematoma)	\$222.25	\$963.94	\$1,186.18	\$257.48	\$1,007.01	\$1,264.47	78.29

BEST AVAILABLE COPY

PROPOSED TAMC UROLOGY CLINIC 2000/2001 REIMBURSEMENT RATES		As of 21 FEBRUARY 2001						
CPT CODE	DESCRIPTION	CY00 ADJ RBRVS	CY00 ADJ APC	CY00 ADJ RBRVS + APC	CY01 ADJ RBRVS	CY01 ADJ APC	CY01 ADJ RBRVS + APC	Delta
54820	Exploration of epididymis, w or w/o biopsy	\$335.10	\$963.94	\$1,299.04	\$354.80	\$1,007.01	\$1,361.82	62.78
54830	Excision of focal lesion of epididymis	\$364.91	\$963.94	\$1,328.85	\$377.99	\$1,007.01	\$1,385.00	56.15
54840	Excision of spermatocele, w or w/o epididymectomy	\$387.09	\$963.94	\$1,351.03	\$383.34	\$1,007.01	\$1,390.35	39.33
55100	Drainage of scrotal wall abscess	\$169.43	\$324.66	\$494.10	\$209.11	\$339.17	\$548.28	54.19
55250	Vasectomy, unilateral or bilateral (separate procedure), including postoperative semen examination(s)	\$218.15	\$963.94	\$1,182.10	\$246.14	\$1,007.01	\$1,253.15	71.05
55400	Vasovasostomy, vasovasorrhaphy	\$587.41	\$963.94	\$1,551.35	\$588.62	\$1,007.01	\$1,595.63	44.28
55500	Excision of hydrocele of spermatic cord, unilateral (separate procedure)	\$396.87	\$963.94	\$1,360.81	\$398.79	\$1,007.01	\$1,405.80	45.00
55530	Excision of varicocele or ligation of spermatic veins for varicocele; (separate procedure)	\$418.20	\$963.94	\$1,382.14	\$412.75	\$1,007.01	\$1,419.76	37.62
55700	Biopsy, prostate; needle or punch, single or multiple, any approach	\$89.53	\$260.79	\$350.32	\$89.80	\$272.44	\$362.24	11.92
55870	Electroejaculation	\$161.10	\$126.70	\$287.80	\$163.24	\$132.36	\$295.60	7.80
55899	Unlisted procedure, male genital system	\$0.00	\$114.57	\$114.57	\$0.00	\$119.69	\$119.69	5.12
58999	Unlisted procedure, female genital system (nonobstetrical)	\$0.00	\$211.16	\$211.16	\$0.00	\$220.60	\$220.60	9.44
74000	Radiologic examination, abdomen; single anteroposterior view	\$33.61	\$41.70	\$75.31	\$34.38	\$43.57	\$77.95	2.64
74420	Urography, retrograde, with or without KUB	\$139.76	\$150.45	\$290.21	\$140.82	\$157.18	\$297.99	7.78
76000	Fluoroscopy (separate procedure), up to one hour physician time, other than 71023 or 71034 (eg. cardiac fluoroscopy)	\$69.30	\$73.90	\$143.20	\$69.36	\$77.20	\$146.57	3.37
76775	Echography, retroperitoneal (eg. renal, aorta, nodes), B-scan and/or real time with image documentation; limited	\$97.10	\$94.49	\$191.60	\$98.83	\$98.72	\$197.55	5.96
76870	Echography, scrotum and contents	\$105.19	\$94.49	\$199.69	\$106.76	\$98.72	\$205.48	5.80
76872	Echography, transrectal;	\$108.32	\$94.49	\$202.81	\$109.89	\$98.72	\$208.61	5.80
76942	Ultrasonic guidance for needle biopsy, radiological supervision and interpretation	\$107.16	\$117.73	\$224.89	\$108.69	\$122.98	\$231.67	6.79
81000	Urinalysis dip stick/tablet reagent; non-auto w/micro	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00
81002	Urinalysis dip stick/tablet reagent; w micro non-auto	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00
90782	Therapeutic, prophylactic or diagnostic injection (specify material injected); subcutaneous or intramuscular	\$5.11	\$50.68	\$55.79	\$5.20	\$52.94	\$58.14	2.34
95028	Intracutaneous (intradermal) tests with allergenic extracts, delayed type reaction, including reading, specify number of tests	\$10.74	\$30.09	\$40.84	\$10.50	\$31.44	\$41.93	1.09
	E&M Codes			\$0.00			\$0.00	0.00
99141	Sedation w/wo analgesia; IV/IM/inhalation	\$57.40	\$0.00	\$57.40	\$54.84	\$0.00	\$54.84	(2.56)
99142	Sedation w/wo analgesia; oral/rectal/intranasal	\$42.81	\$0.00	\$42.81	\$41.57	\$0.00	\$41.57	(1.24)
99201	Office/outpatient visit - prob focused history, prob focused exam, and straightforward medical decision making	\$24.94	\$51.74	\$76.68	\$25.35	\$54.05	\$79.41	2.7
99202	Office/outpatient visit - expanded prob focused history; expanded prob focused exam, and straightforward medical decision making	\$46.11	\$51.74	\$97.85	\$48.96	\$54.05	\$103.02	5.11
99203	Office/outpatient visit - detailed history; detailed exam, and medical decision making of low complexity	\$68.30	\$52.79	\$121.09	\$73.72	\$55.15	\$128.87	7.7
99204	Office/outpatient visit - comprehensive history, comprehensive exam, and medical decision making of moderate complexity	\$101.35	\$87.63	\$188.98	\$108.85	\$91.55	\$200.39	11.4
99205	Office/outpatient visit - comprehensive history, comprehensive exam, and medical decision making of high complexity	\$131.73	\$87.63	\$219.36	\$143.03	\$91.55	\$234.58	15.2

PROPOSED TAMC UROLOGY CLINIC 2000/2001 REIMBURSEMENT RATES		As of 21 FEBRUARY 2001						
CPT CODE	DESCRIPTION	CY00 ADJ RBRVS	CY00 ADJ APC	CY00 ADJ RBRVS + APC	CY01 ADJ RBRVS	CY01 ADJ APC	CY01 ADJ RBRVS + APC	Delta
99211	Office/outpatient visit for eval/mgmt of estab patient w or w/o physician	\$10.46	\$51.74	\$62.20	\$9.92	\$54.05	\$63.97	1.77
99212	Office/outpatient visit - (2 of 3) prob focused history, prob focused exam, and straightforward medical decision making	\$24.07	\$51.74	\$75.81	\$25.35	\$54.05	\$79.41	3.60
99213	Office/outpatient visit - (2 of 3) expanded prob focused history, expanded prob focused exam, and medical decision making of low complexity	\$34.71	\$52.79	\$87.50	\$36.74	\$55.15	\$91.89	4.39
99214	Office/outpatient visit - (2 of 3) detailed history, detailed exam, and medical decision making of moderate complexity	\$55.89	\$87.63	\$143.52	\$59.66	\$91.55	\$151.21	7.69
99215	Office/outpatient visit - (2 of 3) comprehensive history, comprehensive exam, and medical decision making of high complexity	\$89.64	\$87.63	\$177.28	\$95.96	\$91.55	\$187.50	10.23
99241	Office consultation - prob focused history; prob focused exam, and straightforward medical decision making	\$37.34	\$51.74	\$89.08	\$37.26	\$54.05	\$91.31	2.23
99242	Office consultation - expanded prob focused history, expanded prob focused exam, and straightforward medical decision making	\$69.42	\$51.74	\$121.16	\$73.03	\$54.05	\$127.09	5.93
99243	Office consultation - detailed history, detailed exam, and medical decision making of low complexity	\$91.55	\$52.79	\$144.34	\$97.28	\$55.15	\$152.44	8.09
99244	Office consultation - comprehensive history, comprehensive exam, and medical decision making of moderate complexity	\$132.77	\$87.63	\$220.40	\$142.59	\$91.55	\$234.14	13.74
99245	Office consultation - comprehensive history, comprehensive exam, and medical decision making of high complexity	\$177.00	\$87.63	\$264.64	\$189.28	\$91.55	\$280.83	16.20
99271	Confirmatory consultation - prob focused history, prob focused exam, and straightforward medical decision making	\$28.40	\$51.74	\$80.14	\$28.79	\$54.05	\$82.84	2.70
99272	Confirmatory consultation - expanded prob focused history, expanded prob focused exam, and straightforward medical decision making	\$48.90	\$51.74	\$100.64	\$50.87	\$54.05	\$104.92	4.29
99273	Confirmatory consultation - detailed history, detailed exam, and medical decision making of low complexity	\$68.88	\$52.79	\$121.68	\$70.74	\$55.15	\$125.90	4.22
99274	Confirmatory consultation - comprehensive history, comprehensive exam, and medical decision making of moderate complexity	\$96.25	\$87.63	\$183.88	\$100.41	\$91.55	\$191.96	8.08
99275	Confirmatory consultation - comprehensive history, comprehensive exam, and medical decision making of high complexity	\$148.11	\$87.63	\$235.74	\$142.75	\$91.55	\$234.29	(1.45)
99354	Prolong phys serv office/oth outpt w/pt; 1st hr	\$88.86	\$0.00	\$88.86	\$95.17	\$0.00	\$95.17	6.31
99358	Prolong E & M before/after pt contact; 1st hr	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00
G0025	Collagen skin test kit	\$22.52	\$23.76	\$46.28	\$11.48	\$24.82	\$36.30	(9.98)
L8803	Collagen implant, urinary tract per 2.5 cc syringe, includes shipping and necessary supplies	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00
Q0111	Wet mounts including preparations of vaginal, cervical or skin specimens	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.00