

NIH Clinical Center CIO Newsletter

April 2009

41st Edition

This is the forty-first 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. In addition, valuable information can be accessed at the CRIS and DCRI websites: <http://cris.cc.nih.gov>, <http://www.cc.nih.gov/dcric>.

Topics of the Month

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CIO Remarks

There are several high profile projects under way. The following is an update on one having a wide impact: barcoding.

Addressograph Plates - Effective March 30th, the blue addressograph plates are no longer being produced for inpatients or outpatients. With agreement of all effected areas to eliminate the Blue Plate, this change occurred when Phase I of the Bar Code Project went LIVE!

Patient Labels should now be used to apply to any medical record forms or downtime forms. If carbons are involved, please be sure to label each copy. The new patient labels also include a prompt to enter the patient's PCU location. Please fill in this information when sending forms to another department, e.g., during CRIS downtime. This information will help the Pharmacy, DLM, and others know where to deliver medications and/or results. In the near future, we will be removing the addressograph equipment from PCUs and updating some documents, e.g., OR Checklist. We'll advise as these actions are taken.

CRIS Downtime

On May 6th the CRIS component **Sunrise Clinical Manager** will be unavailable from 7 to 10 PM for an upgrade. Please use manual downtime procedures for ordering and charting during that period. Additional reminders will be distributed electronically

New Data Center

Work on the new CC Data Center is continuing, with a projected completion date of June 2009. The main support systems, which consist of physical space, power, cooling and network infrastructure have been completed and are undergoing commissioning, i.e. functional testing. Migration of IT systems to the new data center will start after commissioning testing is completed and is currently expected to take 6 to 9 months.

The current Data Center, which houses many critical IT systems (e.g. CRIS, Nutrition, Surgery, Pharmacy), has outgrown its current 20-year-old location. Though the current location has served its purpose well, due the exponential leap in information technology, the center has grown from supporting a single mainframe to housing over 500 systems. The additional equipment requires significantly increased demand for power, cooling and physical space; the new Data Center has been designed to accommodate both current demands and anticipated future growth of IT systems.

Virtualization

The topic of virtualization is coming up more and more in meetings and projects these days. People are touting virtualization as a way to solve one of the biggest problems most projects have when it comes to incorporating computer systems; reducing the amount time and money it takes to create new servers and publish applications to a large group of people.

The Clinical Center is a leader at the NIH when it comes to using virtualization technology to provide services. It started when the first Sunrays were deployed to the nursing stations, evolved when the CASPER website was brought online and offered remote desktops to home users via CITRIX, and today the CC provide CRIS and Medical Record access to many Institutes and Centers using virtualized services.

The business case for using Virtualization technologies is built on three core processes.

Simplification – Reduce the complexities of having to manage large numbers of physical devices or deploy applications across a large number of devices.

Standardization – Standardize technical configuration through the use of templates and automation tools.

Integration – Through simplification and standards, integration with other systems can be achieved through the use of interfaces or gateways.

The DCRI server & CITRIX teams are using a mixture of free and paid enterprise class server virtualization products. Their strategy currently is to utilize free hypervisors that give them the most features to experiment with server consolidation of resource intensive servers, without the need to commit financial resources. They use CITRIX XEN server to evenly divide up the server resources to a fixed number of virtual servers. Their paid enterprise class server virtualization strategy is to invest financial resources in software that allows them to utilize older hardware and to oversubscribe the physical resources with a larger number of virtual servers. They use VMware ESX server to dynamically allow a larger number of virtual servers access to limited amount of computing resources.

The teams plan to standardize their server virtualization so that on one platform they can provide the highest amount of server consolidation with the ability to over-commit resources to specific virtual hosts and on the other platform they can provide server consolidation without compromising performance.

Application hosting is accomplished using Microsoft Windows 2003 server and CITRIX Server and Networking products currently. The combination of the products allows the DCRI CITRIX team to deliver hosted clinical applications to a diverse user population with high levels of security. They host applications and desktops currently.

In the near future the DCRI CITRIX teams will be evaluating desktop virtualization solutions to compliment the hosted desktop solution they currently provide. They also plan to evaluate application streaming, dynamic provisioning, monitoring, and technologies that allow for high-availability and fault-tolerant replication of critical servers.

The long-term goal will be to provide the highest level of fault-tolerance and interoperability. The DCRI server & CITRIX teams are working closely with the DCRI network team to develop an integrated hardware platform to build a highly available infrastructure that will minimize the impact of losing access to servers in the Clinical Center.

Consults in CRIS

Since the beginning of April, each Consult Service has a free text Consult Follow Up note available in CRIS. For entry, the notes can be found on the Document Browse in alphabetical order under Consults. For viewing from the documents tab, they appear under the Prescriber category.

As of April 16th, initial Consult notes transcribed from ESA/SoftMed are listed on the Documents tab under Consults with their own Consult Service name. They continue to be available on the Results tab as well.

CRIS Training

Spring is here!

CRIS training registration is available on line at <http://training.cit.nih.gov/coursest.asp?lname=cris>. Available class dates and times are now posted through June 30, 2009. If you have any questions related to the registration process, please contact CIT at **301-594-6248**

Eclipsys Security Services

Eclipsys Security Services (ESS) is new software that allow users to log into Sunrise Clinical Manager (SCM - also known as 'CRIS') using their NIH domain User Name and Password, instead of a unique CRIS account. Once the new systems are in place, you will need to remember ONLY ONE user name and password to access CRIS and the NIH network. The Department of Clinical Research Informatics (DCRI) has been collaborating with Eclipsys and the NIH Center for Information Technology (CIT) for several months to develop and test an isolated prototype environment that includes all components needed to prove the new systems work together as expected.

ESS will also result in some other changes in how users access CRIS via CC Citrix (i.e., “Casper” at <https://cccasper.cc.nih.gov>). The new CRIS sign-on process is expected to go live some time in June 2009.

Stay tuned for further details!

How to best prepare for the implementation of Eclipsys Security Services (ESS):

SCM (CRIS) users will access and sign into CRIS differently after this new software (ESS) is installed. It is important that clinicians and CRIS users prepare for the upcoming ESS by registering now for the **I Forgot My Password** service through CIT at <https://iforgotmypassword.nih.gov/aims/ps/>. Registering will allow you 24/7 capability to reset your NIH network account password (which will be used to log into CRIS) and unlock your account yourself without having to contact the CIT helpdesk. Information about the **I Forgot My Password** program can be found at <http://datacenter.cit.nih.gov/interface/interface236/iforgotmypw.html>. We invite you to check it out!

New Documents in CRIS

Progress Note – Brief Operative Procedure has been added to the Procedure section of both the Document Browse and the Document tab. Items required to be included in this note are indicated by a * and must be completed before the document can be saved.

Brief Op Note	
* Procedure Date	<input type="text" value="/ /"/> <input type="button" value="C"/> <input type="button" value="T"/>
* Preoperative Diagnosis	<input type="text"/>
* Postoperative Diagnosis	<input type="text"/>
* Procedure	<input type="text"/>

Additional notes added during April include Progress Note – Transplant SOAP under Prescribers – Transplant, Pulmonary Rehabilitation Note under Rehabilitation Medicine, and Bronchoscopy Nursing Note under Procedures – Nursing.

All laboratory pull sections have been revised to show reference ranges and units of measure.

Privacy & Security

Almost every day we hear of data being lost by or stolen from a bank, credit card company or government agency that has sensitive data. As hackers gain better tools and knowledge of the latest vulnerabilities to exploit, we can only expect this to get worse.

And then there are what we call script kiddies – young teenagers (or younger) with too much time on their hands. It is very easy for them to acquire tools they can use to hack or disable a website or network. These script kiddies are smart, but they don’t have to be. They just need the right tools and they can get in to an unprotected or poorly protected computer system.

Even people not intending to do any harm to a system can accidentally expose themselves to problems. Simple applications that we use for legitimate reasons can have flaws in them that create a backdoor to data that opens up a company's network to those wanting to do harm or just cause mischief. For these reasons it is imperative that we keep all of our computers updated with the latest patches and virus protection, whether they are government owned or not. It just doesn't make sense not to protect your computer and expose yourself to problems that could have been avoided.

Recently there has been a flood of emails hitting the NIH and other places from sources trying to trick people into revealing their email account information. Never, I repeat, NEVER give out your NIH account and password to anyone who is sending you an email or even over the phone. No legitimate organization will ever send you an email requesting that type of information.

Please note that there are several mandatory training requirements that must be completed during May. These include:

Privacy Awareness for all employees, volunteers, students, fellows, contractors, guest workers, etc. This training is required for all those who HAVE NOT previously taken the training. There is no requirement for an annual refresher at this time. Multiple notifications have been sent to all CC Department Heads and Office Chiefs.

Computer Security for all employees, volunteers, students, fellows, contractors, guest workers, etc. This training is required for all those who have NOT previously taken the training and, in addition, there is a requirement for annual refresher training for all those who HAVE previously taken the training. Multiple notifications have been sent to all CC Department Heads and Office Chiefs.

Omnicell Project Update

Previous CIO Newsletters mentioned the project switching from Pyxis to Omnicell medication ADCs. We are currently in the final phase of implementation. Over the past four weeks the Pharmacy Department, with support from Nursing and DCRI, has installed and activated over 30 Omnicell Medication Dispensing Cabinets on nursing units all over the Clinical Research Center. Roll out of all remaining cabinets will be complete within the next two weeks. Please remember to use the Omnicell Super Users on your unit as your first resource for questions.

If you have questions about this project, please contact Tina Patel (301-402-7064), patelj@mail.nih.gov or Barry Goldspiel (301-496-5869, bgoldspiel@nih.gov) in the Pharmacy.

CRIS User Support

Anatomical Pathology Orders:

A reminder that any Anatomical Pathology order placed in CRIS does not generate a lab label. A printed order requisition automatically is generated at the patient's registered location in CRIS. Clinicians should send the Anatomical Pathology specimen with the hard copy order requisition to the appropriate lab.

Medical Care Plan:

For the CRIS 5.0 upgrade in January 2009, a new version of the Medical Care Plan (MCP) was developed that included IV/PCA/Heparin details as well as other modifications that had been requested by users. While the NIS Committee and Shared Governance process are deciding if this version should replace the previous version, **Medical Care Plan This Patient **TEST** (Medical Care Plan by Unit **TEST**)** is currently available in CRIS as an option for clinicians. The Medical Care Plan (**Medical Care Plan This Patient**) that does **NOT** display the full IV/PCA/Heparin details is also available. Below is an example of how an insulin order might display on the new version **Medical Care Plan This Patient **TEST**** :

Insulin Lispro U-100 Inj- (001226VVX)	Routine 04/10/2009 07:21	Active	04/10/2010
Sliding Scale, by subcutaneous INJECTION See ORDER DETAILS for complete sliding scale doses. Whenever the BG is > 399, the physician on call should be notified., every 6 hours			
Variable Dose	Blood Glucose 150 - 2 unit(s) Blood Glucose 200 - 3 unit(s) Blood Glucose 250 - 4 unit(s) Blood Glucose 300 - 5 unit(s) Blood Glucose 350 - 6 unit(s) Blood Glucose >= 400 - 7 unit(s)		

To locate, select the printer icon on the tool bar, select the **Report Category** of **Nursing**, and select the desired document below.

