Establishing an Operational Data Quality Practice

The Data Quality for Army Medical Department Success Experience – A First Annual Review

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ABSTRACT

In the early 1990s, as the Military Health System (MHS) moved toward a managed care model, critical deficiencies in enrollment, utilization, and cost data became a serious issue. Various organizations within the military services collected and reported data on nine million beneficiaries receiving care directly at 629 military treatment facilities and indirectly through contracts with civilian providers. The data were not standardized across source systems, and reporting was neither as timely or as accurate as needed for effective system-wide management. This affected the Department of Defense's ability to fully implement managed care operations. The MHS developed a Corporate Executive Information System (CEIS) to assist in decision support. The Army Medical Department (AMEDD) assumed an important role in developing the CEIS and a system-wide data quality management plan. Meanwhile, a new methodology of enrollment-based capitation program for individual military services funding was in development. A year ago, AMEDD implemented key elements of the data quality plan to improve its data. This paper presents the implementation process and its results. It reports the successes and shortfalls of the implementation and outlines the initiatives for the next year.

ACKNOWLEDGEMENTS

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1.0 Introduction

1.1 *Background*

In 1995, the Customer Service Division (CSD) of the Corporate Executive Information System (CEIS) began developing a systematic, comprehensive, and dynamic data quality (DQ) assurance plan. This plan was based on the Total Data Quality Management process set forth in the draft Department of Defense (DoD) Quality Management Guidelines and civilian literature. The plan included the operations of the Army, Navy, and Air Force medical departments. The main purpose of the plan was to support the deployment of the CEIS to 116 hospitals and 513 freestanding clinics of the Military Health System (MHS) [Corey et al., 1996].

In 1997, the CSD continued developing a data quality assurance plan, revised the *Commander's Data Quality Assessment Guide* as the *Data Quality Management Guide*, and trained several hundred MHS personnel in TDQM. Trained personnel learned to use self-assessment metrics to evaluate the quality of data in their local source data collection systems (SDCSs). Military treatment facility (MTF) commanders subsequently conducted self-assessments and reported their results to the CSD [Corey, 1997]. Several of the proposed MHS corporate metrics developed then continue in use today.

At the 1998 Information Quality Symposium, the CSD proposed applying TDQM concepts, emphasizing leadership intervention and the importance of data quality measurement as the first steps in establishing a data quality environment. The CSD continued to train MTFs in the use of TDQM processes, collected results of MTF self-assessments, and analyzed the results. [Burzynski et al., 1998].

Although some military services and information technology business areas rejected the data quality assurance plan developed by the CEIS in late 1997, negotiations resulted in the development of an MHS-wide data quality assurance plan. This new plan integrated representatives from the military services, business areas, and the Office of Assistant Secretary of Defense for Health Affairs (OASD-HA) into a single working group during late 1997 and 1998. The group corresponded by e-mail and met quarterly. It identified 31 data quality problems and initiated implementation plans to correct the problems. Unfortunately, the plans could not be funded by CEIS past December 1998. The CSD plan was replaced by a TRICARE Management Activity (TMA) Data Quality Integrated Program Team consisting of representatives from the military services and TMA.

The activities of the CSD in support of the CEIS were reduced in early 1998, as the deployment of the CEIS slowed and funding to the Army to support CEIS data quality activities diminished. The CSD returned to its earlier role serving Army biometrics needs; it began supporting program analysis and evaluation activities; and reinstated its former title of the U.S. Army Patient Administration Systems and Biostatistics Activity (PASBA). PASBA

leadership implemented TDQM and operational DQ activities in the Army Medical Department (AMEDD) while the MHS-wide DQ plan was still being formulated.

The AMEDD mission includes:

- **Project a Healthy and Protected Force.**
  Ensure our military forces are deployed in a state of optimal health, equipped to protect themselves from disease and injury.

- **Deploy the Medical Force.**
  Ensure the deploying medical units are capable of supporting the medical requirements of the deployed forces under any contingency.

- **Manage the Healthcare of the Soldier, the Soldier's Family, and the Military Alumni Family.**
  Provide a continuum of accessible, cost-effective, quality care to support the healthcare needs of all eligible beneficiaries.

  [Army Medicine Strategic Vision, 1998]

(An overview of the AMEDD organization, its culture, and its responses to the environment is described in Appendix B.)

1.2 *Overview*

This paper describes how AMEDD implemented a data quality plan for healthcare information. It summarizes the yearlong evolutionary TDQM implementation activities at the Army Medical Command (MEDCOM) to define and establish the Data Quality for AMEDD Success (DQFAS) program. Further, it reports on the importance of leadership involvement, formation of an oversight body and the Data Quality for AMEDD Success Team (DQFAST); it presents a chronology of its activities; and it reports the DQFAST's products and follow-up methodologies. Finally, the paper assesses gains, as measured by the DQFAST's charter, notes the shortfalls and responses, and presents plans for continuing and future initiatives.

2.0 Need for DQ Action and Leadership Involvement

2.1 *The Implications of Managed Care*

As indicated in earlier Information Quality (IQ) Symposium Papers [Corey et al., 1996; Corey, 1997; and Burzynski et al., 1998], the MHS seeks to revise healthcare delivery business processes to a managed care model. The Chief of the Quality Control Section of PASBA and others noted discrepancies in data timeliness, accuracy, and completeness submitted by Army MTFs early in the process of implementing data quality activities across the military medical departments. Notably, discrepancies were observed in enrolled population figures, utilization data extracted from inpatient and ambulatory care records, and cost data. These systems are among the source data collection systems (SDCSs) feeding the

Corporate Executive Information System. The Chief wanted to pursue the use of TDQM processes within the AMEDD.

Meanwhile, the OASD(HA) resource managers developed an enrollment-based capitation (EBC) funding methodology based on historical data and projections for the future. When evaluated with the fiscal year 1998 (FY98) methodology, the data indicated that the Army could provide the most care of all the military services. Unfortunately, it would lose a great deal of money if it did not modify its business processes and improve the quality of data created as a byproduct.

While this was an indicator of serious data quality problems, other issues were found in enrolled population figures, utilization data, and cost data. Enrolled population figures came from the Defense Enrollment Eligibility Reporting System (DEERS); utilization data came from the Standard Inpatient Data Record (SIDR) and the Standard Ambulatory Data Record (SADR); and cost data came from the Medical Expense and Performance Reporting System (MEPRS). The problems in these data sets affected continuity of patient care, managed care operations, clinical outcomes, coordination with the TRICARE Managed Care Support contractors, and Medicare Subvention demonstration projects, among other significant AMEDD missions. The DEERS, SIDR, SADR, and MEPRS were the key measures assessed by the EBC methodology and hence became AMEDD's key DQ issues for assessment and improvement.

2.2 *Obtaining Leadership Support for Data Quality Activities*

The challenge for PASBA was incorporating TDQM processes into the AMEDD corporate culture, considering its multiple worldwide missions, existing processes, and people. MEDCOM-level advocacy and supervision of the key DQ issues were needed to comply with enrollment-based capitation programs.

PASBA leaders decided that AMEDD functional staff leaders, working in a multifunctional team setting, should address the quality of data as it arose from business processes through SDCS at the treatment facilities. While the EBC methodology was not fully embraced by all MHS resource managers, it was nevertheless an imminent threat to continued AMEDD funding. AMEDD needed to act quickly.

PASBA leaders approached the Deputy Chief of Staff for Force Sustainment (Deputy Chief), a senior executive manager at the general officer level charged with logistics and information technology functional responsibility for MEDCOM. We identified the key DQ issues and their potential impact on AMEDD under enrollment-based capitation. The Deputy Chief supported PASBA by directing the development of a charter for an EBC DQ process action team (team). The Deputy Chief invited various staff elements of the MEDCOM to send representatives to the first team meeting. He designated the Director of PASBA as the team leader and directed him to provide an in-process review (IPR) of team's activities after 60 days.

3.0 Establishing the Oversight Body

3.1 *Summary of Process Action Team Activities*

The Quality Control Section of PASBA drafted a charter for the EBC DQ process action team and assembled representatives from the Office of the Surgeon General and MEDCOM staff as members.

Attendees at the first team meeting received an overview of the EBC methodology, learned about its impact on the AMEDD, and heard the initial assessment of the key DQ issues. The draft charter was presented for the members to review. The members agreed the mission of the team was to provide a multifunctional team review of AMEDD activities so they could improve data capture and workload reporting from direct medical care and supporting processes within Army treatment facilities. The members recommended the Deputy Chief approve the charter, which included the following functions:

- Reviewing DQ and underlying business processes indicated by failures in DQ. Assessing the implications of the failures or successes.
- Identifying key issues and establishing an issue tracking process.
- Developing and reviewing metrics as appropriate.
- Recommending corrective actions for MTF commanders to improve DQ and providing suggested metrics for monitoring.
- Assigning command and staff responsibility for implementing, enforcing, and monitoring.
- Referring issues to DoD Health Affairs and its field operating agencies for resolution.
- Sharing "best business practices" within the AMEDD when identified through DQ activities.

The data quality problems in DEERS, SIDR, SADR, and MEPRS data were discussed. Potential metrics were identified. "Champions" were identified at the staff director level for each key issue, and action individuals were appointed for functional and metric development activities. PASBA assumed all the metric development and population activities. The problem tracking processes suggested by the draft MHS DQ plan were presented to the team and adopted as a frame of reference [MHS DQ Plan, 1998].

Regular team meetings were scheduled. DQ and business process education and training of team members were an initial important focus of these meetings. Champions and action individuals were asked to evaluate the key DQ issues and return to the next meeting with problem statement drafts.

The Deputy Chief approved the process action team's charter before the second meeting. Once problem statements were reviewed and approved in the second meeting, the team planned metrics to assess the problem areas. They began to scope DQ marketing, education, and training initiatives. Regular team activity summaries and meeting minutes were provided to the three Deputy Chiefs of Staff and the Deputy Surgeon General (DSG), who also serves as the MEDCOM Chief of Staff.

3.2 *Leadership In-Process Reviews*

An IPR was provided to the Deputy Chief of Staff, Force Development and Sustainment, U.S. Army Medical Command outlining the team activities over the preceding 60 days and their plans for the next six months. He endorsed the team's recommendations by setting up a review with the Deputy Surgeon General and the Deputy Chief of Staff responsible for clinical activities and operations.

The timing of the review was fortunate. The Deputy Surgeon General had recently received a General Accounting Office (GAO) report evaluating the DoD's readiness to conduct a large Medicare Subvention demonstration project. Under this project, military health beneficiaries eligible for Medicare would continue to be treated under the military system and Medicare would reimburse the military system. The GAO criticized the quality of MHS data and questioned MHS ability to reflect patient care activity accurately for reimbursement. The Deputy Surgeon General was concerned about data quality. He directed the activities of the team be transformed into a global DQ program for the AMEDD in incremental steps, first addressing the health services delivery mission.

3.3 *Transforming the Team to a DQ Working Group*

Encouraged by the Deputy Surgeon General's emphasis and support, PASBA and team members transformed the process action team into a working group. The membership was unchanged. With a minimum of effort, the charter was revised. Team members were asked to suggest a name for the working group that would be recognizable and would emphasize the need for data quality in the AMEDD. The working group adopted the name of Data Quality for AMEDD Success Team (DQFAST), and they revised the DQ products it had developed. Other products were added to help medical facility commanders and to market the importance of Data Quality for AMEDD Success (DQFAS) and its components. Figure 2 displays the DQFAS components.

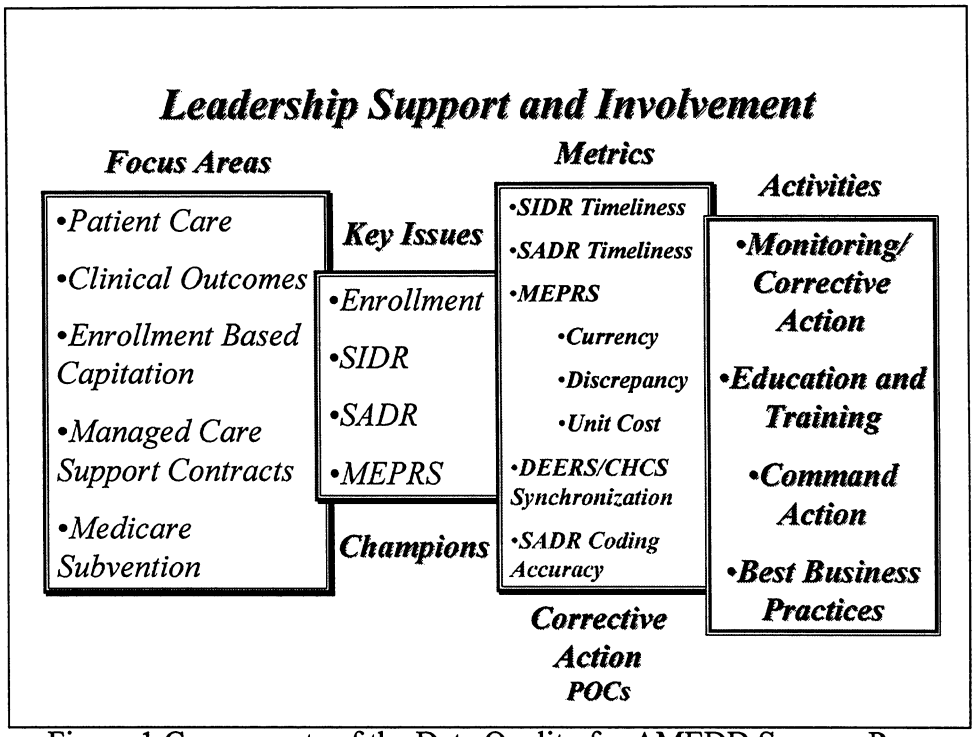

Figure 1 Components of the Data Quality for AMEDD Success Program

3.4 *Deployment and Implementation of the AMEDD DQ Program*

As the products were finished, a DQFAS deployment package was developed. The package, designed for distribution to the Regional Medical Commands (RMCs) and treatment facilities, included an implementing memorandum, which announced and described the program as well as provided an information paper summarizing the metrics, products, and points of contact. A copy of the *Army MTF Commander's Data Quality Guide* (*Guide*), and a Microsoft Office 97 file of the *Guide*, which hyperlinked files on the user's hard drive with Internet Web sites was provided. Finally, the package also provided two videotapes, instructions for obtaining additional videotape copies, and a survey form for evaluating the videotape content.

Within three weeks, another information paper was disseminated by electronic mail to over 200 AMEDD medical, dental, and allied health profession consultants announcing the program and the availability of speakers from the DQFAST to address professional conferences.

4.0 DQFAS Products and Ongoing Activities

4.1 *DQFAS Products*

DQFAS products are designed to provide facility and regional commanders various tools for improving the quality of SDCS outputs by local educational and management approaches. The major approaches are described here.

Data Quality Metrics. The DQFAST developed metrics assessing SDCS data quality. Table 1 briefly describes the metrics. Members of the DQFAST work with MTF and RMC staffs to monitor and evaluate results. More metrics will be developed as required. The metrics are described in detail in the *Army MTF Commander's Data Quality Guide* shown at http://pasba.tricare.osd.mil/dqfas.html. The metric descriptions and results are available on the same Web page.

Table 1. Data Quality Metrics

Metric	Purpose	Availability
DEERS/CHCS Synchronization	Compares DEERS and Composite Healthcare System enrollment status	Under Construction
SIDR Timeliness	Compares completeness of disposition data in the Retrospective Case-Mix Analysis System and MEPRS	In Use
SADR Timeliness	Assesses completeness of SADR extracts compared with MEPRS visits reported	In Use
SADR Coding Accuracy	Assesses accuracy of coding of provider types and patient evaluation and management activities	Under Construction
MEPRS Currency	Assesses MEDCOM database to determine if the MTF report is present within 45 days	In Use
MEPRS Discrepancy	Finds numbers of MTF work centers reporting costs but no workload, and work centers reporting workload but no costs	In Use
MEPRS Unit Cost	Assesses quality of data within defined inpatient and outpatient peer groups	In Use

Medical Command Functional Assistance. DQFAST members provide functional points-of-contact (POCs) and assistance to regional commands and facilities when called. They also fulfill DQFAS corrective action responsibilities. In this role, they monitor and assess metric results, checking with MTFs when assistance may be necessary and offering support. Facility personnel can consult the POCs and regional commanders to identify issues, develop problem statements, and track issues until they are resolved.

***Army MTF Commander Data Quality Guide* (*Guide*).** The *Guide*, a living document, gives facility commanders a quick reference to DQFAS program components and the vital metrics being monitored by the AMEDD. It describes focus areas, key issues, problem statements, and the vital metrics. The *Guide* shows success stories or possible courses of action to improve DQ. It was initially available in a Microsoft Office 97 version for online viewing on the DQFAS Web Page at http://pasba.tricare.osd.mil/dqfas.html. It is currently under revision.

Videotapes for Treatment Facilities. Two videotapes were developed. *Data Quality – Implications for the Future* is intended for MTF leaders and clinicians. *An Introduction to Data Quality, Metrics, and Assistance* is intended for managerial, supervisory, clinical and administrative audiences. Copies of the slides, complete with scripts, are available in the DQFAS Web Page at http://pasba.tricare.osd.mil/dqbrief.html.

DQFAS Web Page. A Web page for DQ information, resources, and informal distance learning education is available at http://pasba.tricare.osd.mil/dqfas.html. The DQFAST and PASBA will continue to develop the Web page. It is a valuable resource for commanders, staff, and DQ managers.

A Discussion Listserver. Maintained by the PASBA, the MHS DQ Listserver provides a multifunctional forum for MHS personnel to raise and discuss local facility and corporate DQ issues. Interested MHS personnel may subscribe through the PASBA Home Page at http://pasba.tricare.osd.mil/listserv.html.

Best Business Practices. Results of metric reviews, knowledge of functional contacts, and MHS DQ Listserver activities identified facility-level success stories and best business practices. The DQFAST gathers information on a story or practice, reviews it, and decides whether to promulgate it throughout the AMEDD. Currently, best business practices exist for MEPRS facility-level program management, discrepancy management, and workload auditing. Two best practices, recording clinician productive time and SADR encounter auditing, are currently under DQFAST review.

4.2 *DQFAST Ongoing Activities*

The DQFAST, supported by PASBA, continues its work through the following activities.

Metric Results Assessment and Functional Oversight. PASBA personnel extract data from various data warehouses on a scheduled basis and compute metrics of interest. Once the metrics are computed, the personnel compare results for consistency with other metric results. After review, PASBA personnel place the results in final display, share them with the DQFAS Metric Corrective Action POCs, and place the results in the DQFAS Web Page. The Metric Corrective Action POCs review the results against standards and contact MTF POCs to offer assistance. If the facility POC fails to respond over a period of evaluation, the DFAST POC may recommend a memorandum signed by the Deputy Chief be directed to the facility's commander. The memorandum identifies the problem and instructs the facility commander to return an overview of the facility's plan of corrective action.

Regular DQFAST Meetings. The DQFAST meets monthly to evaluate progress in solving problems associated with the key DQ issues. Stories of best practices are shared, and some are selected for AMEDD-wide dissemination. Continued studies, marketing, education, training, and other initiatives are planned, prioritized, and executed. DQFAST member training is provided as needed. The DQFAST leader periodically forms sub-teams to address specific initiatives. The sub-teams act and disband as actions are completed. For example, a

sub-team developed the videotape presentation material and executed a plan for the videotape production and distribution.

Marketing, Education, and Training. Introducing and continuously informing AMEDD personnel of the availability of DQFAS tools is a major ongoing initiative. Generally, AMEDD personnel move from one assignment to the next within the AMEDD, U.S. Army field units, other Army and DoD activities, such as recruiting and other Service schools, or to long-term military and civilian education. The PASBA developed DQFAS business cards and brochures for distribution by DQFAST members or professional conference booth displays of PASBA activities. A standard, scripted presentation was developed for DQFAST members to extract and use at their functional area professional conferences and other opportunities. There are updates in corporate periodicals. The chief of the Quality Control Section or other PASBA staff present the DQFAS program at officer and enlisted long and short courses at the Army Medical Department Center and School (AMEDD C&S). In early 1998, the DQFAST initiated efforts to incorporate the importance of DQ and TDQM in the AMEDD C&S officer, enlisted, and civilian personnel short and long course curricula. The DQFAS provides informal distance learning. An initiative is under way to establish a formal distance learning course for DQ managers within the Army Knowledge Management Network, managed by the AMEDD C&S.

Maintaining Leadership Involvement. The PASBA director continues to publish a monthly DQ activity summary and DQFAST minutes for review by the AMEDD senior executive leaders. Periodic reviews continue, and separate meetings occur with the Deputy Chief to address specific DQ initiatives and issues. DQ is a topic, subtopic, or underlying issue in each teleconference or videoteleconference between AMEDD senior leadership and the regional commanders. This group attends quarterly meetings with the Army Surgeon General to discuss mission issues. Frequently, DQ metric results are part of the discussion. In April 1999, the senior clinical leadership, consisting of the MTF deputy commanders for clinical services and nursing, as well as senior enlisted clinical leaders, attended a plenary DQ session and four breakout sessions at their annual conference.

5.0 Measuring Results and Maintaining the Gains

In its first year, the DQFAST achieved its mission as measured by accomplishing the activities described in the DQFAST charter listed in Section 3.1. Improvements and shortfalls identified during this annual review follow.

5.1 *Noted Improvements and Successes*

- The SADR Timeliness metric improved during the year due to DQFAST and command emphasis.
- The MEPRS Unit Cost metric led to improved focus and communications among MEPRS personnel while evaluating their FY97 unit cost data. There was significant information exchange between the MEDCOM and facilities' MEPRS offices and among facilities' MEPRS offices. Notably, the MEPRS division observed new levels of MEPRS

corrections in the FY97 and FY98 data sets. We will assess the effectiveness of the corrections in the FY98 annual MEPRS Unit Cost metric review.

- The use and evaluation of the MEPRS Discrepancy metric improved work center workload and cost reporting.
- The MHS DQ Listserver let MHS participants raise issues and let others offer their experience and insight. Consequently, there was an increase in knowledge about business processes and the importance of DQ. We developed several best business practices as unexpected byproducts of these beneficial exchanges.
- The Information Management representative to the DQFAST, a physical therapist, conducted a review of SADR coding accuracy with the MEDCOM-wide physical therapists, noting differences in practices. The physical therapists benefited by identifying problems and reaching consensus on what business processes and the data byproducts should be. They continued by developing several standardized patient care protocols and data collection sheets while receiving coding education and training. The representative planned a similar review for the occupational therapists.

5.2 *Noted Operational Shortfalls and Responses*

Positive action was not required on deployment package receipt. The deployment package communication with subordinate organizations did not require RMCs and MTFs to act or report, such as providing acknowledgement of receipt or other response indicating planned actions. Many packages languished on someone's desk and went without attention until the Deputy Chief got involved.

Lack of implementation plans. MEDCOM functional staff representatives serving on the DQFAST and DQFAS Metric Corrective Action POCs were slow to understand, support, and invest in DQ corrective actions. We attribute this delay to a PASBA decision not to require the issue champion and Metric Correction Action POC to develop an implementation plan immediately after the problem statement was adopted by the DQFAST. Simply stated, the responsible individuals had not thought through what needed to be done and how to do it. The implementation plans were required of the individuals and approved by the DQFAST during the Spring of 1999. These individuals now have an enhanced understanding of their DQ responsibilities and are starting to achieve more in less time. Henceforth, the champion and Metric Corrective Action POC will be required to develop an implementation plan immediately after a problem statement is approved by the DQFAST for action and follow-up.

Lack of a DQ contact at treatment facilities. The DQFAS Metric Corrective Action POCs were frustrated by their inability to identify a POC at the MTFs. A memorandum was signed by the Deputy Chief requiring regional commanders and facility commanders to appoint DQ managers. These newly appointed managers, most performing the functions as additional duties to their primary functions, assist with communications and perform an array of duties suggested in Appendix C of the *Guide* [CEIS DQMG, 1999]. We recognized these newly appointed DQ managers needed communications, education, and training. We established a Data Quality Manager (DQMGR) Listserver for communications between the PASBA Quality Control Section and DQ managers, referring them to the DQFAS Web Page for informal distance learning until a formal distance learning program can be put in place.

Lack of corporate TDQM training and scarcity of resources. There were no funds to develop DQ symposia to train regional and facility personnel. The deployment package was designed to help regional and facility commanders conduct training without spending travel funds. The DQFAS Web Page provides an informal distance learning tool. The PASBA is currently evaluating the availability of the Army Knowledge Management Network to conduct formal distance learning.

Lack of a Data Quality tie to the AMEDD Strategic Vision or the Surgeon General's Top 20 Issues. While everyone agreed DQ was important and should be a major part of the AMEDD culture, the DQFAST did not undertake a strong enough initiative to tie DQ to these important central missions and goals. There was some effort to display DQ metrics in the AMEDD Performance Measurement Dashboard, but the initiative failed. More work is necessary..

Incomplete Oversight Body Member Responsibility Description. We believe we established a solid oversight body charter from careful planning, organization, and objective measures. We did not clearly communicate responsibilities and expectations of the DQFAST members. Consequently, the PASBA did DQFAST's work rather than coordinated and monitored their activities. We improved this process by requiring several to write implementation plans and participate in developing clinician productivity best practices. Much more needs to be done by DQFAST members to capitalize on the multifunctional composition of the DQFAST and to get the best results from the oversight body.

6.0 Maintaining the Gains and Projecting DQFAS Initiatives

As this paper was submitted, several initiatives were in action or in planning for the next year. Those initiatives include:

- Continuing improvement in the DQFAS Web page to make it more comprehensive and friendly. Converting the *Army MTF Commander's Data Quality Guide* into a Web-based product.
- Implementing formal DQ distance learning through the Army Knowledge Management Network.
- Initiating the next MEPRS Unit Cost annual assessment.
- Obtaining and developing greater physician involvement.
- Scoping and scripting a new videotape directed at MTF-level distance learning for clinical personnel.
- Continuing to monitor and evaluate metric results and business process problem resolution emphasizing MTF improvement in metric results.
- Solidifying efforts to include DQ in AMEDD C&S course curricula.
- Continuing involvement in presentations at professional conferences attended by AMEDD personnel.
- Integration of DQ into the AMEDD Strategic Vision and the Surgeon General's Top 20 Issues.

- Developing an explicit DQ plan for the
the DoD, and civilian theory and practi
- Expanding DQ oversight into other foc
- Recording and promulgating best busin
- Maintaining the dynamic and proactive
Health Affairs workload accounting an

7.0 Summary and Conclusions

We implemented AMEDD DQ oversight a
the major immediate shift required in the c
achieved spectacular first-year formative re
our working conclusions about our accomp
existing and new initiatives. Our working

- To solidify the gains of the DQFAS, w
Strategic Vision.
- The oversight body should be carefully
Expectations should be clearly establis
- Ensure that communications were recei
communication flows between units is
- Responsiveness to subordinate organiz
keep communications open and free flo
- Leaders should be informed about DQ
We are certain that leader support is ult
papers on the MHS DQ activities. In o
Deputy Chief and Deputy Surgeon Gen
- In our culture, data quality marketing, e
must be refreshed to maintain interest.
- A systematic, comprehensive, and dyna

The PASBA and DQFAST look forward to
benefit patient care, capture quality data fo
conserve resources.

Appendix A

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Appendix B

Organization of the Army Medical Department, Its Culture, and Responses to the Environment

B.1 Introduction

The Army Medical Department (AMEDD) is led by the Surgeon General (TSG) of the Army, the Army's top medical staff officer, who advises the Chief of Staff of the Army and the Secretary of the Army. The Surgeon General also commands the U.S. Army Medical Command (MEDCOM). As MEDCOM commander, he has the authority and resources to set and implement policy in most AMEDD commands, agencies, and fixed hospitals.

While overseeing the Army's fixed medical and dental facilities, TSG also supervises training, research and development, health promotion and preventive medicine, and non-tactical veterinary services. Combat medical units report to the combat commanders they support, but TSG sets policy for them and MEDCOM aids their training and readiness.

The organization chart in Figure B-1 displays these relationships [AMEDD Home Page].

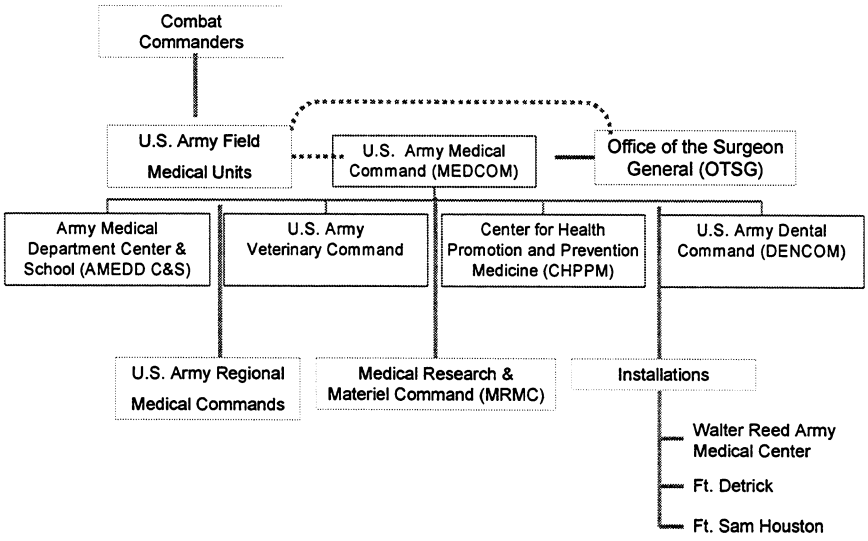

Figure B-1. AMEDD Organization

B.2 The U.S. Army Medical Command (MEDCOM)

The MEDCOM, headquartered at Fort Sam Houston in San Antonio, Texas, employs some 25,000 soldiers and 28,000 civilians worldwide — almost all of the AMEDD except the combat medical units. It has major subordinate commands to manage fixed medical and dental facilities, training, research and development, health promotion and preventive medicine, and veterinary functions. The MEDCOM supports the ability of mobile Army medical units to care for American soldiers on the battlefield and in other hazardous roles. MEDCOM facilities care for casualties evacuated from overseas in time of crisis. In normal times, they care for soldiers in training and their families and provide real-life medical experience for Army medical personnel. This supports readiness by ensuring that medical and non-medical soldiers can perform their missions. [AMEDD Home Page]

B.3 Regional Medical Commands

Army MTFs provide day-to-day patient care throughout the world. These activities are controlled by Regional Medical Commands (RMCs), each with a geographic health services area (HSA) of responsibility. The six RMCs provide regional command-and-control over medical treatment facilities and resources. There are 8 medical centers (MEDCENs), 29 Medical Department Activities (MEDDACs), and numerous clinics. The MEDCEN commander in the regional command is also the RMC commander. The RMCs also provide training and readiness support to Active Army and Reserve Component combat medical units. Four RMCs provide command-and-control over facilities in the contiguous United States, Alaska, and Puerto Rico. Two others provide command-and-control to the Pacific and Europe.

B.4 MEDCENs and MEDDACs

The MEDCENs and MEDDACs have assigned geographic health service areas of responsibility within the RMC that ensures global AMEDD coverage. The MEDCENs have tertiary care centers delivering inpatient and hospital-based primary and specialty outpatient services. These services support patient referral from primary care facilities within its area, MEDDACs within the regional command, or referral from worldwide MHS facilities for specific specialty care. The MEDDACs have community hospitals with outpatient primary and specialty clinics supporting referrals from primary care facilities in its area.

During calendar year 1998, these worldwide medical activities accommodated 137,984 admissions necessitating 504,827 bed days, and supporting 24,127 live births. In addition, MHS beneficiaries visited outpatient facilities at least 13.7 million times. Millions of laboratory studies, radiology procedures, as well as other ancillary procedures were performed; and millions of prescriptions were filled.

When civilian services are required, the MHS purchases the services or shares the cost with some of its beneficiaries through the TRICARE program. The TRICARE program is a triple-option, managed healthcare plan for some MHS beneficiaries. These MHS beneficiaries, namely active duty family members, retirees, retiree family members, and

survivors of active duty and retired deceased personnel may first elect to enroll for primary care services in MTFs or with civilian providers (Prime). Second, they may use preferred provider networks (Extra) at a reduced Civilian Health and Medical Program for the Uniformed Services (CHAMPUS) co-payment. Last, under the TRICARE Standard plan, they may use standard CHAMPUS to offset their civilian medical care costs by paying a deductible and co-payment.

In addition to delivering health services, the uniformed Services members of the MHS must train and be ready to deploy for contingency and other national defense operations.

B.5 AMEDD Leadership and Management

A military environment relies heavily on command and staff leadership and management, as well as separate functional activities and agencies, to accomplish its mission. The commander is always responsible for everything. The commander must sense what is important to accomplish a mission using subordinate commands, staff, activities, agencies, executive information systems, and decision support tools. The AMEDD is well organized functionally. Frequently AMEDD leaders use multifunctional process action teams and working groups as additional tools to support decisions and implement new and essential programs. As in any organization, good data and information quality are key to leadership and management success.

B.6 U.S. Army Patient Administration and Biostatistics Activity (PASBA)

PASBA is a subordinate activity of the Army Surgeon General's Office. Among PASBA's mission activities are responsibilities to provide worldwide healthcare informatics, models, analysis, and data quality products as well as diagnostic and procedural coding and biostatistical consultative services to AMEDD and Military Health System customers.

PASBA ensures data integrity and compliance for electronic file transmissions of the inpatient and ambulatory record extracts, biometrics reports, worldwide patient accounting, dental workload information, and child and spouse abuse incident reporting and follow-up.

Appendix C

Acronyms and Abbreviations

AMEDD	Army Medical Department
AMEDD C&S	Army Medical Department Center and School
BG	Brigadier General
CEIS	Corporate Executive Information System
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
CHCS	Composite Healthcare System
CHPPM	Center for Health Promotion and Prevention Medicine
CPT	Captain (U.S. Army)
CSD	Customer Service Division
DEERS	Defense Eligibility and Enrollment Reporting System
DENCOM	Dental Command
Deputy Chief	Deputy Chief of Staff, Force Development and Sustainment, U.S. Army Medical Command
DISA	Defense Information Services Agency
DoD	Department of Defense
DQ	data quality
DQFAS	Data Quality for AMEDD Success
DQFAST	Data Quality for AMEDD Success Team
DQMG	*Data Quality Management Guide*
DQMGR	Listserver for data quality managers
DSG	Deputy Surgeon General
EBC	Enrollment-based capitation
Ft.	Fort
FY	Fiscal year (October 1 to September 30)
GAO	General Accounting Office
Guide	*Army Military Treatment Facility Commander's Data Quality Guide*
IPR	In-process review
IQ	Information quality
LTC	Lieutenant Colonel
MA	Massachusetts
MEDCEN	medical center
MEDCOM	U.S. Army Medical Command
MEDDAC	medical department activity
MEPRS	Medical Expense and Performance Reporting System
MHA	Master's in Healthcare Administration
MHS	Military Health System
MRMC	Medical Research and Materiel Command
MTF	military treatment facility
OASD(HA)	Office of the Assistant Secretary of Defense for Health Affairs
OTSG	Office of the Surgeon General
PASBA	Patient Administration Systems and Biostatistics Activity
PAT	process action team

POC	point-of-contact
RMC	Regional medical command
SADR	Standard Ambulatory Data Record
SDCS	source data collection system
SIDR	Standard Inpatient Data Record
TDQM	total data quality management
TMA	TRICARE Management Activity
TRICARE	triple option health benefits plan for the uniformed Services
TSG	The Surgeon General of the Army Medical Department
TX	Texas
U.S.	United States
VA	Virginia