



BITS AND BYTES

Volume 3, No 1 | March 2011

A Newsletter from the UCHC Information Technology Department

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Meaningful Use Incentives: The Race is On!



With the potential for \$10-12 million of incentive revenue over 5 years, as soon as the final ARRA HITECH Meaningful Use Rules were published in July, the JDH and UMG Meaningful Use teams sprang into action. The goal: to quickly assess what projects were required to take advantage of the incentives offered by Medicare and Medicaid under these new rules, and to get started as soon as possible in order to qualify early. Overall, we are very well positioned with our current systems to meet the new rules, given the sophisticated clinical systems in place today, including CPOE, Medication Administration Checking, Medication Reconciliation, Discharge Instructions, IBEX ED, Lifetime Clinical Records and NextGen EMR. However, a number of system upgrades to “certified” versions will be necessary, and new clinical system projects will also need to be prioritized in the next twelve months. Stay tuned as the Meaningful Use teams work to quickly implement the new guidelines, further strengthening our clinical system capabilities and securing those all-important incentives.

For more information, please contact Roberta Luby at x4088.

LIFENET Speeds Heart Patient Time To Treatment

Late last year, the JDH Emergency Department implemented a new application from Medtronic called LifeNet. This system was purchased to improve patient care by reducing door-to-balloon time treatment for heart attack patients being transported by ambulance to the JDH Emergency Department. With LifeNet, paramedics can send a 12-lead EKG while they are in transit, enabling the ED staff to determine whether the patient is a candidate for a catheterization procedure. If so, an early alert can be sent to the Cath Lab giving the Cath Lab time to mobilize before the patient has arrived. The end result is a drastic reduction in the time it takes for the patient to receive a life saving procedure.



A pre-hospital 12 lead ECG is transmitted to the emergency department with the use of a Bluetooth capable cardiac monitor and cell phone

The system also has the capability to page medical staff and send an email with the EKG. Dr. Fuller, head of the JDH ED, commented, “Having the ability to review EKGs sent from paramedic units can definitely help reduce the time to treatment during a heart attack.”

For more information, please contact Rob Darby at x6086.



Library Offers Free & Practical Medical Mobile Apps

Navigating the App Store to find reliable apps for the medical professional can be challenging and sometimes expensive. The LM Stowe Library has subscribed to several evidence-based and practical apps that students and physicians can use. The best part is the library pays for site licenses, so you can download them for free!



iPhone/iPod Touch

- ◆ Archimedes - 150+ medical formulas.
- ◆ Diagnosaurus - 1,000+ diagnoses. Search by disease, symptom, or organ system.
- ◆ DynaMed - Clinical reference tool providing summaries of over 3,200 topics. Updated daily to incorporate the latest evidence at the point of care.
- ◆ First Consult - Easy to use clinical reference tool in a simple, straight forward format.
- ◆ Lexi-Select - Mobile version of Lexi-Comp. Comprehensive drug database that includes in-depth information on drugs, natural medications, drug interactions, etc.

Blackberry/Android also has Archimedes, Diagnosaurus, Dynamed and Lexi-Select apps.

For install instructions, visit: <http://uchc.libguides.com/mobileresources>. For additional information, contact Jessica Kilham at x4052.

CMHC HealthCare Data Warehouse Solution Yields Benefits

Within Correctional Managed Health Care (CMHC), key data elements have historically resided on multiple disparate information systems. What CMHC lacked was a solution that would allow staff to satisfy more robust cross-system data mining, information analysis and reporting needs.

To address this challenge, application developers Chris Holody and Patrick Cooney successfully architected and implemented a data warehouse solution whose use has already translated into real savings for CMHC. It has allowed CMHC to streamline and reduce the manual intervention in the collection and documentation of monthly statistics. Additionally, since its initial introduction in 2009, it has saved CMHC and the Connecticut Department of Corrections over \$1.5 million in drug expenditures by giving staff access to information that enabled them to utilize the federal [340b](#) drug pricing program. Moreover, the use of pharmacy data, which is now available to CMHC staff via the warehouse, has enabled prescribers and managers to effectively reference previously inaccessible information.



Chris Holody and Patrick Cooney

CMHC has only just scratched the surface of potential data mining capabilities. They are continuing to actively work with IT to identify additional data they would like added to the warehouse to further their primary goals of saving CMHC time and money and assuring the best healthcare possible to the inmates of Connecticut.

For more information, please contact Patrick Cooney at x5572 or Chris Holody at x5571.

Research Informatics Corner

Research Informatics was established within Information Technology over 2 years ago with the sole purpose of serving the research community. Since then, we've made much progress towards meeting the short- and long-term needs of our constituents. Here are some highlights:



Khamis Abu-Hasaballah

- (1) Completed drafting the 2010-2015 Research IT Strategy, which is now being actively implemented.
- (2) Established a secure file transfer system (sFTP) that allows the transfer of files—large and small—securely to and from anyone within/outside the Health Center.
- (3) Leading efforts to create an electronic data capture (EDC) tool for collecting and storing research data. We have implemented the Research Electronic Data Capture – REDCap (<http://project-redcap.org>) to serve as our EDC tool and have setup a steering/user group to help advance its adoption.
- (4) Made significant progress towards the establishment of a clinical research data warehouse (CRDW) to aid clinical research, and have implemented the Informatics for Integrating Biology & the Bedside - i2b2 (<https://www.i2b2.org>) as a front end tool.
- (5) Created the Comprehensive Faculty Activity Registry (CFAR), which provides our faculty with one-stop shopping for managing and utilizing their Curriculum Vitae (CV) data. CFAR is seeded with core faculty data – such as demographics, publications, grants, etc.— and includes a set of productivity tools for generating Biosketches specifically formatted for NIH grants, and a standard website maintained by the faculty and made available to the public (<http://facultydirectory.uchc.edu>). To access CFAR, go to <http://cfar.uchc.edu> and login using your UCHC network account. Stay tuned for announcements on demos and training sessions.
- (6) Established the Study and Recruitment Registry (<http://clinicaltrials.uchc.edu>) - a web-based system with a maintained list of active clinical research studies, resource information to volunteers and researchers, and a registry of self-enrolled research volunteers.
- (7) Worked with the Human Subjects Protection Office and representatives from the research community on selecting a solution for an online application for preparing, submitting, reviewing, and managing human subjects protocols. After months of demos and reviews from a number of leading vendors in the field, the selection committee awarded the contract to Integrated Medical Research Information Systems (<http://www.imedris.com>) for their iRIS software. Implementation is scheduled to begin in April 2011.

In addition, we've established the Research Informatics Core - staffed by two programmers and a technical analyst - to further meet the needs of our researchers. To read more about our activity, Core staff and services, visit us on the web at <http://researchit.uchc.edu>

For more information, please contact Khamis Abu-Hasaballah at x8141.



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