

# NIH Clinical Center CIO Newsletter

September 2009

46<sup>th</sup> Edition

This is the forty-sixth 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](mailto:CIOnewsletter@cc.nih.gov). In addition, valuable information can be accessed at the CRIS and DCRI websites: <http://cris.cc.nih.gov>, <http://www.cc.nih.gov/dcri>.

## Topics of the Month

- CIO Remarks
- Heparin for Blood Draws
- Drug Level Task Form Changes
- Bar Code Project Update
- October Document Changes
- Introducing EBOT
- Suspend/Unsuspend Orders Filters
- CRIS Training & User Support

## CIO Remarks

After many months the building of the new Clinical Data Center to house CRIS and a multitude of other clinical applications has been completed and we just received the keys. I feel like when I was 16 and getting the keys to my brother's car that required a lot of work to make it operational. Similarly, the Clinical Data Center will not become fully operational until the end of March 2010. We have approximately 430 devices to move from the existing data center to the new data center over the next 6 months. As with the car that needed a lot of help from family members and friends and required me to be patient, the migration to the new Clinical Data Center will require a lot of dedicated staff from within CC DCRI and others within the CC as well as patience from everyone. The final planning for the migration is currently taking strong shape and over the next 6 months as these systems move there will be downs. We are working to limit the downs and to maintain a high percentage of up time for all of the systems including CRIS. I would like to thank now the DCRI staff and CC System Owners and Administrators who will work hard and long on the migration of servers and systems from the current data center to the new Clinical Data Center. The move will include a lot of hard work and dedication but as with getting the car well worth the time and effort.

# Heparin for Blood Draws

Please note that there are **two options for heparin for blood draws**. One is for the **nurse** who will draw the blood on the floor/clinic. The other is for blood draws that will occur in **phlebotomy**. The entries highlighted by the purple arrows are the same for each category.

The screenshot shows a search interface for heparin. The search results list several options, with two highlighted in red boxes and pointed to by purple arrows:

- Heparin for Blood Draws (Heparin PF 1,000 units/mL for Blood Draws) **Nursing**
- Heparin for Blood Draws (Heparin PF 1,000 units/mL for Blood Draws) **Phlebotomy**

The screen below is for heparin preservative free for blood draws which will occur in Outpatient Phlebotomy.

Please note that the Deliver To section is filled in with **Outpt Phlebotomy**. Please note the Comment to Pharmacy. Pharmacy will continue to draw up the heparin in a 60 mL syringe and will continue to send the syringe to Phlebotomy. Please indicate the number of syringes in the Comments to Pharmacy section for Phlebotomy draws only.

The screenshot shows a medication order form for 'Heparin PF 1,000 units/mL for Blood Draws'. The 'Deliver To' field is set to 'Outpt Phlebotomy' and the 'Comment To Pharmacy' field contains 'Draw up in a 60 mL syringe'. Both fields are highlighted with red boxes and pointed to by purple arrows.

The screen below is for heparin preservative free for blood draws by a Nurse on the patient care unit or clinic.

Please note the required field of Deliver To. This is where the blood draw will occur. Because the CRIS location of the patient may be different from the location of the blood draw, this field should be filled in to indicate where the heparin should be delivered. Example: Patient is located in OP12 in CRIS, but the blood draw will occur on 3SES-DH by the nurse. Unless specified, Pharmacy will dispense heparin vials for blood draws that are to be completed by a Nurse.

If the heparin should be drawn up in a syringe, this comment should be added to the appropriate section. Please add to the Admin Instructions if this is to be done by the nurse. Please add to the Comments to Pharmacy section if this is to be done by Pharmacy. Please enter in one order per syringe.

The screenshot shows a software interface for managing medications. The title bar reads "Medications - NIHCCTEST, PHARMD ADULT". The main window title is "Heparin PF 1,000 units/mL for Blood Draws - NIHCCTEST, PHARMD ADULT". The "Order" field contains "Heparin PF 1,000 units/mL for Blood Draws" and the "Order ID" is "001319ZRR". The "Requested By" is "Skahill, Victoria E" and the "Template Name" is "Heparin PF 1,000 units/mL for Blood Draws Nursing". The "Allocate Order to Protocol" is "90-CC-0168". The "Dose" is "2", "Unit" is "mL", and "Route" is "for phlebotomy". The "Frequency" is "one time dose". The "Start Date" and "Priority/Time" fields are empty. The "Admin Instructions" field contains "Not for patient administration. For blood draw use ONLY." The "Deliver To" dropdown menu is open, showing a list of locations: "Output Phlebotomy", "1NW", "1NW-FL", "1SE", "1SW", "3NE", "3NW", "3SE-N", "3SW-FL", and "3SW-N". A red box highlights the "Deliver To" field, and a blue arrow points to the "Output Phlebotomy" option. A blue text box explains: "Location of where the blood draw will occur. This may be different than current CRIS location. If not already floorstock, the heparin should be sent to this location."

**Please note:** When the heparin is added to the Omnicell, the item to look for will be Heparin PF 1000units/ml for Blood Draws. The heparin PF 1000 units/ml option will not work to remove the heparin ordered for blood draws. Any attempts to remove heparin PF 1000units/ml in place of heparin PF 1000units/ml for Blood Draws will go unrewarded. The name must match in order to remove the medication.

## Drug Level Orders - Task Form Enhancement

An enhancement was put into the system on September 22<sup>nd</sup> to improve the workflow of collecting relevant information associated with drug level orders for monitoring in CRIS. The enhancements are the following:

- Task forms are now standardized between the three types of drug level orders (Pre, Post and Random).
- Task form logic has been updated to show/hide field(s) and to require or not require fields depending on values selected.
- The CRIS user has the option to opt out when information is not known or unavailable.

Example:  
The default view has key fields visible and required to start the workflow of data collection.

Based on selections with a single or multiple fields, additional fields will become visible and may be required as seen here.

The CRIS user has the ability to opt out from required fields when information is unknown. If a field is chosen as "Unknown" or "No", the additional fields are unprotected and hidden as necessary.

# Bar Code Project Update

## Bar Coding at the Point of Care

On September 24<sup>th</sup>, Outpatient Phlebotomy Services began collecting clinical and research specimens using bar code technology. For the first time, Phlebotomists are able to scan a patient's bar coded identification to accurately link them to specimen collection orders. Additionally, for the first time, Phlebotomists are able to print container labels at the point of care. These are key steps towards keeping our patients safe at the Clinical Center.

To reach this milestone, a team of Clinical Center staff from DCRI, DLM, DTM, Phlebotomy, NPCS, and the Office of the Director have collaborated over the last 15 months to integrate bar code technology into our clinical processes. Twenty-three phlebotomists were trained on September 16<sup>th</sup> - 18<sup>th</sup> to use the bar code technology and application. As Dr. David Henderson remarked that afternoon, "We marked our 100th patient blood draw this morning and now feel extremely comfortable in pronouncing the phase 2 barcode go-live a wonderful, unmitigated success!"

The Bar Code Implementation Team will begin work immediately to activate Phase III Specimen Collection . . . that is, implementing this same specimen collection solution in the inpatient, outpatient, and day hospital settings.

## Research Labels

Effective Thursday, September 24<sup>th</sup>, you probably noticed a change in the "tube type" that displayed on printed labels for research specimens. Up until this time, the tube type that displayed on research specimen labels was "RSH." To accommodate needed changes for the bar code project, the label tube type was changed to read, "41R, 42R, etc..." An example is provided below. Please continue to collect your research samples as you always have. If you have any questions, please call Chung-Hee Row @ 301-402-3420.



## Entering Orders for Specimens for OP Phlebotomy Draw

Just a reminder about the process for ordering OP Phlebotomy lab draws.

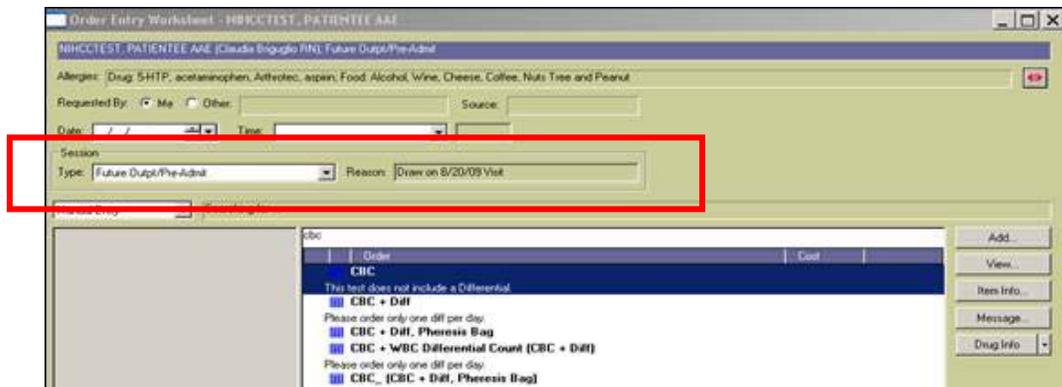
- All specimen collection orders scheduled for OP Phlebotomy draw must be entered in CRIS using the **Future Output/Preadmit** session type. This places the order in a hold status for activation on the day the patient arrives in OP Phlebotomy. At that time, the specimen collection orders can then be released and container labels will be printed in the presence of the patient.
- The **Reason** field must include the date of visit. This field communicates when and which orders are to be released (see picture 1).
- The **Specimen Collection/Label Printing Site** field should be left *blank*.

To support this process, a new alert in CRIS production now displays (see picture 2) and the Printing Site field will clear if a CRIS user:

1. Directs the label to print in Outpatient Phlebotomy  
and
2. The order is not entered in the **Future Output/Pre-Admit** session type.

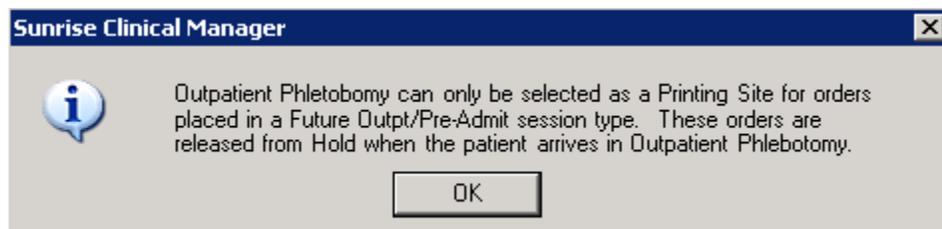
Orders that are entered under Future OutPt/Preadmit session type allows flexibility when to release orders and when the order is to be carried out. For example, if the patient could not make their appointment date, having the order in the Future Outpt/Pre-Admit session type allows OP Phlebotomy staff to change the date(+/- 2 days from the designated date) and proceed with blood collection without waiting for LIP to enter another order.

Picture 1- Reason



The screenshot shows the 'Order Entry Worksheet' for patient 'MIHCCTEST, PATIENTEE AM'. The 'Session' section is highlighted with a red box, showing 'Type: Future Outpt/Pre-Admit' and 'Reason: Draw on 8/20/09 Visit'. Below this, a list of test orders is visible, including 'CBC' and 'CBC + Diff'.

Picture 2- New alert



## October Document Changes

**Anesthesia** – Anesthesia will begin using two new documents – Post-Anesthesia Note and Epidural Note. If you sort documents on the Documents tab by Categories, these notes will be found under Anesthesia & Surgical Services.

**Rehabilitation Medicine** – Rehabilitation Medicine sections will begin using Clinical Procedure Documents to list the procedures/services provided to patients each day. These will be found on the Documents tab under the Category Rehabilitation Medicine.

**First Registration** – Since there is a Medical Record requirement that these documents be signed by a licensed prescriber, the security for these documents will be modified. If anyone who is not a licensed prescriber enters a First Registration document, they will be required to indicate an authorized prescriber as the author of the document and the document will then appear on that prescriber's Signature Manager for signature.

## Introducing the EBP InfoBOT



A new tab has been added to CRIS to facilitate practice based on evidence. The EBP InfoBot is designed to find evidence based resources using pre-selected patient data from the electronic medical record. The EBP InfoBot dynamically generates links to medical definitions, protocols, patient education materials, medication information and prioritized research articles from databases such as Medline, PubMed, Cochrane Reviews and others. The EBP InfoBot works by utilizing key criteria such as, chief complaint, age, identified patient problems, current medications and other information to search national databases for evidence to support development of interdisciplinary plans of care. This project was developed as a collaborative effort between the National Library of Medicine, the Department of Clinical Research Informatics and Nursing and Patient Care Services.

**We Need Your Feedback!** We hope you will try the EBP InfoBot feature. Let us know what you think by selecting the Evaluation link on the EBP InfoBot page.

### Evidence Based Practice (EBP) InfoBot

<p><b>Search options</b></p> <ul style="list-style-type: none"> <li>» <a href="#">CINAHL</a></li> <li>» <a href="#">ClinicalTrials.gov</a></li> <li>» <a href="#">Cochrane Reviews</a></li> <li>» <a href="#">Drug Information</a></li> <li>» <a href="#">MedlinePlus</a></li> <li>» <a href="#">Micromedex</a></li> <li>» <a href="#">Mosby's Nursing Skills</a></li> <li>» <a href="#">PubMed</a></li> <li>» <a href="#">Turning Research Into Practice</a></li> <li>» <a href="#">UpToDate</a></li> </ul> <p style="text-align: center;"> Evaluate the</p> <p style="text-align: center;">Offer Feedback</p>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>CRIS Data</b></p> <p>42y Male CHIEF COMPLAINT: SEIZURES Goal/s: Airway will remain unobstructed            Goal/s: Patient will take precautions at home to insure a safe environment            Goal/s: Patient will understand implications of seizure disorder and</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>Protocol(s)</b></p> <p>01-N-0139 02-N-0014</p> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>MedlinePlus</b></p> <p>SEIZURES seizure disorder</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Evidence Based Practice Search Results</b></p> <p>Query: (SEIZURES OR (seizure disorder AND suction) OR workup) NOT Child</p> <ul style="list-style-type: none"> <li>📄 Antiepileptic drugs for preventing seizures in people with brain tumors. more ...</li> <li>📄 Dose-response population analysis of levetiracetam add-on treatment in refractory epileptic patients with partial onset seizures.</li> </ul> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;"> <p style="text-align: center;"><b>Procedures and Standards of Practice</b></p> <p>Suctioning: Artificial Airway <b>Mosby</b>            Suctioning: Endotracheal or Tracheostomy Tube <b>Mosby</b>            Suctioning: Nasopharyngeal <b>Mosby</b></p> </div> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>Medications</b></p> <p>Acetaminophen Leuprolide Acetate</p> </div>
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# Suspend/Unsuspend Orders Filters

With our last upgrade to SCM, the screen for Suspending/Unsuspending orders has changed, adding the ability to limit orders retrieved by using filters. You are now able to filter your orders by Status (Active/In Process, Take Home Meds....). You can also filter by department or use the <Temporary Selection...> to retrieve specific orders. After altering your filters, select Find Orders

PHARMINP, PATAA PHRM

CRC-3NE-31424-A  
Drug: 1 Plus 1 F, Chemworld Colourfree C

Suspend  Unsuspend

Find Orders

Status Filter: Active/In Process

Selection Filter: Active/In Process

From: 09/23/2008  Start of Chart

To: / /

Find Orders

Medica	Date	S
<input type="checkbox"/> TARP 1 mg time d Admin	09/23/2009 12:00	
100 mcg via subcutaneous injection, one us injection into the anterior thigh ****		
<input type="checkbox"/> PrismaSol - BGK U/2.5; Total Volume: 5,000 mL via Prismaflex, Pre-Filter: 85%, Post-Filter: 15%; 1,000 mL Dialysis Flow Rate 500 mL/hour; Number of Bags: 3; Start on 09/23/2009 Stop after 1 Times	09/23/2009	

(Un)Suspend -

PHARMINP,

Suspend

Find Orders

Status Filter:

Selection Filter: All

To: / /

Medica	Date	S
<input type="checkbox"/> TARP 1 mg time d Admin		
100 mcg via subcutan		
<input type="checkbox"/> Prisma Post-F Dialys Stop after 1 Times		
5,000 mL via Prismaflex, Number of Bags: 3; Start on C		

# Training Update

## Secure Electronic Communication between Provider / Patient

Effective September 8, 2009, at 9:00 am, the Medical Secure Communication Service became available for NIH health care providers and other authorized NIH staff to electronically communicate in a secure manner with patients. If you would like to learn more about this service, please refer to the CRIS website <http://cris.cc.nih.gov>. There is a 4 minute online tutorial about the service and additional information about how to register and get started.

For those providers who have access to the service please note there are a few reminders regarding the medical secure email process:

- Only one email address may be collected on the Information Practices consent form and subsequently entered in CRIS for each patient. The patient should designate an email address that they monitor and utilize regularly.
- If a patient would like to designate someone other than themselves to communicate on his/her behalf through the medical secure email system, he/she must complete an Authorization for the Release of Medical Information form designating that individual as authorized to receive medical information (NIH-527: <http://intranet.cc.nih.gov/medicalrecords/forms/pdf/NIH-527.pdf> ).
- Please be sure to verify that a patient has consented to email communication prior to initiating electronic communication. This information can be found in CRIS under the Patient Info tab, Demographics/Visa Data Summary Views. Clicks details and one can view **both** the email consent signed field and the primary email field at a glance (see below). If you have any questions please feel free to call CRIS Support at 301 496-8400.

The screenshot displays the CRIS Patient Info Summary View. The 'Demographics' tab is active, showing patient information for a 14-year-old female born on 01/18/1993. The 'Patient Demographics' section includes fields for Last Name (NIHCCTEST), First Name (PATIENTCCC), Middle Name (TEST), Title, Social Security (111-11-2222), Gender (Female), Date of Birth (01/18/1993), and Age (14y). The 'Address and Phone' section shows Address 1 as 12 NIHCC STR. The 'Other Demographics' section includes Language (English), Ethnicity (Unknown), Race (Black/African Ame), and Religion (Baptist). A red box highlights the 'Email Consent Signed?' field, which is set to 'Yes', and the 'Primary Email' field, which is 'NIHCCTEST@nih.gov'.

## CRIS Booth

The CRIS Booth held on September 14<sup>th</sup> was a huge success as users learned more about the Medical Secure Communication Service. If there is a CRIS topic or issue you would like presented at the next CRIS Booth please contact the CRIS training team in the global as CC CRIS SCM Training Team at [CCCRISSCMTrainingTeam@mail.nih.gov](mailto:CCCRISSCMTrainingTeam@mail.nih.gov)