Information Technology NEWS
Office of Information Technology

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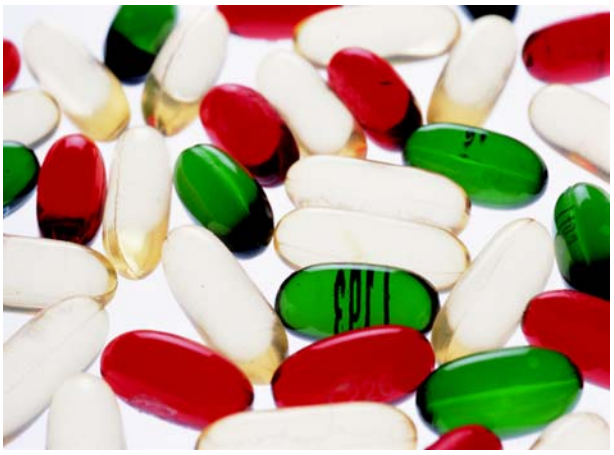
Moving to Pharmacy 5/7

Ten Non-EHR Reasons to Make the Change

For the past two years, development and deployment of the IHS Electronic Health Record (EHR) has occupied a prominent place on the agenda of the Office of Information Technology. EHR has been the subject of a number of articles in this newsletter and elsewhere, and the IHS Director has mandated deployment of EHR to all Federal IHS facilities by the end of 2008. Version 1 of the IHS EHR graphical user interface (GUI) was certified in January of this year, and at the present time 24 IHS, Tribal, and Urban (I/T/U) facilities are using the application in clinical practice.



This is not an article about EHR. It is about why facilities need to move toward installation of the EHR software, even if they do not intend to use the EHR GUI in the immediate future. EHR is not a standalone product. Its functionality depends heavily upon a number of VistA-derived RPMS applications, the chief of which is the new Pharmacy suite (Inpatient version 5, Outpatient version 7). The purpose of this article is to outline ten reasons why Pharmacy 5/7 is important even if a facility is not yet ready for EHR.

1) Get your software up to date – A legitimate reason to move toward Pharmacy 5/7 is that this activity forces a facility to review and update essentially the entire RPMS infrastructure to current version and patch levels. Many I/T/U facilities have fallen behind on installing patches, and are experiencing software problems as a result. The upgrade to Pharmacy 5/7 requires the latest Kernel and Fileman patches, Cache, and PIMS 5.3, among others. An organizational decision to implement Pharmacy 5/7 can provide the needed impetus to upgrade the rest of RPMS.

2) Medication order checks – Pharmacy 5/7 offers a number of enhancements that are critical for improving patient safety. The most important is the ability to check prescriptions against known sensitivities using

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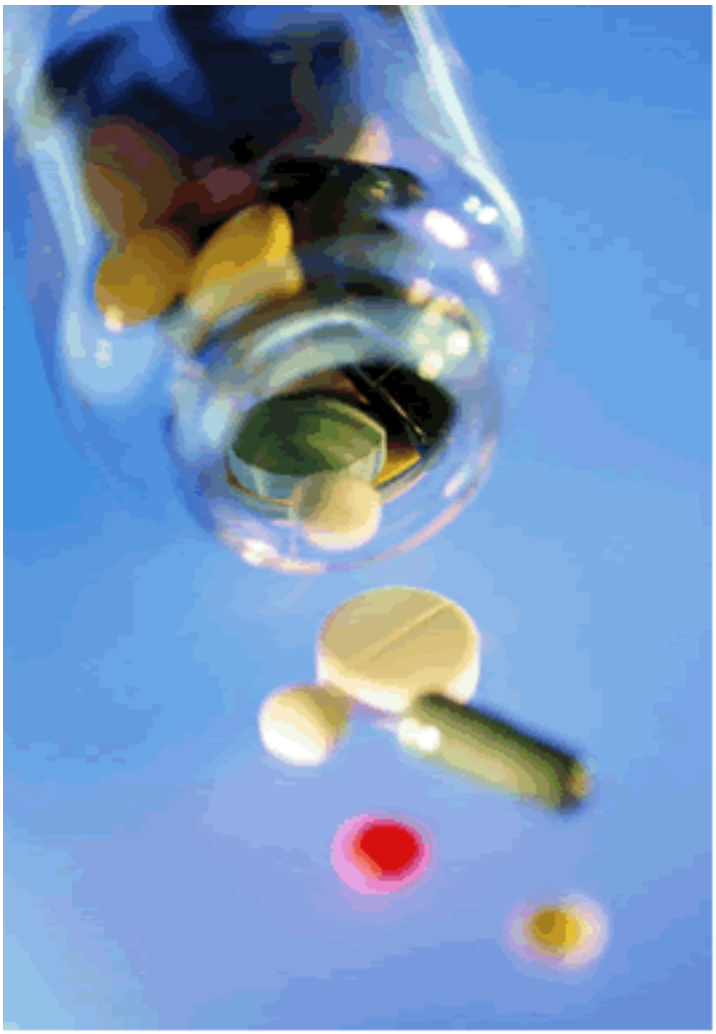
the Adverse Reaction Tracking (ART) application. A similar feature also exists to screen for drug-drug interactions. Outpatient Pharmacy version 6 has a rudimentary order check capability, but it requires the drug name in the prescription to exactly match the name in the order check file. With Pharmacy 5/7, order checks are done by drug class, ensuring that class-specific reactions or interactions (such as penicillin sensitivity) are not missed. In the near future (see below), Pharmacy 5/7 will be able to check for interactions with outside (so-called "non-VA") medications and with over-the-counter and herbal products. The database for all of these interactions is maintained through National Drug File (NDF) updates that IHS receives through VHA, and these updates are only compatible with Pharmacy 5/7.

3) "Non-VA" medication capability – It is common at I/T/U facilities for patients to obtain some of their medications in the private sector either because of formulary issues or because they also see private practitioners. RPMS currently allows for these "outside" medications to be listed on the Health Summary (via the V MEDICATION file) but does not integrate these medications into the RPMS Pharmacy application. Upcoming patches to Pharmacy version 7 (delivered with CPRS version 24) will allow "non-VA" medications, including over the counter and herbal products, to be part of the orderable drug file and therefore displayable on the medication profile and accessible to the order checking functionality.

4) Compatibility with laser printers – Previous versions of RPMS Pharmacy applications only allowed prescription labels to be printed on dot-matrix printers. These printers are noisy, slow, and are rapidly becoming obsolete. Pharmacy 5/7 is compatible with laser printers, an enhancement that among other things facilitates the ability to customize and format prescription labels.

5) Drug text – Pharmacy 5/7 allows for the linkage of customizable text entries with any drug or drug class in the orderable file. The pharmacist thus has access to information about dosing guidelines, restrictions, within-class comparisons, or a variety of other decision support tools during the process of completing or refilling prescriptions. (This same information is accessible to users of the EHR GUI and provides valuable point-of-service support to prescribing providers.)



6) Paperless refills – Outpatient Pharmacy version 7 offers the option of performing "paperless refills," which means that the pharmacist can create and complete a complete PCC visit without filling out an encounter form, and without a clerk having to enter the data into RPMS. Refills can be done without the chart, if desired, or the chart may be pulled for the pharmacist to review. This option speeds up the refill process and reduces workload for medical records, pharmacy, and data entry staff.

7) Code Set Versioning – One of the provisions of the Health Insurance Portability and Accessibility Act (HIPAA) is that all codes (such as CPT and ICD codes) submitted to third party payers must be codes that were in effect at the time the services were rendered. The ICD and CPT code sets are updated at least annually. In order to be fully compliant with HIPAA, RPMS has to have the ability to match visit-related diagnoses and services with the particular code sets that were in effect on the date of the visit. This functionality was delivered by the Veterans Health Administration a few years ago in a large set of VistA patches bundled into version 22 of the Computerized Patient Record System (CPRS). The RPMS EHR software is presently comparable to

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CPRS version 20, and development is underway to upgrade it to CPRS version 25 equivalence. This upgrade will include the Code Set Versioning functionality, but only those facilities installing the EHR software (including Pharmacy 5/7) will have the ability to automate their compliance with this HIPAA provision or (and this is important) to install updated ICD and CPT code sets.

8) Getting ready for EHR – Although this article is not about EHR, it must be mentioned that the installation and use of the Pharmacy 5/7 application suite is a sine qua non for EHR implementation. The software and business process changes required for the Pharmacy upgrade are necessary (but not sufficient) steps toward successful launch of the Electronic Health Record. In fact, installation of the Pharmacy 5/7 suite constitutes over 95 percent of the software needed to run the EHR GUI. It is strongly recommended that Pharmacy 5/7 be running for at least three full months (six is desirable) before beginning GUI order entry by clinicians. This is because prescriptions entered using Pharmacy 6 are not renewable in Pharmacy 7, so there needs to be enough time for all existing prescriptions to be "rebuilt" by pharmacists using Pharmacy 7. This is most conveniently done as patients present for their routine prescription renewals.

9) Software updates – Along the lines of item (1) above, the fact is that essentially all ongoing development in RPMS, particularly those packages derived from VistA (Pharmacy, Laboratory, Radiology, and many other applications), will take place in the post-EHR environment. This means that facilities that have not yet upgraded to the EHR software (including Pharmacy 5/7) will not be able to install new RPMS patches. During the transition to EHR, OIT will support older applications to address operational issues only.

10) Preparing for the next generation of VistA – The VA is developing new versions of VistA applications using Java and relational database technologies. The new system, known as Health**e**Vet-VistA, will include a national master patient index, national and regional health data repositories, and many other enhancements that will benefit RPMS users. IHS is committed to leveraging the VA's substantial new investment in Health**e**Vet-VistA to bring the very best of health information technology to our staff and patients. Pharmacy 5/7 is an essential step toward this new direction.

The above information should be sufficient to get any I/T/U pharmacist, clinician, or CEO thinking about the need to implement the RPMS Pharmacy 5/7 suite of applications. All RPMS sites, whether they are considering EHR as a near term or long term option, should be planning for Pharmacy 5/7. Because of the integration of and interdependencies between RPMS clinical applications, even facilities that do not have pharmacies will need to install this software in order to take advantage of updates to other packages that

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New Director Announced

I am pleased to announce that Mr. Bernie Daillebout has been selected as the Director of the Division of Enterprise Project Management within the Office of Information Technology (OIT). Bernie will lead a broad range of corporate-level, organization-wide information technology projects and the planning, development, organization, coordination, and management of technical projects related to the Information Technology (IT) enterprise architecture and engineering. He will oversee the implementation of an effective IT Project Management Framework that consists of standardized system development processes, plans, and controls that will ensure the IT projects are completed on time, within budget, and are aligned with the IHS mission and objectives.

Bernie Daillebout has been with the Indian Health Service since 1992 and has served in a variety of assignments within the Office of the Director, the Office of Clinical and Preventative Services, and the OIT. Before joining the IHS, Bernie served as a project manager with Sandia National Labs and as a supervisory engineer with AT&T. He earned a Master of Business degree in general management and a Bachelor of Science degree in electrical engineering from the University of New Mexico in Albuquerque.

Please join me in welcoming Bernie to OIT!

Keith Longie
IHS Chief Information Officer

A CAC's Life

What is a CAC?
Although a common position among the Department of Veterans Affairs (VA) hospitals, the Clinical Applications Coordinator (CAC) is a relatively new job that has appeared throughout the Indian Health Service. This position was created in response to the national decision to adopt the Indian Health Service Electronic Health Record (IHS-EHR). The Resource Patient Management System (RPMS) currently consists of over 35 clinical applications for case management (asthma management system, diabetes management system), clinical outcomes (CRS, VGEN, Q-MAN), and decision making support (Health Summary, Health Maintenance Reminders). The IHS-EHR closely ties and integrates these applications and other RPMS packages together to enable the documentation, capture, and output of essential patient information. The CAC serves as an interface (the middle-man) between clinicians and the information technology (IT). To achieve this goal, the CAC is responsible for implementation, testing, and training of new applications. A CAC knows what is required to make these applications work effectively and appropriately. In addition, the CAC also trains clinicians and others on the effective use, maintenance, and upkeep of the applications.

Effective CACs must have: (a) a strong clinical background, (b) familiarity of all hospital departments and the interactions that exist between them, and (c) RPMS and other computer related skills. The CAC position is currently filled by a wide number of professions: physicians, nurses, pharmacists, medical technologists, IT specialists. As such, no single position description or clinical billet has been developed and approved — and it may be some time before this occurs.

A day in the life of a CAC
Let's look into a CAC's journal and look at their normal routine.

It's 7am on Monday, three weeks before our first provider starts using the entire EHR. I arrive in my office, turn on my computer, put my tea in the microwave, and begin another day as the Clinical Application Coordinator, better know as "the CAC".

I start each day the same: check my meeting schedule and my "to do" list (if you're a CAC and not a list maker- you will quickly become one).

Meetings:
8:00- med staff meeting
8:30 - meet with Medical representative
10:00-Safety Committee
1:00pm- EHR Pharmacy representative
3:30pm- EHR core committee

To do list for today:
- Finalize templates
- Make Podiatry ICD picklist
- Test med orders printing to pharmacy
- Setup and test note printing as a batch
- Test Allergy orders- how do they work
- Check on new laptop for Treatment room
- Chart review for nurses entering immunizations- are they doing it correctly

I hurriedly scan the 40 new e-mails that I've received from the EHR list-serve to find out if any of my many posted questions were answered or if there are any new "hot topics" identified. The answer to both is yes. I flag numerous e-mails to remind myself to review them later on and head off to my first meeting of the day.

8am: Off to my first meeting with the medical staff for their bi-weekly EHR "tricks of the trade" briefing. This is the most productive part of my day where I meet with the medical staff to give them a short lesson or answer questions about how they are currently using the EHR. They have

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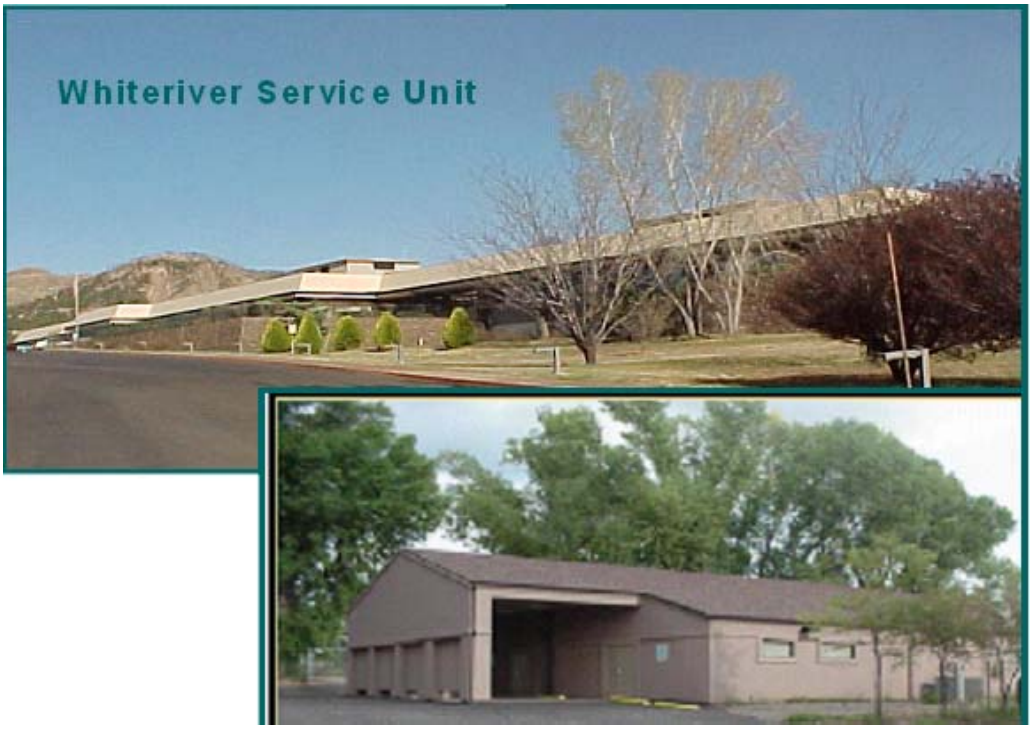

Clinical Reporting System (CRS) Update

CRS 2005 Software

The Clinical Reporting System 2005, Version 5.1 software was nationally released on June 16, 2005. The CRS Project Team would sincerely like to thank the following beta sites for testing this version of the software:

- Aroostook Band of MicMacs
- Cherokee Indian Hospital
- Chinle Comprehensive Health Care Facility
- Clinton Indian Hospital
- Colville Indian Health Center
- Portland Area Office

Key changes for this version include:

- 6 new indicators (also included in HEDIS report):
  - o Topical Fluoride (GPRA indicator for 2005)
  - o Beta-Blocker Treatment After a Heart Attack
  - o Persistence of Beta-Blocker Treatment After a Heart Attack
  - o Cholesterol Management After Acute CVD Event
  - o Osteoporosis Management in Women
  - o Asthma Quality of Care
- New Centers for Medicare and Medicaid Services (CMS) report for use by hospitals to report on 10 quality measures for heart attack, heart failure, and pneumonia
- Revisions to several existing indicators, including fixes for Childhood Immunizations (addition of CVX code 110 for Hepatitis B) and Mammography Screening (including refusals for certain CPT codes)
- New Elder Care report for patients 55+
- New Graphical User Interface (GUI)
  - o Windows-based
  - o In addition to current roll-and-scroll, users are not required to use the GUI

CRS 2006 Software

Version 6.0 is in the development phase and is planned for national release in late October 2005.

Key enhancements planned for CRS Version 6.0 include:

- Colorectal Cancer Screening, Depression Screening, Childhood Weight Control, and Tobacco Cessation changed to GPRA indicators.
- Diabetes: Access to Dental Services, Public Health Nursing, Tobacco Use

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Computer Security Tip - Cleaning your computer system

It's time for a cleaning! Just as closets and drawers become cluttered over the year, so does your computer. Files, e-mails, and specialty software that are no longer necessary can take up needed memory space and in some cases, cause the systems to slow down. In addition, not regularly cleaning your system can also have the following security implications:

- Corruption of files

- Increase chance of unwanted access of sensitive information

- Increase of malfunctions in the system, resulting in limited availability of necessary information

Please take the following measures to ensure that your system is performing efficiently:

- Set aside a certain time each week to delete unwanted and unnecessary personnel data
- Archive the data and e-mails you need to keep but are not often used
- Back up important information
- Delete old and unnecessary files
- Empty the recycle bin
- Ensure security applications are current and security features are enabled

For more information regarding cleaning your computer system, please contact your local computer team. ■

Kathleen Federico, *IHS ISSO*

RPMS Behavioral Health Applications

The RPMS behavioral health (BH) applications were developed to be used by BH clinicians at a wide variety of IHS, Tribal, and Urban (I/T/U) sites. The BH applications interact with the entire suite of RPMS clinical and administrative applications to provide an integrated, electronic behavioral health record for over 250 I/T/U sites, including hospital based mental health and social work programs, tribal alcohol and substance abuse outpatient programs and youth residential treatment facilities.

Current Applications

Behavioral Health System (BHS) v3.0 patch 4 was released in early July. The behavioral health graphical user interface (BH GUI) was released simultaneously. BH GUI is a component of the IHS Patient Chart and offers the user a friendly and intuitive graphical interface to the Data Entry module of the server side application, BHS v3.0. Efforts to assist sites using BHS transition to BH GUI are ongoing and over 60 IHS, Tribal and Urban (I/T/U) behavioral health sites currently are using the alternative graphical format.

Enhancements to both applications include:

- Updated POV tables (includes DSM-IV-TR, ICD9 and Problem Codes)
- New Activity Codes
- Enhanced Group Entry functionality
- Enhanced privacy and security features
- Modifications to the suicide reporting form
- Graphical user interface to the RPMS IPV/DV Screening Exam Code
- IPV/DV Screening reports
- Ability to view BH and PCC patient education, health factors and screening data
- Modified export

Support Activities

In June, the RPMS BH user support staff reactivated the dormant Patient Chart listserv. Users can now benefit from the availability of a listserv primarily dedicated to the BH GUI component of Patient Chart. A second listserv was also launched to meet the unique needs of the residential alcohol and substance abuse treatment facilities that use the BH GUI.

Area two-day training events will continue through the end of the fiscal year. The training schedule for FY 2006 is being finalized now. The registration process and coordination of training has been made easier by the new RPMS training software which allows the trainers to generate class rosters, waiting lists and certificates of attendance electronically. Class participants can also register and complete evaluations on-line. On-site implementation visits are scheduled as resources allow. Abbreviated on-line learning opportunities are also being explored at the request of users as an alternative to lengthy and costly training events.

RPMS Help Desk support for the behavioral health applications is enhanced by the availability of licensed behavioral health providers as well as technical experts and the application developers. The RPMS Clinical Applications Integrated Behavioral Health Web site has been updated. Users can now retrieve training materials and job aids directly from the Web site as well as recent PowerPoint presentations on the RPMS behavioral health applications. The Web site will be continually updated to reflect current development activities.

Current Development Activities

Many of the long-term requirements for an integrated behavioral health application can be met by functionality currently available in the IHS Electronic Health Record. In order to provide enhanced functionality to behavioral health users, the IHS is integrating behavioral health components into the EHR VueCentric framework. This integration will build upon functionality and features found in the current BH GUI release and BH providers will have the ability to utilize all of the functionality offered by the EHR (including Notes/TIU, OE/RR, Pharmacy 7, PIMS, etc.). Additionally, numerous BH-specific TIU templates for biopsychosocial assessments, progress notes and other BH clinical documentation needs are being created. Testing of the integrated behavioral health components of the EHR will begin in the fall and the release of the new behavioral health components is anticipated in the spring of 2006.

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Web Team News

The IHS Web Team has been up to some amazing things this last quarter.

IHS DBA Assistant
In order to better manage the IHS SQL Servers, the Web Team is in the process of creating the IHS DBA Assistant. This amazing program written in VB.Net will give DBAs an exciting new tool to aid in their everyday duties. While currently only able to monitor SQL servers, the application has the potential to be modified across platforms.

Based on an established set of business rules and parameters unique to the IHS, the IHS DBA Assistant will have the ability to:

- Monitor user accounts to ensure that no one has been granted permissions that they do not need.
- Monitor the physical sizes and locations of databases. If the database is larger than an established parameter, the application will truncate the database minimizing it without altering the database itself.
- It will also monitor the locations of file and transmission logs to ensure they are in their correct location.
- Allow specific users to run DTS Compare™ without needing full System Administrator privileges.
- Monitor databases to ensure that the DBO user name is being used. The application won't make any changes, but will notify the DBA of the problem, allowing them to notify the owner of the database in question of the problem and assist them in correcting the problem.

An exciting module of this application is currently in development that will allow users wanting a database to fill out an Outlook form. The form would then be sent to the DBA for approval. If approved, the DBA Assistant will automatically create the database with the requested parameters and then notify the requestor that the database has been created.

While no current GUI front-end is in the works, the IHS DBA Assistant does have the potential to be modified for one. The application is flexible enough to allow the creation of a GUI using any COM Object compatible software.

DSFC PAS
The Division of Sanitation Facilities Construction Project Approval System has been completed and is running live. The Albuquerque Area DSFC office is using the system to route a series of project documents through a 22 step approval process. E-mail notification, document review and approval are all done on-line. The system also includes a history feature that keeps track of all actions taken on each of the documents throughout the approval process.

http://www.ihs.gov/NonMedicalPrograms/DSFCPAS/index.cfm

NPR
The Nurse Position Report web application was officially launched at the IHS National Council of Nurse Administrators (NCONA) conference in Tucson, Arizona on 7/12/05. The Nurse Position Report web application allows you to submit your quarterly report by entering nursing staff changes directly from the IHS Web site. Approximately 200 Nurse Position Reports are submitted every quarter. This streamlines the quarterly reporting process for compiling the number of nurses hired or terminated during the quarter by discipline at your site whether it's IHS, Tribal, and Urban (I/T/U).

The administrator functions for the Nurse Position Report web application allows authorized administrators to assign roles to users, to update the Nurse Position Report when needed, and to run reports. This streamlines administration by placing control with the most appropriate personnel.

Help Desk Statistics

The OIT Help Desk closed 906 support calls for the third quarter of FY05. Here's a breakdown of those calls:

1. Resolved within 0-7 Days: 504 (56%)
2. Resolved within 8-14 Days: 49 (5%)
3. Resolved within 15-21 Days: 52 (6%)
4. Resolved within 22+ Days: 301 (33%)

You can contact the OIT Help Desk by:
Phone: 888-830-7280 or 505-248-4371
or **E-Mail:** ITSCHelp@IHS.HHS.gov

Alex Fullam, *User Support Specialist*

RPMS Development News

Recent Package Releases

Immunization Data Exchange (BYIM) v1.0 released on 08/04/05
Immunizations are an established prevention practice that contributes to individual and community health by preventing infectious diseases in both children and adults. Over the past decade, both the number of vaccines and the complexity of vaccine regimens have increased dramatically. Resource and Patient Management System (RPMS) immunization software (IMM) has been developed and enhanced to improve patient care. The value and accuracy of IMM vaccine forecasting and reporting features are dependent on complete and accurate vaccine history in the local RPMS database.

IHS Patient Chart System (BPC) v1.5 released on 07/06/05
The IHS Patient Chart program is a Windows-based GUI (Graphical User Interface) application that allows a provider to review and, in some cases, add or edit patient data in the RPMS application suite.

Clinical Reporting System (BGP) v5.1 released on 06/16/05
CRS Clinical Reporting System version 5.1 adds FY 2005 clinical performance indicators to existing FY 2002 through FY 2004 indicators. The CRS Clinical Reporting System is an RPMS (Resource and Patient Management System) software application designed for national reporting as well as local and Area monitoring of clinical GPRA and developmental indicators. CRS was first released for FY 2002 indicators (as GPRA+) and is based on a design by the Aberdeen Area (GPRA2000).

.Net Data Access/connectivity Util. (BMX) v1.0 released on 06/16/05
BMXNet is a set of software utilities designed to enable Windows applications written using the .NET framework to exchange data with RPMS using standard ADO.NET tables. Specifically, BMXNet is an ADO.NET Data Provider for RPMS. BMXNet is intended to be used by Windows software developers who are writing .NET applications based on data contained in the RPMS clinical repository. BMXNet may be used by any kind of .NET application, including rich client, web services or ASP.NET. BMXNet is implemented on the RPMS server using routines, options, RPCs and files contained in the KIDS file. All sites using .Net GUI clients should install the KIDS file on the RPMS server. ■

Albert Toya
Computer Specialist

Recent Patch Releases

Administrative Resource Mgmt (ACR) v2.1, patch 17 released 07/29/05
Patch 17 fixes 6 known errors and makes 7 modifications, including modifications to accommodate the new process of Adding Payments to Payment Management batches. This patch will also prevent the PAID-FOR field from displaying along with the ACH Addendum field on the Payment Management reports.

Behavioral Health (AMH) v3.0 patch 4 released 07/06/05
This patch updates the MH/SS ICD crosswalk as a result of the new ICD update for 1997 and fixes the Modify a Record template.

Health Summary (APCH) v2.0 patch 13 released 05/04/05
Patch 13 makes 2 modifications to the DM Supplement, modifies the exam section to not display values for IPV/DV exam, removes the lookup on Loinc codes until after Loinc taxonomies are reviewed, modifies the lab components to not display the abnormal/normal flag if the result is a space (no result), and adds GMTS as a group to several dd's added a check for V LAB 0 node in supplement

Immunization (BI) v8.0 patch 2 released 07/28/05
Patch 2 changes 3 routines to allow the use of some newly released vaccines.

Laboratory System (LR) v5.2 patch 19 released 04/12/05
This patch makes 2 changes to Patient Chart functionality, 11 changes to the current IHS Lab package functionality, and 1 fix for IHS Lab package label printing functionality for Intermec 3400/4100 printers.

Patient Information Management System (PIMS) v5.3 patch 1003 released 07/15/05
The Patient Information Management System, Version 5.3, Patch 1003 was released on July 15, 2005. This patch contains requested fixes and enhancements to the Scheduling and ADT modules. Scheduling changes include: Sites have the capability to update reasons why a patient's

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primary care provider was changed; and the appointment search threshold can now be set to zero days preventing display of any past appointments. ADT modifications include: Chart delinquency parameter now has an upper limit of 30 days to meet JCAHO and CMS standards; and patient transfers from observation to inpatient are now show as admissions on the M202. These are just a few of the 40 changes made to PIMS 5.3.

PCC Management Report (APCL) v3.0 patch 16 released 05/11/05
Patch 16 of PCC Management Reports adds a new 2005 Diabetes Audit.

Pharmacy Point of Sale (ABSP) Class II v1.0 patch 13 released 07/21/05
Patch 13 alters 1 routine and 1 DD, adds 3 new formats, and adjusts 2 existing formats.

Pharmacy Point of Sale (ABSP) Class II v1.0 patch 12 released 06/28/05
Patch 12 alters 5 routines, 4 DDs, and 2 fields, adds 14 new formats, and adjusts 12 existing formats.

Radiology (RA) v5.0 patch 1001 released 05/12/05
Patch 1001 includes several fixes and enhancements, including modifications to correct errors when either deleting or un-verifying reports. This patch modifies the status tracking option display to include the patient identification number, and makes it easier for sites not entering reports to complete each day.

Text Integration Utility (TIU) v1.0 patch 1002 released 04/29/05
Patch 1002 makes several modifications to existing objects, adds 8 new objects, and makes several other technical modifications and fixes identified by the field.

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Computer Security Awareness Tip– Sober Q

Recently, many system users received an e-mail written in German that links to various political web pages. These e-mails have been attributed to the Sober Q virus, which is a Trojan that came with the Sober P worm. Systems infected with Sober P had an open backdoor installed which allowed the virus originator to send the Trojan Sober Q. Infected systems were then directed to download the necessary code to execute Q.

Sober Q's goal was not to spread or infect other computers with nasty e-mail messages. Rather, this version contained right-wing German nationalistic propaganda and other political messages. Reports cited 72 variations, some occurring in English with foul messages, while others were of a political nature.

The virus/spam was successfully spread because the messages appeared to be sent by harmless everyday systems, and as a result, escaped spam filters.

Merely opening one of the messages did not infect computers with the virus. It seems that only those systems previously infected by the Sober virus were at risk of infection. There was significant concern because the sender's e-mail address was spoofed, meaning the messages seemed to come from someone other than who really sent them and the spoofed sender had no knowledge of the message.

The following symptoms are indications that your computer is infected with a virus:

- Unexpected messages or images are suddenly displayed
- Unusual sounds or music is played at random
- Your CD-ROM drive mysteriously opens and closes
- Programs suddenly start on your computer
- You receive notification from your firewall that some applications have attempted to connect to the Internet, although you did not initiate this

If you think your computer is infected, perform the following functions:

- Disconnect your computer from the Internet
- If your computer is connected to a Local Area Network, disconnect it
- Contact you local system administrator
- Before taking any action, back up all critical data to an external drive (a floppy disk, CD, flash memory, etc.)
- Install antivirus software if you do not have it installed
- Download the latest updates for your antivirus database
- Perform a full system scan

For more information regarding viruses on your computer system, please contact your local computer team. ■

Kathleen Federico, *IHS ISSO*

Business Office News

PAMS Update

Current Status
The PAMS workgroup continues to have its weekly calls working with the Chickasaw Tribal Health Care Facility on the development and alpha testing the PAMS software. There has been much progress made this summer due to the strong efforts of the Chickasaw tribal facility business office and IT staff.

The following alpha testing schedule was proposed on the last call:

Chickasaw Tribal Health Care Facility: Go Live September 2005

Choctaw Tribal Hospital: Install and begin testing September 2005

Gila River Tribal Health Care Facility: Install and begin testing October 2005

Gallup Indian Medical Center: Install and begin testing November 2005

Beta testing is projected to begin in either December or January, depending upon the results of the alpha testing of all the software requirements at GIMC. National release of PAMS is still projected for spring 2006, which is, again, dependant on the successful completion of software testing.

Training will not be offered to other sites until after the software is officially in the beta testing phase. OIT is working on the PAMS training schedule to be implemented once the contracting documents can be finalized.

Preparing for PAMS
It is hoped that all sites have been actively preparing for the PAMS release which is projected for the spring of 2006. In past sessions, three major steps were identified that need to occur for facilities to prepare for PAMS. Below is a description of these three steps and what each facility should actively be working on as one step positively impacts the next step.

Step 1 Patient Registration RPMS Version 7.0 Patch 5: This patch was released nationwide on March 7, 2005 and is available for installation. Once installed, each facility will have to run the audit function that will tag each patient file in the RPMS database that may have one of the 26 errors/warnings that were identified by the PAMS workgroup as major reasons why claims are being denied. Once the audit is completed, the site will print the error report listing which identifies specific patients with these errors and the site will then have to begin the cleanup process. The error report and the corrective actions, as well as the instructions for the audit function were released in the Patient Registration v7.0 Patch 5 User Manual Addendum.

Step 2 Patient Registration RPMS v7.1: This version is in its final stages of Beta Testing and should be available in September 2005. There are over 100 major edits in this application that include many new data fields that the PAMS application will be using in the future. Training is being provided currently by OIT and is scheduled for Phoenix and Albuquerque for August and September. It is important that all of the Patient Registration staff be trained on the new functionality of this version, especially the Errors and Warnings that are going to start displaying on each of the patients' pages. Additional training sessions may be available through remote training sessions but this is being scheduled.

Step 3 Business Process: A listing is available of all of the Business Process changes that each facility can be working on today. These changes must be in place before PAMS can be installed, especially with the backlogs of patient registration eligibility information entry, PCC data entry, coding, billing and accounts receivable. These systems must be current in order to successfully complete the data conversion step that will occur with the PAMS installation. If you need a copy of the Business Process listing, you can go the PAMS Web site and print the checklist.

ORAP is also in the process of hiring additional support staff to provide assistance to the sites on these steps.

For More Information:
All of the information provided can be accessed via the PAMS Web site. The following link is provided for your information.

http://www.ihs.gov/NonMedicalPrograms/BusinessOffice/index.cfm

If you have any questions, you can contact also Sandra Lahi at 505-248-4206 or Sandra.lahi@ihs.gov. ■

Sandra Lahi
Management & Program Analyst

RPMS Training Schedule

OIT Sponsored Training

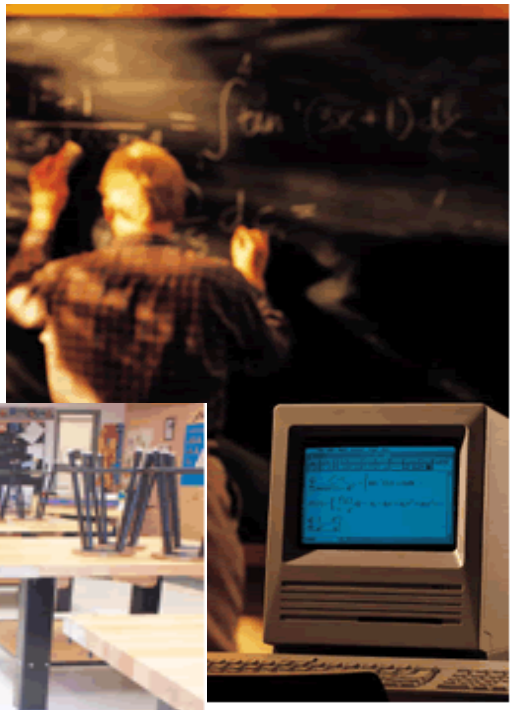
The following trainings are sponsored by the Office of Information Technology (OIT):

September

09/07	Overview, Implementation & Lessons Learned— Warm Springs, OR
09/07-09	RPMS-EHR— Chinle, AZ
09/12-14	PCC Data Entry I (User Training) — Albuquerque, NM
09/15-16	PCC Data Entry II (Supervisor Training) — Albuquerque, NM
09/13-15	PCC Outputs— Phoenix, AZ
09/13-14	Behavioral Health GUI— Portland, OR
09/15-16	PCC Data Entry II (Supervisor Training) — Albuquerque, NM
09/19-23	EHR CAC & Implementation Team (Basic Setup) — Albuquerque, NM
09/20-22	Patient Registration— Albuquerque, NM
09/26-30	IHS-EHR CAC & Implementation Team (Setup) — Billings, MT
09/27-28	Point of Sale Pharmacy Billing— Albuquerque, NM
09/27-29	RPMS-EHR Super End User— Browning, MT
09/27-29	RPMS-EHR Super End User— Polacca, AZ
09/28	EHR: Overview, Implementation & Lessons Learned— Cherokee, NC

October

10/19	EHR: Overview, Implementation & Lessons Learned— Warm Springs, OR



November

11/01-03	Advanced PCC+ 2.5 User Training— Albuquerque, NM
11/14-18	EHR CAC & Implementation Team (Basic Set Up) — Albuquerque, NM
11/16	EHR: Overview, Implementation & Lessons Learned— Cherokee, NC
11/30	EHR: Overview, Implementation & Lessons Learned— Warm Springs, OR

If you are interested in attending any of the OIT sponsored trainings please visit the OIT National Training Web page at: http://www.ihs.gov/Cio/RPMS/index.cfm?module=Training&option=index

or contact:

Michelle Riedel
RPMS Training Coordinator
(505) 248-4446
Michelle.Riedel@IHS.HHS.gov

Area Sponsored Training

If you would like your Area trainings to be included in this publication, please contact the IT News.

Moving to Pharmacy 5/7

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they do use.

Information about preparing for Pharmacy 5/7 can be found in documents linked to the "Preparing for EHR" page of the IHS EHR Web site (www.ihs.gov/cio/ehr). A pharmacy-only page of this site is in development. For additional information and help on getting your pharmacy ready, preparing drug files, and training, contact Carlene McIntyre (Carlene.McIntyre@ihs.gov) or Pam Schweitzer (Pam.Schweitzer@ihs.gov). Release of the Pharmacy 5/7 software is managed by the EHR Program; once your site has made the commitment and begun preparations for the upgrade, these individuals will assist you in selecting an installation date and will advise the EHR Program to release and install the software on your system.

Planning for Pharmacy 5/7 can proceed simultaneously with your facility's preparation for EHR, or it can precede it by months or even years. Whereas the EHR process is expected to take most facilities at least nine to twelve months, an energetic pharmacy staff, in cooperation with a committed IRM department, could orchestrate the transition to Pharmacy 5/7 in six months or less. The following table provides a simplified outline of the steps involved for both applications. ■

Howard Hays, MD, MSPH,
IHS-EHR Program Director

What you need for:	
Pharmacy 5/7	EHR
Software prerequisites (run XBEHRCK) - • Cache conversion • Pharmacy Inpatient 4.5, Outpatient 6.0 •Radiology 5.0 - coordinate with radiology department • Laboratory 5.2 p1018 or higher - coordinate with laboratory department • PIMS 5.3 and more ...	Software - Pharmacy 5/7, Order Entry, VueCentric GUI framework, EHR GUI components
	RPMS server redundancy required
	Facility network infrastructure assessment
	Computer access for all clinicians, nurses, and ancillary clinical support staff (may be phased in with EHR)
Consider RPMS server upgrade	Multidisciplinary EHR implementation team, meeting regularly
Pharmacy file preparation	Documentation for EHR Program - Site Survey and Tracking Record
Pharmacy 5/7 training	EHR-related business process redesign
Preparation for Pharmacy Point of Sale (POS) application, if necessary	EHR setup and training - restricted to sites that have complete above prerequisites
POS training (if implementing POS)	Clinical Application Coordinator (CAC)

CRS

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and Assessment, and Obesity Assessment changed to non-GPRA indicators.

- Revisions to several existing indicators, including Tobacco Cessation, Depression Screening (renamed and removed the Anxiety component); Childhood Immunizations, and Alcohol Screening (FAS Prevention).
- 3 new indicators
  - o Antidepressant Medication Management (also included in HEDIS report)
  - o Prediabetes/Metabolic Syndrome
  - o Osteoporosis Screening in Women
- New Comprehensive GPRA Patient List that will list patients included in GPRA indicators and lists which indicators they did not meet.
- New site parameter for CHS-only sites
- New site-defined lab taxonomy report
- New childhood height and weight data file (GPRA developmental)

Beta-Test Sites Needed!

Beta-test sites are still needed for testing CRS Version 6.0. Version 6.0 is scheduled to be ready for beta testing on October 3, 2005 and will last approximately 4 weeks. Please contact Stephanie Klepacki by e-mail at Stephanie.Klepacki@ihs.gov or by phone at (505) 821-4480. ■

Stephanie Klepacki
CRS Project Coordinator

Theresa Cullen, MD, MS
National Medical Informatics Consultant

CAC

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been ordering lab tests and x-rays via the EHR for 6 weeks.

8:30 am: I meet with our first provider to "go paperless" for a final review of his note templates. We make a few minor adjustments.

9:00am: I start working on my "to do" list. Phone rings, a clerk in the Urgent Care clinic needs help with a lab order; off to the clinic to see what is happening. Paged by lab while in the Urgent clinic- someone is not signing lab orders before sending the patients over- can you come over?

9:30am: I'm back in the office with 3 voice messages- Clinic B has a computer that is "stuck," need to call our satellite clinic because they ordered the wrong x-ray, dental receptionist needs help making a new Dental Clinic for appointments. Off I go…

10:15am: I arrive at the Safety Committee meeting (late) and give an overview of how we could document patients at risk for a fall using the EHR. The committee wants to know if I could make a note template for a Clinical Warning note and show it at next week's meeting.

11:00am: I'm back in my office determined to start on the "to do" list. I work on the Podiatry ICD pick list that the Podiatrist will use to pick his diagnosis codes from when he documents his visits. My supervisor stops by to see how things are going and to discuss future computer requests.

12:00: lunch time- I close the door, turn off the lights, and clandestinely continue to work on the "to do" list and check e-mail.

1:00pm: Our Pharmacy EHR representative comes by for our daily meeting. We review the Medication Order menu that he is putting together, discuss how to implement the Adverse Reaction Tracking Package, and work on his plan for how the Pharmacy staff will process EHR med orders. I have been meeting with him every day for the past 3 weeks- Provider Order Entry of medications is a big step.

2:30: I make my rounds of the Outpatient clinics to see how everyone is doing with their lab and x-ray orders. One of the nurses needs to know how to enter the results of a ppd given 2 days ago, one of the providers wants to know how to review all of her notifications at the same time, and one of the clerks can't remember her electronic signature code.

3:30pm: I arrive in our new training room for the bi-weekly meeting of our core EHR team. Every Monday and Wednesday we meet to discuss how each department is doing with their preparation for our first paperless provider. Each department has their own "to do" list that we work on. Each item seems to take on a life of it's own and much discussion revolves around the process of changing from paper to computer documentation.

5:00pm: I'm back in my office. I review what is still on my "to do" list for today:

- Setup and test note printing as a batch
- Test Allergy orders- how do they work
- Check on new laptop for Treatment room
- Chart review for nurses entering immunizations- are they doing it correctly?

After an hour or so, I turn off my computer, tomorrow is another day. I put on my jacket, and throw out my tea that was still in the microwave. ■

Catherine Moore
CAC, Whiteriver Service Unit

Chris Lamer, PharmD
CAC, Cherokee Indian Hospital

BH

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It is strongly recommended that BH providers at facilities that are using the EHR continue to use the RPMS behavioral health applications to document behavioral health services rather than the EHR. These applications have functionality that was specifically designed for mental health, social work and alcohol and substance abuse providers. Perhaps even more importantly, behavioral health data captured via the server side application, BHS v3.0, is much more comprehensive than behavioral health information that passes to the RPMS Patient Care Component. Data from BHS is used both locally and nationally for exports and reports (including GPRA), to demonstrate workload, for program development and evaluation and to understand the prevalence of behavioral health issues. Data from BHS is also used by the IHS Division of Behavioral Health and the Office of the Director for justification of continued and increased funding for behavioral health services.

Testing of the integrated behavioral health components of the EHR and the additional BH functionality will begin in the fall and the release of the new behavioral health components is anticipated in the spring of 2006. For more information about the RPMS behavioral health applications, contact Denise.Grenier@ihs.gov or visit www.ihs.gov/cio/bh. ■

Denise Grenier
National RPMS Behavioral Health CAC

BJ Bruning
User Support Specialist

Peter Burton
Management Analyst

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Periodic Patch Releases
Pharmacy Price listing (APSA) v6.1 patch 63 released 08/03/05

Pharmacy Price listing (APSA) v6.1 patch 62 released 07/06/05

Pharmacy Price listing (APSA) v6.1 patch 61 released 06/01/05

Pharmacy Price listing (APSA) v6.1 patch 60 released 05/04/05

Pharmacy Patient Drug Education (APSE) v6.1 patch 21 released 07/06/05

IHS Dictionaries-Pointers (AUT) v98.1 patch 16 released 06/16/05

IHS Table Update (AUM) v5.1 patch 08 released 06/16/05

IHS Table Update (AUM) v5.1 patch 07 released 05/23/05

IHS Utilities (XB) v3.0 patch 10 released 06/21/05

Taxonomy (ATX) v5.1 patch 07 released 06/10/05

Taxonomy (ATX) v5.1 patch 06 released 05/11/05

Generic Interface System (GIS) v3.01 patch 12 released 08/04/05

Generic Interface System (GIS) v3.01 patch 11 released 07/29/05

Generic Interface System (GIS) v3.01 patch 10 released 07/26/05 ■

Albert Toya
Computer Specialist

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About the IT News

The IT News is published several times throughout the year by the IHS Office of Information Technology. All articles and article suggestions are gladly accepted. If you would like to submit an article for consideration or have any questions regarding this publication, please contact Juan Torrez at (505) 248-4355 or Juan.Torrez@IHS.HHS.gov.

All articles should be no longer than 1200 words in length and be in an electronic format (preferably MS Word). All articles are subject to change without notice.