

Improving the Revenue Cycle in the Military Treatment Facility

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Organizational Information

Headquarters Air Education and Training Command (HQ AETC) is the Directorate of Medical Services and Training located at Randolph AFB, Texas. The Directorate consists of a multi-disciplinary group to provide medical command oversight. The medical resource department manages, directs, and executes the largest \$1.3B medical financial program in the Air Force Medical Service (AFMS). AETC consists of 2 medical centers, 2 inpatient facilities, 9 outpatient clinics, 1 medical training unit and 2 managed care offices. These units require over 11,000 officer, enlisted, and civilian manpower billets; 2,000 annual student man-years; \$500M in annual Operating and Maintenance funding and \$120M in private sector care support. AETC medical treatment facilities (MTFs) vary greatly in size from small clinics to the largest medical center in the AFMS. AETC medical centers carry most of the Graduate Medical Education (GME) programs for the AFMS. There are approximately 16 different residency programs in place at any one time.

Brief Summary of the Problem

Historically, the military has not put an emphasis on coding outpatient visits. In 2001, we began to do more comparisons with the civilian healthcare sector. The Air Force Surgeon General (AF/SG) sent out a policy on Air Force coding improvement initiatives. In this policy, he stated that the AFMS must have timely, accurate clinical encounters data to assess the health of our population, allocate resources, and support corporate decisions. He went on further to say it is crucial to correctly document, code, and bill for the care we provide. This data is used to improve our ability to assess and manage the health of our population, provide evidence-based medicine, and prepare to implement itemized billing. The AF/SG established four outpatient coding goals as follows.

1. Improve the overall accuracy of medical coding.
2. Improve the overall timeliness and completeness of medical coding.
3. Decrease the percentage of third party collections rejected due to coding errors.
4. Establish business processes linking billing functions, coders, and providers.

Description of the Problem

The revenue cycle begins with coding the patient visit and ends with billing and collections. AETC has a reimbursable contract for a third party collection service, however, incomplete and inaccurate coding was hampering progress. In a 2001 Bearing-Point study, it stated, “Sound,

timely, and accurate coding provides the data necessary for healthcare organizations to make sound business decisions. Accurate coding provides information for third party payers to determine medical necessity and amount of reimbursement, determine staff productivity and accurately manage quality healthcare delivery. Proper coding will allow decision support systems to determine current cost of offering a product line or service, make budgeting and resource decisions, and negotiate payment contracts.”

In order to ensure complete and accurate clinical data was being recorded, critical success areas (CSA) were investigated. AETC initiated tracking metrics to follow medical record data completion and coding accuracy. When a patient is seen, the medical record information is documented and processed into our database. To measure the CSAs, the following two metrics were utilized:

1. Ambulatory Data Module (ADM) Completeness. AETC was only completing 86% of its records. This indicated that a substantial number of records were not being processed into the database in a timely manner. Consequently, not only 14% of the data was missing, we were not able to bill for this healthcare provided.
2. Coding Accuracy. External auditors visited a random sampling of military treatment facilities to determine overall coding accuracy. The results indicated that AETC facilities mirrored the Air Force average, which was 60 percent accuracy for Evaluation and Management (E&M) codes and 40 percent accuracy for Current Procedural Terminology (CPT) and International Classification of Diseases (ICD-9) codes. Clearly, these low accuracy rates were not acceptable.

Determining who was responsible for completion of the records was another issue. Some facilities thought the providers should be responsible, others felt the medical technicians were responsible, and still others wanted the few professional coders they had on staff to code every single visit. This was physically impossible. Resources were constrained and productivity demands continued to increase, so everyone was looking elsewhere for answers.

Last, but certainly not least, is the billing and collections program. If the data is not complete in the patient’s record, it will not transfer from the database to the billing system. We were missing some billable services and therefore losing potential revenue. In addition, if the documentation was inadequate to support the code used, we could not bill the insurance company for that level of care.

Administrative Decisions

A few facilities were able to contract for some professional coding support, but funding was not available to satisfy all coder requirements. In April of 2002, Air Staff (our medical headquarters counterpart in Washington, D.C.) was able to fund approximately 25 percent of our requirement; however, this funding was for coding auditors only, not medical record coders. Instead of sending this limited funding to our medical treatment facilities (MTFs), we decided to pursue a centralized command-wide contract. In doing a centralized command-wide contract, we were able to maximize economies of scale to provide better leverage, buying power, and have residual

funding for supplemental training. We interviewed numerous companies and chose one with extensive coding experience who had done business with Veterans Administration (VA) hospitals.

Initially, we purchased only coding auditors and coding trainers because we did not have enough funding to provide the quantity of coders needed. Coding trainers provide more formalized training on a quarterly, or as needed, basis to each MTF. The trainers focus their training sessions on items the auditors find incorrect in their monthly audit reports. In addition, the auditors provide one-on-one feedback to the providers as needed. Sometimes, the monthly audit reports indicate problems occurring throughout the command. Many times we uncovered an issue that needed further clarification from Air Staff. This proved to be a valuable tool to improve our program not only in AETC, but also Air Force-wide.

As time progressed, we saw the need to include an auditor in the billing department to verify bills were properly coded before they left the facility. Bringing the coder contractor and billing contractor together was instrumental in the success of the centralized-contract approach. It was the vehicle for improvement throughout the revenue cycle process. As revenues increased, we were able to add professional coders to the staff. By October of 2003, we had a full staff of coding trainers, auditors, and coders. Professional coders were placed throughout the MTFs based on workload and expertise required. Auditors checked the work of the coders, ensuring coding accuracy. Trainers provided training sessions based on audit results.

On Aug 20, 2003, Dr William Winkenwerder, Assistant Secretary of Defense for Health Affairs, directed the improvement of medical record coding at military treatment facilities. He requested several actions be taken, including the establishment of a coding compliance plan. Fortunately for AETC, we were able to address all of his requests because we had started our initiative in AETC over a year prior. Each MTF developed their own coding compliance plan unique to their facility. The following items were part of AETC's program.

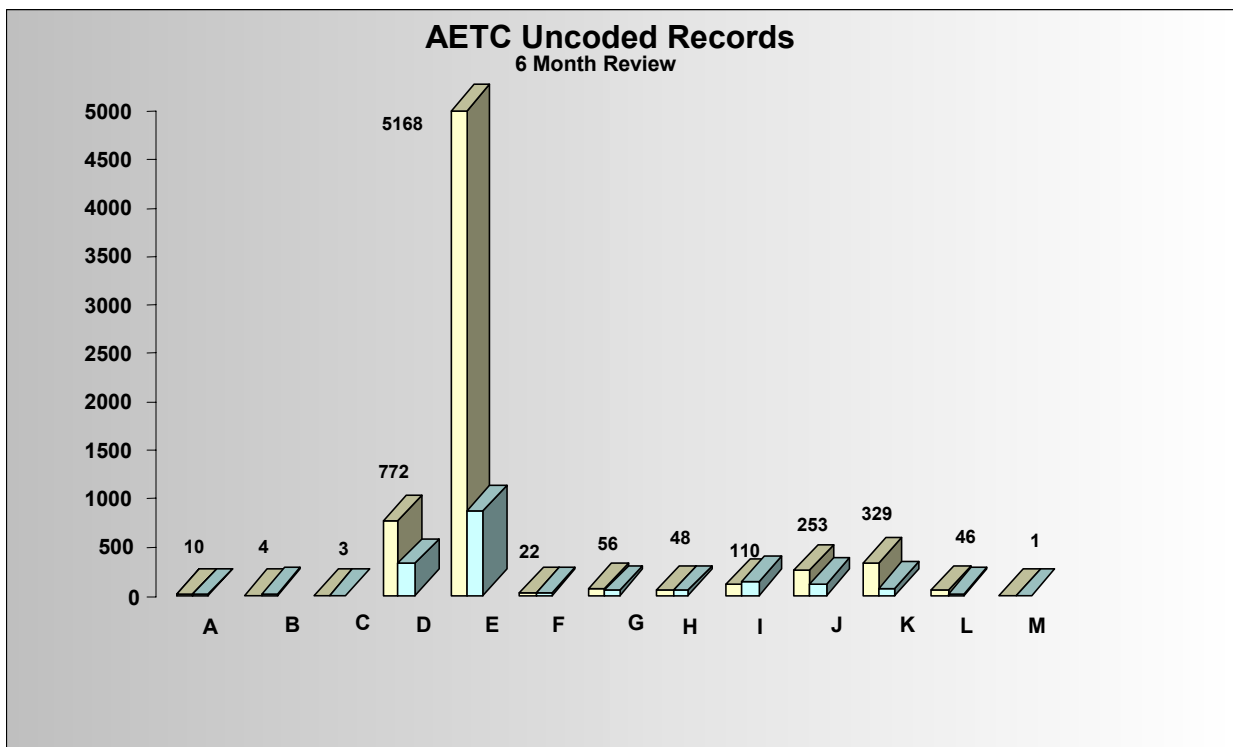
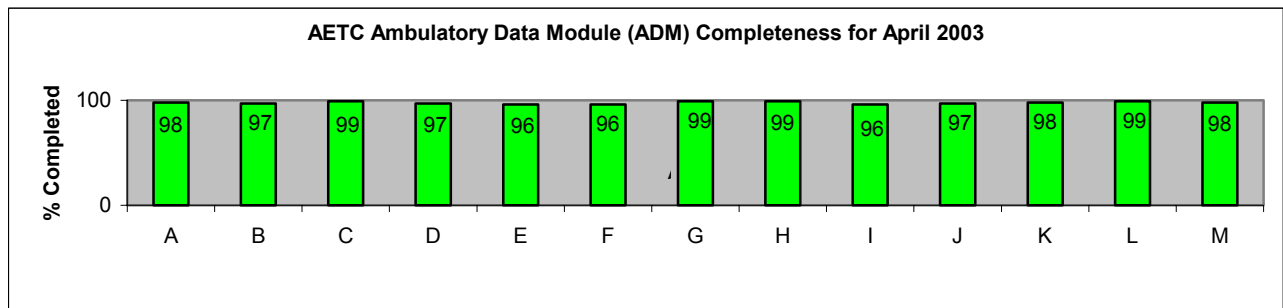
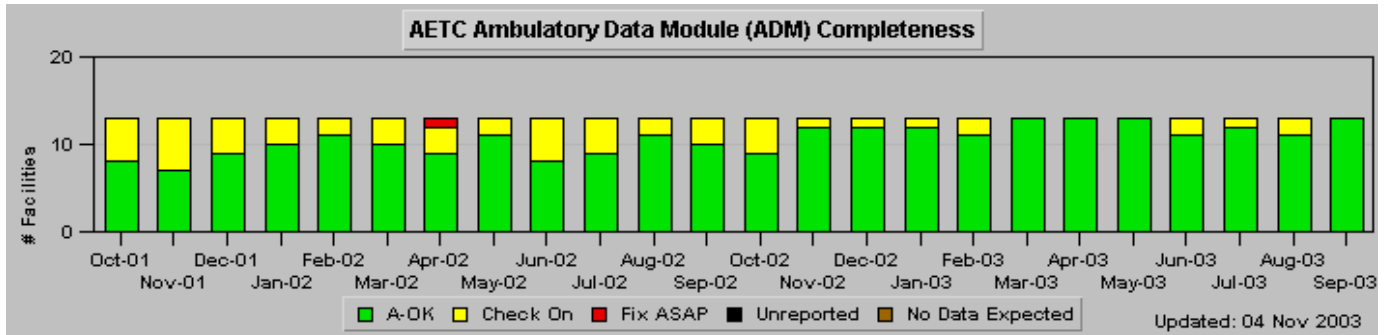
- All MTFs have a Coding Compliance Plan that includes a training and audit plan to evaluate coding compliance.
- External auditors are incorporated in the compliance plan.
- All MTFs have the appropriate coding resources available.
- Tools are available to assist in the correct coding of encounters.
- Certified coders are available to assist in coding functions.
- Coding instructors and auditors adhere to the Department of Defense coding guidance and coding standards in the civilian medical community.

To support the compliance plans, the following coding standards were established.

- 100% of all outpatient encounters, other than ambulatory procedures visits (APVs), should be coded within three business days of the encounter.
- 100% of APVs should be coded within 15 days of the encounter.
- 100% of inpatient records should be coded within 30 days after discharge.
- 100% medical record coding accuracy (60% in 2004, 75% in 2005, 95% in 2006).

Results

Ambulatory Data Module Completeness increased from a command average of 86% to a record high of 98%. Within the first six months of the AETC contract, uncoded records showed a dramatic improvement as noted below. Uncoded records at one of our medical centers dropped from 5168 to 874.



Results

Coding accuracy improvement was substantial command-wide. Each military treatment facility showed an increase in coding accuracy over the first nine months. E&M, CPT, and ICD-9 accuracy rates averaged between 14% and 23% improvement. We expect this improvement to continue with the increase in coding staff and training initiatives fiscal year 2004.

CODING ACCURACY

PEER GROUPS 1-3	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	LEGEND
MTF A	88	97	94	99	100	100	100	100	98	95-100%
MTF B	89	94	94	95	97	97	97	97	99	85-94%
MTF C	82	93	91	86	86	91	91	93	94	BELOW 85%
MTF F	98	98	99	100	99	100	100	97	100	
MTF G	75	75	90	95	95	95	99	98	100	
MTF I	91	81	97	93	92	85	90	90	96	
MTF J	91	80	88	94	91	95	95	97	96	
MTF L	84	85	73	78	79	83	90	97	99	
PEER GROUPS 4-5										
MTF D	76	70	77	75	73	73	76	79	85	
MTF E	89	93	92	92	93	87	88	89	81	
MTF H	94	79	78	79	89	88	92	92	94	
MTF K	84	86	78	74	72	92	90	90	91	

<i>MTF</i>	<i>E&M Accuracy Increase</i>	<i>CPT Accuracy Increase</i>	<i>ICD-9 Accuracy Increase</i>
A	11%	24%	19%
B	11%	38%	28%
C	12%	6%	0%
D	10%	65%	11%
E	12%	0%	13%
F	2%	0%	3%
G	25%	24%	16%
H	23%	8%	44%
I	13%	0%	1%
J	15%	45%	42%
K	15%	2%	0%
L	15%	68%	70%
<i>Average Increase:</i>	<i>14%</i>	<i>23%</i>	<i>21%</i>

*** This table details the accuracy increase between July 02 and May 03.*

SAVINGS POTENTIALS

Provider Time

Valuable provider time can be saved by having professional coders and auditors on staff. This allows the providers to spend more time on direct patient care. This initiative has also improved the provider's coding awareness. Overall, provider and clinical staff time spent on administrative duties was significantly reduced. The table below depicts the estimated time saved with associated cost savings of having a central coding and auditing mechanism.

<i>MTF</i>	<i>TOTAL PCMs</i>	<i>25 visits x 2 minutes</i>	<i>Hourly Savings</i>	<i>Annual Savings</i>	<i>Cost Savings</i>
A	7	175 x 2 = 350	6	1560	\$67,672.80
B	5	125 x 2 = 250	4	1040	\$45,115.20
C	7	175 x 2 = 350	6	1560	\$67,672.80
D	17	425 x 2 = 850	14	3640	\$157,903.20
E	34	850 x 2 = 1700	28	7280	\$315,806.40
F	5	125 x 2 = 250	4	1040	\$45,115.20
G	13	325 x 2 = 650	11	2860	\$124,066.80
H	22	550 x 2 = 1100	18	4680	\$203,018.40
I	15	375 x 2 = 750	13	3380	\$146,624.40
J	15	375 x 2 = 750	13	3380	\$146,624.40
K	19	475 x 2 = 950	16	4160	\$180,460.80
L	4	100 x 2 = 200	3	780	\$33,836.40
TOTAL SAVINGS POTENTIAL:			136/day	35,360/year	\$1,533,916.80

*** This table demonstrates an average of 2 minutes spent by each provider for each visit if they did not have the auditor and/or coding staff. It reflects data from the Primary Care clinic only and does not include clinical staff time that could potentially be saved as well. The cost savings is associated with the FY 2003 officer man-hour rate of \$43.38 x hour saved.*

Audit Cost Savings

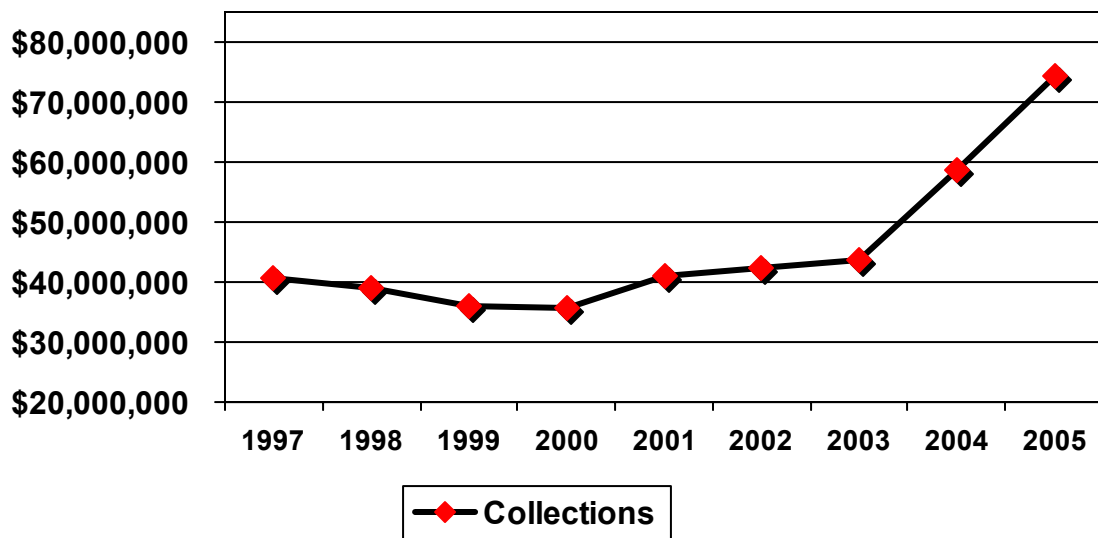
There was a definite cost savings by adding auditing staff to the MTFs. In September 2002, we only had half of the projected auditing personnel on staff at the MTFs, but still saw significant savings. By April of 2003, the facilities were fully staffed. The table below reflects the effects of having this professional auditing staff available in one of our Primary Care Clinics.

<i>Month Audited</i>	<i>Amount Audited</i>	<i>Amount of errors noted</i>	<i>Cost savings</i>
Sep 2002	3,122	96	\$5,390.98
Apr 2003	6,571	776	\$32,805.00

*** This table reflects data from one of the Primary Care Clinics. It is a comparison of September 2002 audits and April 2003 audits. The amount of errors noted reflects errors that would have been sent out had the professional auditing staff not discovered and corrected them. The cost savings were computed using current CHAMPUS Maximum Allowable Charges to reflect potential costs of each incorrect code.*

Reimbursement Potential

Collective efforts between the coding and collections contractors proved very effective the first year. Coding auditors identified where documentation was insufficient to support the specified code. Training was accomplished to instruct providers on documentation requirements for each level of code. This not only improved coding accuracy, but increased reimbursements as well. We saw an increase of over \$1.5M in reimbursements the first year. We expect this to grow substantially over the next few years as the process and working relationship is refined. Air Staff is using AETC as the model for the rest of the AFMS. They project increased reimbursements of \$16M each year as depicted in the chart below.



SUMMARY

In an effort to improve the military's revenue cycle, Air Education and Training Command discovered numerous benefits in utilizing centralized contracts for training, auditing, coding, billing, and collections. Below is a brief synopsis of our findings.

- Significant increases in quality improvement reflecting accurate data from the MTFs.
- Decrease in incomplete documentation and inaccurate coding.
- Increase in overall reimbursements.
- Successful use of a professional auditor in the billing department; ensures proper codes are being used on bills sent out.
- Decrease in litigation liability; Air Force and DoD regulations standardized and followed.
- Better capture of data for population health initiatives including disease management and preventative medicine.
- Greater patient satisfaction; provider and clinical staff can focus on patient care.
- Better utilization of physicians and clinical staff time.
- HQ AETC/SG is the central point of contact for all contract issues so the MTF can concentrate on patient care.
- Standardization of coding, auditing, training. All personnel are receiving the same guidance so miscommunication and complications are minimized.
- Residents are trained on coding issues during residency programs to ensure standardization of knowledge among all physician staff.
- Reporting is centralized through the contractor; standardized information is provided as needed to command and MTF level.
- AETC is able to display accuracy amount on the command's website. MTFs can compare themselves with peers.
- Website link for questions is available to all physicians. Coding questions are answered by AETC's coding trainer.

Source Material

Assistant Secretary of Defense, Health Affairs. Improving Medical Record Coding at Military Treatment Facilities, Aug 20, 2003.

Air Force Surgeon General. Air Force Coding Improvement Initiatives, Jul 27, 2001.

Air Force Surgeon General's Performance Improvement Website, <<https://p2r2.hq.af.mil>>