NIH Clinical Center CIO Newsletter

December 2006

12th Edition

Topics of the Month

- CIO Remarks
- CRIS Upgrade: Version 4.5
- Type & Screen Order Change
- Security Update
- User Training

CIO Remarks

Over the last calendar year the NIH Clinical Center has accomplished many important milestones regarding CRIS, including:

1. POIS.

   An automated surgery scheduling system that optimizes staff and room assignments, tracks resources, including materials used in the operating rooms (OR), as well as off-site anesthetic procedures. In the future, POIS will be the electronic source for OR, Anesthesia and PACU clinical documentation and provide enhanced clinical and management reports

2. MEC IT Subcommittee

   The purpose of the MEC IT Subcommittee, as specified the Bylaws of the NIH Medical Executive Committee.

   a. Coordinates all clinical information systems activity at the NIH Clinical Center (including CRIS)
   b. Supports the systems and processes necessary to achieve a complete electronic medical record
   c. Responds to MEC initiatives and requests for information
   d. Responds to user requests for new systems or enhanced system functionality
   e. Recommends to the MEC additional services, systems, functionality or policy changes needed at the Clinical Center to ensure optimal patient care and research support
   f. Develops standards for an idealized, seamless environment for information exchange
   g. Conducts an annual customer survey to assess the efficacy of existing systems and the need for additions, enhancements and altered priorities
   h. Addresses issues of confidentiality and integrity of patient records
   i. Minimizes to the greatest extent possible the risk of redundant clinical systems

1. Scheduling System.

   The Scheduling.com upgrade migrated the functionality of CAS to a web-based system, providing scheduling users with a graphical user interface to find available timeslots for creating patient appointments, as well as an automated method for notifying patients of scheduled appointments by mail. Users who need to track patient appointments utilize the Scheduling Viewer to see what appointments a patient or clinician has on a given day.

4. ADT.

   The Admissions process was transferred into CRIS to migrate the final functionality from the legacy MIS system and allow the mainframe to be shut down. This change provides Admissions Staff with a much more state of the art user interface, allows for improved ADT reports and robust processes, provides a single system of record, and an improved ability to clean up demographics and protocol information for historical patient data.

5. Unsigned Orders.

   There has been an intense effort underway to ensure that prescribers sign off on medical orders that have been entered into CRIS on their behalf. The first initiative was an alert that went into effect in October that is triggered upon order entry and displays if a prescriber has unsigned orders that are greater than 72hrs old. To complement this, email notifications are now being sent to prescribers who have unsigned orders that are greater than 14 days old and 30 days old. After the first of the year another email message will be sent to prescribers with outstanding orders that are greater than 45 days old with a message that they are to appear before the NIH Clinical Center Medical Executive Committee to explain non-compliance.

   Orders may be signed using the Signature Manager icon in the CRIS tool bar. This tool enables clinicians to quickly review and sign all orders on all patients currently awaiting signature. Complete instructions regarding this process may be obtained through the CRIS website: http://cris.cc.nih.gov/prescribers/signature.html

   If prescribers have any questions regarding the orders signature process or believe that orders have been erroneously entered under their name, please contact the Medical Record Department on 301-496-2271.

6. CRIS Modifications.

   Throughout 2006, there have been 26 scheduled releases for CRIS, usually consisting of around 35-45 changes each. In fact, in the past 12 months, there have been 1,021 changes implemented. The vast majority of these changes, (38%) were requested by the Pharmacy department, with many others coming from Nursing and Laboratory Medicine. Over a quarter (29%) of the requested changes come from PI's requesting new or updated protocol order sets. Changes to order sets are some the most common requests that are made, followed by orderables (21%), reports (16%), clinical documentation (10%), and other "behind the scenes" changes that help CRIS to run as efficiently and effectively as possible.

7. Medication Order Enhancement

   Until November, it was always necessary to enter both the total dosage and a corresponding number tablets or capsules for many medication orders. A new feature introduced last month

makes such orders much easier to enter in CRIS. Only a total dose is required, and the correct number of tablets or capsules is now calculated automatically. Additional enhancements for medication orders are planned in 2007.

I would like to thank all those involved in these milestones including the Ambulatory Care Services Department, Nursing Department, Critical Care Medicine Department, Medical Record Department, Department of Transfusion Medicine, Department of Laboratory Medicine, Imaging Sciences Department, Pharmacy Department and the Department of Anesthesia and Surgical Services.

CRIS Upgrade to Version 4.5

The upgrade to the CRIS system from version 4.0 to version 4.5 is scheduled for the Spring of 2007. New features that will affect CRIS users will be minimal as the majority of the changes will be to the database to improve the efficiency of the Clinical Summary and Clinical Documentation. Additional functionality will be added after the activation through our releases that occur every two weeks. More communication will follow as we get closer to the activation date.

Some new features you will see include:

1. Select All Button: A new button on the patient list that allows you to easily select all patients on the list.
2. Print Button: A new button available when viewing clinical documentation to print the document.
3. Default Patient: When you initially login, a default patient will no longer be selected.
4. Rescheduling of Medications: This functionality has been enhanced.

Type & Screen Order Change

There will be a change to the Type & Screen Order and also to the order forms for Red and White Blood Cell Products starting the week of 1/9/07. A new field will automatically display a current type and screen result when the order form is opened. The orders will be valid for four days, and results dated beyond that point will expire and will not not appear on the order form.

The advantages include immediate information when there is a current Type and Screen Result on the patient, its expiration, and the ABO/Rh Type and Antibody Screen status. As well as, an expected reduction in the number of duplicate orders for Type & Screen since immediate feedback will be provided if an order has already been placed previously.

IMPORTANT: There is a natural delay between the time a sample for Type & Screen is sent to the lab and the results are posted in CRIS. Prior to posting, the new results will not appear on the order forms. When in doubt, or a patient was just admitted, please remember to contact DTM regarding the test status before requesting blood products.

Security Update

While the holiday season brings good cheer, it also brings out an increased number of hackers and unscrupulous people that prey on unsuspecting victims. Review these safety tips on using email and online shopping, and help protect yourself from downloading malicious software, identity theft, and fraud.

1. Email
   - Be wary of opening unexpected email attachments. Viruses and worms can be disguised as Christmas cards or holiday pictures. If someone sends you an attachment (especially a program), you might want to email the sender and verify they actually sent it.
   - Use your intuition and be careful where you go on the Internet. Unsolicited emails advertising phenomenal deals may contain links to unscrupulous websites and clicking on the link might install dangerous software on your computer. Also, by hovering your mouse over a link, you will see where the link actually takes you.
   - Protect yourself from identity theft and don't fall prey to e-mail (or pop-up) messages that tell you to update, validate, or confirm any account information. Legitimate companies already have this information and would never conduct business in this manner. These emails typically threaten a dire consequence if you don't respond. Do not click on the website links in these email or pop-up messages.
   - Email is not secure. Never provide passwords, your Social Security number, phone numbers or credit card information via e-mail.
   - Be wary of emails offering loans or credit. Taking advantage of cash-strapped consumers, con artists may offer loans or credit cards for a fee and will simply take your money and disappear.
   - Keep antivirus software, web browser and operating system software up-to-date. Set your web browser to detect unauthorized downloads. Consider using a firewall on your home computer.

2. Online Shopping
   - Know who you're dealing with. Confirm the online seller's physical address and phone number in case you have questions or problems. If you get a pop-up message while you're browsing that asks for financial information, don't click on the link in the message. Check the web site address. Cyber thieves create websites that can appear convincingly like the websites of well known vendors. Consider typing in the URL to ensure it is actually the vendor you intend to order from.
   - Know exactly what you are buying. Read the seller's description of the product closely, especially the fine print. It if looks too good to be true, it could be a scam.
   - Know what it will cost. Check websites that offer price comparisons and compare apples to apples. Factor shipping and handling into the total cost of the order.
   - Pay by credit or charge card. Debit cards do not have the same levels of consumer protections. Consider using one credit card for Internet use.
   - Check out the terms of the deal, like refund policies and delivery dates. Check out the cancellation, return and complaint-handling policies.
   - Create secure passwords and don't click to automatically save your password. Keep your passwords private and don't use personal information as a password. Use a separate password for shopping. Avoid using work passwords.
   - Print and save records of your online transactions. Keep a paper trail, including the product description and price, online receipts, and emails you send or receive from the seller. Read your credit card statements as you receive them and be on the lookout for unauthorized charges.

- Shop at secure websites. Before entering any financial information, look at the top of the screen where the website address is displayed and make sure the URL begins with https: (the "s" stands for secure). You can also look for a closed padlock icon in the status bar at the bottom of your browser screen.
- Check the privacy and security policy. It should let you know what personal information the website operators are collecting, why, and how they're going to use the information. Provide only the bare facts when you order. Merchants may ask for information about you (e.g., lifestyle) for marketing reasons. Providing such information could lead to spam being sent to your email address.
- Remember, the NIH Rules of Behavior states that Government provided Internet access is intended for official use and authorized purposes; exercise common sense and good judgment. Limited personal use of government resources is acceptable if it does not affect the NIH mission and does not conflict with laws, regulations, and policies. The NIH Rules of Behavior can be found at: http://irm.cit.nih.gov/security/nihitrob.html.

User Training

1. **CRIS Website is New and Improved!**

   The CRIS website is more organized with lots of updated resources. New features include a Frequently Asked Questions (FAQ) section, detailed Change Request Process, updated Downtime Procedures, Training Materials and much, much more. Check out the CIO Newsletter, which provides monthly updates related to CRIS changes, implementation of new systems, training needs, and general announcements. Key issues and updates for Physicians and Nurses are highlighted under the **Spotlight** sections. You can access this new site at: http://cris.cc.nih.gov

2. Printing a Universal Order Requisition on Demand

   Most orders requisitions do not print automatically, but you have the ability to request one on demand.

   Beginning December 13, 2006, the order requisitions will provide information on the isolation status as well as the allergies, which presently display. Information on how to print a Universal Order Requisition on demand is found on the CRIS website at http://cris.cc.nih.gov/.

3. CRIS Training for New Physicians in January 2007

   The Department of Clinical Research Informatics continues to provide CRIS training for new physicians arriving weekly. If you have new physicians starting January 2007, you may register them for training *on-line through the CIT Training website* at http://training.cit.nih.gov/.

   It is necessary to complete all paperwork and authorization for new physicians through the Credentialing Office in advance to assure their CRIS code is ready at the end of training.

Although classes are self-paced, the training must occur in the DCRI office (10/1C290) and needs to be scheduled in advance. New physicians, fellows and other credentialed clinical staff are required to attend one *three hour session* called: "CRIS Prescriber Training or CRIS Open Course- CRIS Prescriber Training."

Please register new staff for training via the CIT website http://training.cit.nih.gov/. Under "Classes by Category" click on "CRIS" and a list of course titles will appear. Select either:

- 271 CRIS Prescriber Training, or
- 283 CRIS Open Course- CRIS Prescriber Training

Advise new physicians to visit the CRIS website and complete the " Introduction to CRIS" on-line tutorial before attending class. Other tutorials are also available to help shorten their in-class time. Access all tutorials at http://cris.cc.nih.gov/cristraining/cbt.html

For questions about how to register please contact the CIT Help Desk at 301-594-6248 or the CRIS Support Center at 301-496-8400.