



HEALTH AFFAIRS

THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-1200

OCT 3 2003

MEMORANDUM FOR SURGEON GENERAL OF THE ARMY  
SURGEON GENERAL OF THE NAVY  
SURGEON GENERAL OF THE AIR FORCE

SUBJECT: Initial Coding Accuracy Report of Audit Contractor

The purpose of this memorandum is to advise you of initial audit findings from our contractor coding audits of Military Health System (MHS) military treatment facilities (MTFs) (six per Military Department per month) and to solicit your assistance in improving overall quality of clinical coding data throughout the MHS. The first two months' results are from January and February 2003 workload data. Summary audit results and a description of the audit process, including suggested areas for attention, are attached. Detailed audit results have been provided to your Uniform Biostatistical Utility (UBU) Workgroup member.

January and February 2003 Inpatient Findings: The auditor's evaluation indicates an average 82.4 percent accuracy in Diagnosis-Related Group assignment. All 12 MTFs provided records, and 99 percent of the requested records were available for review.

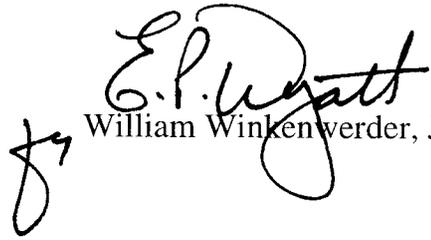
January and February 2003 Outpatient Findings: The auditor's evaluation indicates an average 15 percent coding accuracy of diagnosis, E&M, and CPT-4/HCPC coding. All 12 MTFs provided records, and 67 percent of the requested records were available for review.

January and February 2003 Ambulatory Procedure Findings: The auditor's evaluation indicates an average 3.5 percent coding accuracy of diagnosis, E&M, and CPT-4/HCPC coding. Ten of 12 MTFs provided records, and 80 percent of the requested records were available for review.

The poor Outpatient and Ambulatory Procedure audit results appear to be impacted by the lack of coding of relevant items including significant diagnoses and procedures from patient history, allergies, anesthesia administration, and anesthetic agents. Please see the attached process summary for more detail.

We will continue to update you through your UBU Workgroup membership on future months' results. These first two audit months confirm previous AdvanceMed and Iowa Foundation audit reports – we have a problem, and it requires our immediate attention. It is important to recognize that, to some extent, the systems, processes, tools, and guidelines we have in place are preventing our coders from maximizing their effectiveness. The UBU Workgroup will work to solve these deficiencies.

You should already have received my policy memorandums on medical records custody/retention and coding. We must implement the policy immediately to solve the record availability and coding problems.

  
William Winkenwerder, Jr., MD

Attachments:  
As stated

cc:  
UBU Workgroup Chairman

**MHS Coding and Documentation Study**  
Summary of Results - January 2003

<b>INPATIENT</b>				
Group	Facility Name (DMIS ID)	% Pass		# Records Reviewed (180 Requested)
<b>Overall</b>		<b>89%</b>		<b>150</b>
MTF1	Irwin ACH Ft Riley (0057)	93%		30
MTF2	Reynolds ACH Ft Sill (0098)	80%		30
MTF3	Sheppard (0113)			30
MTF4	Lackland (0117)	87%		30
MTF5	NMC Portsmouth (0124)	87%		30
MTF6	NH Bremerton (0126)	97%		30
Service Branch	Army	87%		60
	Air Force	87%		30
	Navy / Marines	92%		60
<b>% Passing Trend</b>	<b>January 2003 (n=150)</b>	<b>February 2003</b>	<b>March 2003</b>	
<b>Overall</b>	<b>89%</b>			
Army	87%			
Air Force	87%			
Navy / Marines	92%			
<b>OUTPATIENT</b>				
Group	Facility Name (DMIS ID)	% Pass per 1997 E&M Guidelines	% Pass per 1995 E&M Guidelines	# Records Reviewed (180 Requested)
<b>Overall</b>		<b>15%</b>	<b>16%</b>	<b>96</b>
MTF1	Andrews (0066)	11%	17%	18
MTF2	Bethesda (0067)			
MTF3	Offutt (0078)	10%	10%	21
MTF4	NH Cherry Point (0092)	11%	11%	19
MTF5	Wm Beaumont Ft Bliss (0108)	25%	25%	24
MTF6	Dewitt Ft Belvoir (0123)	14%	21%	14
Service Branch	Army	21%	24%	38
	Air Force	10%	13%	39
	Navy / Marines	11%	11%	19
<b>% Passing Trend (per 1995 E&amp;M Guidelines)</b>	<b>January 2003 (n=96)</b>	<b>February 2003</b>	<b>March 2003</b>	
<b>Overall</b>	<b>16%</b>			
Army	24%			
Air Force	13%			
Navy / Marines	11%			
<b>APV</b>				
Group	Facility Name (DMIS ID)	% Pass		# Records Reviewed (180 Requested)
<b>Overall</b>		<b>5%</b>		<b>173</b>
MTF1	NH Pensacola (0038)	0%		28
MTF2	MacDill (0045)	0%		28
MTF3	Scott (0055)	0%		30
MTF4	NH Great Lakes (0056)	0%		30
MTF5	Brooke AMC (0109)	0%		29
MTF6	McDonald ACH Ft Eustis (0121)	32%		28
Service Branch	Army	16%		57
	Air Force	0%		58
	Navy / Marines	0%		58
<b>% Passing Trend</b>	<b>January 2003 (n=173)</b>	<b>February 2003</b>	<b>March 2003</b>	
<b>Overall</b>	<b>5%</b>			
Army	16%			
Air Force	0%			
Navy / Marines	0%			

## MHS Coding and Documentation Study Process Summary

The following summary provides detail regarding the on-going audit of inpatient and professional services coding conducted by TRICARE Management Activity (TMA) Health Program Analysis and Evaluation (HPA&E) directorate. The audit includes a comprehensive review of inpatient/outpatient medical record coding at 55 MTFs within the continental United States (CONUS) and Hawaii, as well as the collection of qualitative data to assess coder qualifications, education, training, and available resources at selected MTFs.

### **Process**

Data collection is done monthly on inpatient and outpatient encounters occurring January 1, 2003 and after. Using a randomized sampling methodology, each month 30 records are requested for review from each of 18 MTFs (N=540), with the selection of MTFs providing for equal representation from each service branch (Army, Air Force, Navy/Marines). Additionally, the methodology evenly stratifies the requested records by 3 encounter types [inpatient, outpatient clinic (including emergency department), and ambulatory procedure visits (APV)], such that 6 MTFs each provide 30 inpatient records, 6 MTFs each provide 30 outpatient clinic records, and 6 MTFs each provide 30 APV records per month.

MTFs are given 21 calendar days to comply with TMA's request for records, though records received later are included in the monthly report, if possible. Records received too late for inclusion in the relevant monthly report are included in subsequent reports.

The auditors code the encounters of interest and compare their findings with inpatient data from the Standard Inpatient Data Record (SIDR) and outpatient/APV data from the Standard Ambulatory Data Repository (SADR).

### **Inpatient Record Coding**

For inpatient records, auditors assign each sample record a principal and up to seven secondary ICD-9-CM diagnosis and procedure codes according to standard 2003 coding guidelines modified with applicable DoD coding standards. Where differences are identified between original coding and recoding, auditors assign customized "match and reason codes" to categorize differences and explain recoding rationale. After completing coding and assigning a DRG for each recoded record, auditors assign a "pass/fail" grade reflecting the adequacy of the assigned codes, based on whether or not the MTF-derived DRG and auditor-derived DRG match.

Please note the methodology used to determine DRG accuracy is not the same as that used by CMS when determining what constitutes accuracy with respect to payment. For example, when more than one condition could be considered the principal diagnosis the auditor may consider it not to pass if the MTF does not optimize sequencing or code

**MHS Coding and Documentation Study**  
Summary of Results - February 2003

<b>INPATIENT</b>				
Group	Facility Name - DMIS ID	% Pass		# Records Reviewed (180 Requested)
<b>Overall</b>		<b>82%</b>		<b>177</b>
MTF1	NH Twentynine Palms - 0030	90%		30
MTF2	Walter Reed AMC - 0037	86%		29
MTF3	96th Med Grp Eglin - 0042	90%		30
MTF4	Langley - 0120	76%		29
MTF5	NH Oak Harbor - 0127	90%		29
MTF6	Brooke AMC - 0109	60%		30
Service Branch	Army	73%		59
	Air Force	83%		59
	Navy / Marines	90%		59
<b>% Passing Trend</b>	<b>January 2003 (n=180)*</b>	<b>February 2003 (n=177)</b>	<b>March 2003</b>	
<b>Overall</b>	<b>83%</b>	<b>82%</b>		
Army	87%	73%		
Air Force	70%	83%		
Navy / Marines	92%	90%		

<b>OUTPATIENT</b>				
Group	Facility Name - DMIS ID	% Pass per 1997 E&M Coding Guidelines	% Pass per 1995 E&M Coding Guidelines	# Records Reviewed (180 Requested)
<b>Overall</b>		<b>14%</b>	<b>15%</b>	<b>131</b>
MTF1	McDonald ACH - 0121	13%	13%	15
MTF2	NH Jacksonville - 0039	14%	14%	22
MTF3	Mountain Home - 0053	9%	13%	23
MTF4	Wright Patterson - 0095	8%	8%	24
MTF5	NH Beaufort - 0104	19%	19%	27
MTF6	Moncrief ACH - 0105	20%	20%	20
Service Branch	Army	17%	17%	35
	Air Force	9%	11%	47
	Navy / Marines	16%	16%	49
<b>% Passing Trend</b>	<b>January 2003 (n=110)*</b>	<b>February 2003 (n=131)</b>	<b>March 2003</b>	
<b>Overall</b>	<b>15%</b>	<b>15%</b>		
Army	24%	17%		
Air Force	13%	11%		
Navy / Marines	9%	16%		

<b>APV</b>				
Group	Facility Name - DMIS ID	% Pass using SADR data	% Pass using Hardcopy ADM Cover Sheet	# Records Reviewed (180 Requested)
<b>Overall</b>		<b>1%</b>	<b>1%</b>	<b>114</b>
MTF1	Travis - 0014	0%	0%	30
MTF2	NH Lemoore - 0028	3%	3%	30
MTF3	NNMC San Diego - 0029	0%	0%	30
MTF4	USAF Academy CO - 0033			0
MTF5	Eisenhower AMC - 0047			0
MTF6	Winn ACH - 0049	0%	0%	24
Service Branch	Army	0%	0%	24
	Air Force	0%	0%	30
	Navy / Marines	2%	2%	60
<b>% Passing Trend</b>	<b>January 2003 (n=173)</b>	<b>February 2003 (n=114)</b>	<b>March 2003</b>	
<b>Overall</b>	<b>5%</b>	<b>1%</b>		
Army	16%	0%		
Air Force	0%	0%		
Navy / Marines	0%	2%		

\* Reflects the addition of 1 MTF that provided data late

selection. Likewise, the DRG may not pass if it appears a coder did not query the provider or the provider did not amend the record in the circumstance where provider documentation was unclear, conflicting, or suggested clinical circumstances that should have been queried in order to make a more accurate or optimal coding decision that would impact DRG assignment.

Based on two months' review, the following factors are impacting accuracy and sequencing of codes resulting in DRG discrepancies:

1. There is no evidence of a structured, system-wide provider query process in which questions asked by coders and answers given by physicians are documented in the medical record either through amendment or inclusion of a completed query form.
2. The MHS inpatient coding guidelines lack instructions for coders regarding how to handle instances in which coders should query providers for clarification.
3. The inpatient encoder-grouper made available to MTFs does not prompt the coder in the same manner as more technologically advanced systems that are prevalent in the private sector (such as 3M or QuadraMed). This is especially important for large medical centers that handle complex cases.
4. Certain MTF coding errors could be avoided if more comprehensive electronic access to the AHA Coding Clinic would be made available to MTF coders. It does not appear that current systems provide electronic access to Coding Clinics dated before 1997, include the current year of Coding Clinic advice, or are integrated with the encoder-grouper application. Integration is crucial so that tips, prompts, edits, and other similar features are immediately accessible.
5. Operative reports and pathology reports must be available to the coder at the time of coding to ensure accurate and complete reporting. Such documents, while present in the audit chart, may not be present when the record is coded by the MTF (though, since there is typically no filing date on the reports, it is impossible to quantify the extent of this issue). For example, the provider may document a non-specific diagnosis in the narrative summary and the coder codes based on a more specific diagnostic statement found in a progress note, but the pathology report documents a definitive result that reflects a different finding.
6. While study MTFs generally report they are doing monthly internal coding audits, the sample sizes reported indicate they are random in nature and designed for acceptance testing or spot-checking. MTFs should consider implementing a more concentrated on-going monitoring process that incorporates a second level of verification for records meeting certain conditions. Private sector health systems utilize re-code processes, profile detection, edits, and other methods to verify coding decisions on an ongoing basis. This is especially important when the available encoder-grouper and other electronic resources are insufficient and the case mix handled by the healthcare facility is complex.
7. Inpatient coding guidelines should address how to code inpatient admissions resulting directly from an APV. MHS outpatient coding guidelines call for the procedure performed during an APV to be coded for the APV encounter and not for the inpatient episode of care; however, this guidance is not also provided in MTF *inpatient* coding guidelines. In the private sector (as reflected by AHA Coding

Clinic, 1996 1<sup>st</sup> Quarter), ambulatory surgery procedure codes are incorporated in the inpatient DRG determination and not coded separately for the ambulatory surgery encounter.

8. MHS inpatient coding guidelines lack direction regarding admissions that incorporate transfers to another institution for major surgery.

### Outpatient/APV Record Coding

For outpatient clinic and APV records, auditors assign each sample record a primary and up to three secondary ICD-9-CM diagnosis codes, an Evaluation and Management (E&M) CPT-4 code, and CPT-4 procedure codes from the primary through the fourth-listed positions. Where differences are identified between original coding and recoding, auditors assign customized “match and reason codes” to categorize differences and explain recoding rationale. Auditors assign a “pass/fail” grade reflecting the overall adequacy of the codes assigned to the record. This grade is based on MHS coding guidelines and reflects that the MTF- and auditor-assigned codes match as follows:

- Up to four ICD-9-CM diagnosis codes coded by the MTF match the auditor’s codes at the highest level of specificity. The primary diagnosis code is a function of the chief reason for the encounter, but sequencing of secondary ICD-9-CM diagnosis codes does not impact the auditor’s determination of accuracy, even though it is a significant factor for third party reimbursement,
- At least one E&M code is coded by the MTF and matches an E&M code assigned by the auditor (using either 1997 or 1995 CMS guidelines), **AND**
- Up to four CPT-4 procedure codes coded by the MTF match the auditor’s codes. The procedure code(s) must relate to the diagnosis that caused the problem, but sequencing of CPT-4 codes does not impact the auditors’ determination of accuracy though, again, it is a significant factor for third party reimbursement.

All criteria must be met in order for the outpatient/APV record to be assigned a grade reflective of overall coding accuracy.

Although sequencing and prioritization of procedure codes before anesthesia codes (i.e., selection of the ambulatory surgery code over the anesthesia administration or anesthetic agent codes) is considered critical for workload, reimbursement, and other reporting purposes, this study does not incorporate sequencing of these codes in validation decisions since the SADR limits the number of codes that can be extracted from the MTFs’ local Composite Health Care System (CHCS). As a result, if procedure codes are not included in the SADR but four accurate anesthesia and anesthetic agent codes are in SADR, the record is considered accurate (provided all diagnosis codes are also accurate and complete and the E&M code is present and accurate). Likewise, if the ambulatory surgery procedure is coded and the MTF does not code anesthesia administration and there were available spaces in SADR for reporting additional codes, the record does not pass.

After two months’ review, it appears MTF coders should be reminded of the importance of coding relevant items such as significant diagnoses and procedures from patient

history, allergies, anesthesia administration, and anesthetic agents (after the proper sequencing/prioritization of procedure codes). TMA recognizes that, because of limits on the amount of data that can be captured by SADR, the electronic data being used in this study may not fully reflect all codes assigned by MTF coders for outpatient and APV records. Subsequent studies will use a different data source to mitigate this problem. However, auditors are currently reviewing hardcopy coding documentation in the medical record coversheets to compare with the electronic data captured in SADR, and in no case have the auditors identified a situation in which the MTF failed the audit due solely to the use of SADR data.

### **Reporting**

Audit results are reported monthly and reflect overall findings as well as Service-, MTF-, and patient-level results. Patient-level results provide data code-by-code to allow detailed review by the MTFs. Month-by-month results for each record type are also reported at the MHS and Service Branch levels, providing TMA with an efficient means of tracking MHS coding accuracy over time.