# NIH Clinical Center CIO Newsletter

## November 2006

11th Edition

This is the eleventh edition of a monthly broadcast email to the CRIS user community about CRIS capabilities and issues. In addition to the text version in this email, I've attached a PDF version that can be printed. I look forward to receiving your comments or suggestions at CIOnewsletter@cc.nih.gov

### **Topics of the Month**

- CIO Remarks
- Automatic Calculation of Tablets/Capsules for Drug Orders
- ADT Go-Live
- Requesting Changes to CRIS
- Testing Changes to CRIS
- Filtering Results in CRIS
- Security Update
- User Training

#### **CIO Remarks**

Continuing the overview of DCRI from the last two months, we will complete the review by focusing on three groups that support the department, as well as the Clinical Center.

#### **Education and Evaluation: Charlotte Seckman**

The mission of the Education and Evaluation Team is to develop curriculum and facilitate training for internal and external training programs and fellowships, plan improvement strategies for clinical operations, and direct systems evaluation initiatives, including prototype testing, performance measurement and satisfaction surveys.

#### **Program Support: Jon McKeeby**

The mission of the Program Support team is to enhance productivity within the department by providing effective and timely administrative support to DCRI staff, leadership and project teams.

#### **Asset Management: Judy Dickerson**

The mission of the Asset Management Team is to assure that computers, printers and communication devices are available and managed effectively to support DCRI and other CC departments, as well as research initiatives conducted at the CC.

### **Automatic Calculation of Tablets/Capsules for Drug Orders**

Starting Wednesday evening, November 1, CRIS started to automatically calculate the number of tablets or capsules when a dose is entered for these dosage forms. Once calculated, the '# of Tabs/Caps' field can only be changed by changing the dose.

The automated calculation of tablets/capsule on oral dosage form orders has significantly reduced the numbers of mismatches. This decrease in mismatches has reduced the number of pharmacist interventions and phone calls to the prescribers that were typically needed for the clarification of these orders. In comparing a similar two-week period, the new automated processed reduced the number of errors to less than one percent.

Additionally, the new automated process has also prompted some additional review of the maximum allowable tabs/caps per dose. If when ordering, you find that you need to enter a dose higher than what is allowed, please contact Pharmacy. A few items were discovered that needed a higher maximum value and their maximum values were updated. Pharmacy has contacted and worked with the impacted prescribers. The non-formulary oral dosage form order was used in a few cases with the maximum value issue. Prescribers should limit the use of the non-formulary form, since this is a generic form and does not use the automatic calculation.

If you have problems entering an order, please call:

Outpatient Pharmacy (301-496-2866) for Take-home medications orders Unit Dose Pharmacy (301-496-1914) for Inpatient orders, or for Take-home orders when the Outpatient Pharmacy is closed

#### **ADT Go-Live**

On November 5, 2006, admission, discharge and transfer functionality (ADT) was successfully migrated from the MIS Mainframe to SCM. This migration is a significant milestone allowing retirement of the outdated legacy mainframe, scheduled for the first quarter of CY 2007. This project was a complex undertaking that required the transfer of business logic from MIS to CRIS/SCM and the QDX Interfaces and involved the development of order items, order forms, reports, interfaces, and multiple process changes.

Thanks go out to the following:

Jim Pitts and Seth Carlson who worked together as the Project Management Team leadership.

Tim Maloney, MIS Database Administrator, responsible for data migration and clean up.

Admissions Staff under the leadership of Karen Kacerowski, Gene Hulen and Suzan Parada.

Medical Records Department under the leadership of Tricia Coffey.

Protocol Services under the leadership of Kim Jarema.

Ancillary Departments (Laboratory Medicine, Radiology) that worked closely with the interface team and project team to ensure the ADT feeds between the systems were designed and operated correctly.

Norma Street and Suzan Parada for user training and support.

Occupation Medical Service under the leadership of M'Lou Stevens.

The CRIS interface, report, security and SCM build teams including Tony Barnes, Achara Mah, Sandari Ravichandran, Yenshei Liu, Frank Mickey, Michael Nansel, Lincoln Farnum, Jose

Miletti, and Patty Sengstack.

CRIS Support team UNDER the leadership of Susy Postal.

DCRI CITRIX and Technical User Support, including Mark Bradley, Doug Butters, Bertram Brown, William Hernandez, Mukesh Khatri, and Manjula Patel

CRIS Test Team, including Yulia Broydo, Swarna Vallabhaneni, and Inna Etin

Steve Luxenberg, Susan Houston, Ryan Kennedy, Martha Kendrick, Chris Epinger, Steve Bergstrom, Almaz Tsehay, Chris Klein, Ray Redmond, and Paul Hodges

IV&V under the leadership of Jill Andres

The entire DCRI and CRIS staff involved with the project.

## **Requesting Changes to CRIS**

Requests for changes in CRIS can be made through one of several available means. In general, most departmental requests for changes to orderable items (such as forms and fields) are submitted through specific individuals or committees, e.g., NIS for nursing requests. In all cases, requested changes must have departmental, PI, or other appropriate approval before they can be built in CRIS. A form for requesting changes to protocols or other aspects of CRIS can be downloaded from the CRIS web site (<a href="http://cris.cc.nih.gov/changes/orderset.html">http://cris.cc.nih.gov/changes/orderset.html</a>) and submitted in person or via campus mail to the DCRI offices, located in Building 10, Room 1C290. Please contact the CRIS Support Center (496-8400) if you have any questions about requesting changes in CRIS.

## **Testing Changes to CRIS**

Testing plays a very important role when making updates and changes to the CRIS system. Ensuring that new functionality and configuration to the system work as designed is imperative to the integrity of the data contained within CRIS. Currently, changes to the system are implemented every two weeks during what is called a bi-weekly "Release". Each time changes are made to the system, a rigorous testing process is carried out in order to make certain that the implementation is smooth and without interruptions in care delivery

The testing process for CRIS has several components. Initially, the updates are made in a development or "practice" database that is similar to the CRIS system and then tested to ensure that all changes made appear as intended without error. Once all changes have been made in the development database, an overall testing of system functioning is performed called regression testing. This testing touches all of the basic areas of functionality of the system. Following successful regression testing, outstanding issues are evaluated and corrected.

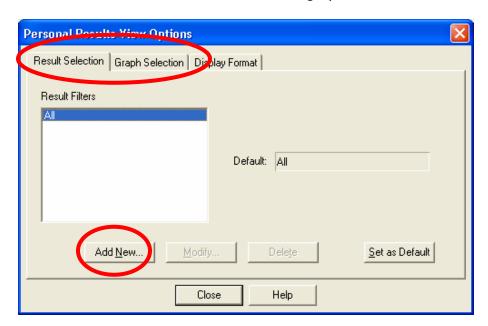
At this point, the system is ready for "function" testing of the specific CRIS changes in the development environment. Each type of system change has a specific test plan. Once the changes pass function testing, they are approved to be moved into the active production database. The developer makes the change to the production database and then tests it again to validate that it was built correctly. After each Release, this cycle begins again.

#### Filtering Results in CRIS

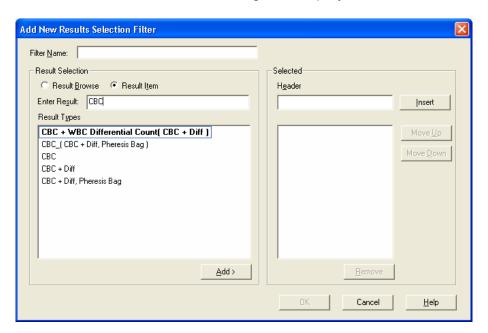
Do you monitor the same lab results on your patients? Want help to set your filters to display these routine results? Please read below.

Customize permanent filters of specific lab results can be built via the Preferences option at the top of the CRIS screen. Select the Results tab of any patient. Select **Preferences** on the tool bar. Select **Results** from the drop-down list. The **Personal Results View Options** dialog box displays. The **Results Selection** tab is the default setting. Select **Add New**.

Note: Custom filters can be built for both results and graphs of results.



The Add New Results Selection Filter dialog box displays.



Enter the new filter name you prefer in the **Filter Name** field.

Select individual labs by typing in selections in the **Enter Result** field. It may be necessary to pick multiple results to get comprehensive information (e.g., CBC and CBC + Diff). Lab names followed by a '.' are result components that are part of a test.

Some components reported by the lab may actually use abbreviations (e.g., HGB, HCT, WBC). The names of the result components of each test are visible when viewing results on the Results tab. Add each desired result to the **Selected** column on the right, then click OK. Graphing displays are built via the **Graph Selection** tab in a similar manner. All custom filters will appear in the Result Selection drop-down list on the Results tab. Note that existing filters can also be modified. Filter options no longer needed can be deleted.

### **Security Update**

Ever wonder if there is an IT Security policy for something? Ever wonder if what you are doing with your sensitive data is safe and more importantly, legal? Ever wonder who you can contact on an IT security issue – Well you need not wonder any longer - NIH has a special website that can answer all your questions, and if it can't answer your question it will give you directions on who to contact. The website is: http://www.cit.nih.gov/security.html

In the near future, the Clinical Center will be developing its own website for and IT Security and Privacy issues. When it is ready we will be posting it in this newsletter. If you have any ideas on what you would like to see on this website, please send them to John Franco at jfranco@nih.gov

## **User Training**

Back by popular demand:

We are pleased to announce that the CRIS training schedule will be expanded beginning in December 2006! We have added an additional Prescriber Course on December 1, 2006.

**Prescriber** as well as **Introduction to CRIS** classes or an Open Course will be offered the first Monday of **every** month (excluding holidays) beginning January 2007. For the **Open Course**, users can sign up for **one** of the following four courses: Introduction to CRIS, Non Prescriber Order Entry, CRIS Clinical Documentation, or Prescriber.

Please go to the CIT training website (<a href="http://training.cit.nih.gov/">http://training.cit.nih.gov/</a>) to register for CRIS classes (<a href="http://training.cit.nih.gov/courselst.asp?lname=cris">http://training.cit.nih.gov/courselst.asp?lname=cris</a>). Course descriptions, their dates and times offered are listed at the CIT training website. Call 301-496-8400 or contact CIT Help Desk at 301-594-6248 to register or ask questions about what CRIS classes to take.