



# AHLTA

## Clinical & Business Notes



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### Welcome!

This bulletin is designed for passing along the latest information in the implementation and clinical integration process.

### 180k Weekly Encounters!

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### Milestones

**180,000 weekly AMEDD encounters documented in AHLTA.** In October 2005, 52% of all AMEDD outpatient workload was completed in AHLTA.

### AHLTA: A New Change & A Renewed Vision

Before a brief discussion of why CHCSII's name was changed, I think it important to review AHLTA's brief history. It is 22 months into worldwide deployment, 15 months into the AMEDD having a physician as program manager (which added clinical integration as a major role of the program office), and only eight months since the AMEDD held its first EMR Summit where AHLTA was definitively accepted as the AMEDD enterprise EMR. In that short time, the system has been deployed around the world and is now available to over 70% of the AMEDD and its use accounts for 52% of all AMEDD outpatient encounters. It is the largest EMR in the world. At the second AMEDD EMR Summit in November, the true EMR relationship between CHCS, CHCSII-T and the Clinical Data Mart was discussed. The understanding that the MHS EMR is really the totality of these three systems is a large part of what drove the name change by TMA from CHCSII to AHLTA. (Note: The name AHLTA is a name, not an acronym.)

### SCRs & Improvements

The success mentioned above notwithstanding, it is clear that AHLTA is still not perfect, as few IT systems are. The TSG directive was to field and improve it, as it was clear the system would not improve if left in the lab. This strategy has been successful as the AMEDD (really the AMEDD end users) has guided much of the transformation of the system. This has included speed, stability, vocabulary (structured language) and other capabilities. In the early days, the request of a few users led to a change that was subsequently requested to be undone when the number of users increased. Issues like this led the AMEDD AHLTA Office to establish an AMEDD-unique process to handle System Change Requests (SCRs). This process involves the Program Office receiving an SCR (in the attached format) and first comparing it to previous SCRs. If the new SCR is unique, work is done to develop the SCR into a tool or process to improve care for all. This process of reviewing and developing the outcomes that the end user wants and validating them against what many users want prepared us to take advantage of a large amount of year-end funds to further develop AHLTA. It also has clearly shown that most specialties want similar tools/improvement.

I will focus on some of the most common overlap areas with ophthalmology as the example.

**MEDCIN Vocabulary** - Please note that due to direct feedback from many eye specialists, over 170 new eye terms were added to MEDCIN and the developer of that COTS product stands ready to add more. The eye specialist feedback has also been provided to that company to look at note emission. A very functional relationship has been developed with this company. I look forward to working with users to coordinate consolidation and validation of additional structured terms to add to MEDCIN. This is true of all specialty areas and it is difficult to get everyone to agree on what is "needed." The use of free text will likely remain in place with primary structured terms for some time to come.

**Drawing Tool** - In January 2006 the initial drawing tool should be fielded. This consists of

## Current AMEDD

### AIM Forms:

- Asthma-aCPG
- Asthma Peds-aCPG
- Audiology-General
- BH--Intake
- Cardio-EKG & GXT
  - General
  - Ischemia-aCPG
- Chiro-General
- CHN-Latent TB Infection
- Colposcopy-Procedure
- Depression-aCPG
- Derm-General
- Diabetes-aCPG
- Dyslipidemia-aCPG
- Dysuria-aCPG
- ER-Abdominal Pain
  - Allergic Reaction
  - Altered Mental States
  - Arrhythmia
  - Back
  - Behavior
  - Bite and Venom
  - Buttocks
  - Chest Pain
  - Code
  - Cold Sx
  - Ear
  - Fast Track Adult
  - Fast Track Peds
  - Nursing
  - Peds Respiratory
  - Respiratory
- FP-General
- GERD-aCPG
- GYN-General
- IM-Geriatric Adult
- Influenza Vaccine
- Low Back Pain-aCPG
- Nephrology
- Neuro-General
- Nursing-General
- OB-Intake
- OB-Labor and Delivery
- Ophthal-General
- Opto-Eyete
- Ortho-General
  - Surgery Counseling
- Osteopathic
- OT-General
- PC-General
- PC-Hearing Conservation
- Peds-Cardio
  - General
  - School & Sports Physical
  - Well Child
    - 1 to 12 months
    - 1 to 3 years
    - 3 to 11 years
    - 11 to 16 years
- PT-General
- Pulm-General
- Rheum-General
- Speech Therapy-General
- SRP
- Telephone Consult
- Urology-General
- Vasectomy-Procedure

basic images, the ability to import your image of choice off your desktop, and the ability to import any picture on your computer. The user will be able to write on these images in free hand and in color. The images can be "copy forwarded" into the patient's next visit to be updated. This tool was requested by many specialties. The integration of the advanced drawing tool into AHLTA will start in December 2005 with a likely fielding in July 2006. This tool will provide several features to meet the request of eye specialty areas. The images will now be structured. This will allow you to write a structured note while drawing on the picture. The "drawing" can also be a chart of results so that a paper-like input and output chart of numbers can be entered and the notes will print out looking similar. This has been a big request from ophthalmology and optometry. We will need the help of specialty SMEs to define areas of the images to make the image smart. This work has been going on in part with RMC local development of AIM forms and the soon-to-be-fielded advanced AIM forms. The RMCs all have MOUs with my office to help produce these AIM forms. To date, this resource has not been tapped as well as I would like.

**Note Writing Choices** - Presently a note can be entered using a template and/or an AIM form. This will soon be augmented by the Advanced AIM (A2) form and then by the drawing tool mentioned above. Templates have the advantage of being developed locally and to individual personal preferences. They also have built-in decision support, which is a feature that we are just starting to take advantage of. The AIM form is more like paper. The optometry and ophthalmology AMEDD AIM form were designed by specialists in those areas. I would be interested in your opinion of them. The addition of the basic drawing tool, the A2 form, and the advanced drawing note will provide more choices to meet the individual desires of the thousands of AMEDD healthcare professionals. The AMEDD has also changed the deployment CONOPS for computers. Now Tablet PCs are part of the computer package deployed for providers. This will permit easier drawing, the use of handwriting recognition for free text comments, and facilitate the move to wireless. Drawpads and scanners are also being fielded to all sites based upon field input.

**Flow Sheets** - Flow sheet capability is one of the most requested enhancements. Depending on the specialty making the request, the term "flow sheet" has different meanings. Flow sheets are now a funded project. It will permit global templates to be established for a data flow sheet (table) or visit template (findings over time).

**Equipment Integration** - This is desired by all medical areas. Unfortunately there is little uniformity of equipment across the AMEDD - often within an MTF. Defining this requirement has caused equipment interfaces to become one of the "top 10" end-of-year items. The generic interface currently being designed will allow the provider at the time of the visit to see the information, and allow that information to be digested into structured data for later use. This will allow the equipment output to be searchable and queried. This is far better than just saving a PDF file of results that can only be interpreted by human review.

**Document/Letter Writing capability and Standard Form Completion** - These are both projects that the AMEDD has funded to permit the use of standard forms (initially physical forms) and the ability to create letters/documents. The document can be any form that the patient needs to sign, a note for work, or an overprint of information for minor edits to make a patient letter. As we have done with the OB Summary Sheet, pertinent patient data can be pulled into a defined note for a summary letter or specialty referral letters.

**Point-of-Care Decision Support** - One of the key advantages of a global EMR with a common data set is that decision support can be used at point-of-care. This is becoming available in AHLTA initially as the USPSTF reminders and individual reminder, it will be part of the Individual Medical Readiness module, and it is being built into the patient registry and outcome tool (often called the aCPG project). This tool will allow patient-centric data to be displayed at point-of-care as defined by the condition and clinic providing that care. The AMEDD Refractive Surgery Information System (RSIS) was recently reviewed by the OTSG CIO and AMEDD AHLTA Project Offices. Upon review, it was determined that the only thing that AHLTA did not currently include was the decision support component. A method of providing this has been determined and can be done by AMEDD development teams outside of direct AHLTA development. This development will provide the decision support by keeping all the patient information in one longitudinal and searchable database.

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## COTS & Separate EMR Products

The TSG direction has been to field an EMR that serves both the patient and the entire healthcare team. Buying COTS software does not provide benefits to all areas and can lead to increased expense and delays. The use of separate COTS EMR products could

To see the current updated list of AIM forms (including USAF & USN, as well as draft, working, and requested forms), visit the AHLTA website on AKO.

## Web-Based Training

This website contains tutorials developed to help you learn how to use AHLTA. The tutorials consist of lessons, demos, and guided practice that teach you how to perform critical medical tasks using the AHLTA software. On the web at:

<http://www-nmcp.med.navy.mil/chcsII/Medical%20Tutorial/s/index.html>

The AHLTA Community Homepage is located on the AKO at [www.us.army.mil/suite/page/406](http://www.us.army.mil/suite/page/406).

Or, login to AKO, click on GROUPS, search for CHCS II, click on HOMEPAGE.

fractionate that effort, create more inefficiency, and delay improvements. Unlike past EMR efforts that created common access to files such as PDF, the current MHS effort is to create a more advanced EMR. The storage of a picture of paper does not create efficiency and is not integrated. The patient data is not available to every member of the healthcare team unless the picture is read. Studies show that providers rarely log into a second application while providing care. To overcome these issues, the system must share data. This requires that all patient demographics be shared among the applications and the structured exam findings/data elements must be mapped between the two systems. This is a costly endeavor and any change to either system requires testing of the systems together to ensure that data integrity is maintained. This additional testing is costly and will delay improvement of the entire EMR. If we are going to take money and time to modify something, why don't we spend the year modifying our EMR – AHLTA? It is a concern that other Services are pursuing "plug and play" in a disjointed fashion. By present agreement, any Service-specific application is at the service's expense for purchase, development and sustainment cost.

As a family physician, I understand everyone's and every specialty's desire to get the best possible application to care for our patients. Finally, it has always been and will always be difficult to get complete agreement from all providers in any specialty area. This is particularly true of the global and tri-service nature of our EMR. Even with all the money, effort and SME time that were spent on some interim applications, the systems developed were not accepted by all. The AHLTA Program Office requests that all specialties, healthcare team areas and consultants work in a common direction to synergistically improve AHLTA. This combined effort will speed improvement as we focus on the areas that can provide the greatest benefit.

Specifically, I request your help with the following areas along with improving understanding and communication:

- Additional structured language needed for your specialty or area of care
- Specialty-specific AIM and A2 forms
- An SME to define structured areas of the smart images for your specialty
- Workflow with use of AHLTA – technology alone is never the answer
- Review of equipment standardization

Information Technology is not the answer in isolation. Technology is a tool; healthcare is a process. The process of using that tool must be evaluated and changed. This provides the greatest near-term possibility to improve healthcare throughput. The EMR is not going to solve every issue. The process of healthcare, from staffing to scheduling to health team documentation and the provider visit, must evolve in our current system with our current tool. To this end, a business process reengineering (BPR) document has been prepared and included with this Newsletter. I would ask that each MTF and service continue to provide feedback so this document and the sharing of best practices can be collected and shared throughout the AMEDD.

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## In Conclusion

I hope that this note, although lengthy, and the attached documents have helped to address some concerns as well as clarify our present status. Multiple substantial improvements to AHLTA based upon user impact will be fielded during this FY. This list will be posted to the AHLTA AKO website by 15 Dec 05, and more detail will be added as it becomes available. I am sure that by working together the needs of the patients, the practitioners, and our healthcare system will be met in a timely manner.

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