

Rosalind Franklin University of Medicine and Science Equips Students with Computerized Diagnosis System

Rosalind Franklin University of Medicine and Science (RFUMS) is the first medical school in Illinois and one of the first in the nation to provide its students with an advanced computer system that helps diagnose patients and recommend treatments. The new system enables medical educators to present students with individual cases and then check their diagnoses against the computer system, which has a proven accuracy rate of over 90 percent.

The new computer system, from Isabel Healthcare Inc. of Falls Church, VA, is used by physicians at 18 medical centers around the country to improve diagnoses and reduce medical error.

According to John Tomkowiak, M.D., M.O.L., Associate Dean for Curriculum and Director of Interprofessional Clinical Education and Simulation at RFUMS, one of the hardest skills to teach medical students is the ability to reason in a clinically oriented context – it is this skill that differentiates the average clinician from the excellent one.

“Educators have consistently looked for approaches to not only teach this essential skill, but to assess it. With the new Isabel system, we can do both,” he said.

Dr. Tomkowiak noted that computer technology is rapidly gaining momentum in hospitals and medical practices around the country. Having students learn and understand its benefits and limitations will allow them to be better prepared to practice when they are on their own, he said.

At RFUMS, Isabel is a mandatory component of training for the University's Chicago Medical School students and the Dr. William M. Scholl College of Podiatric Medicine students. In addition, all RFUMS students and faculty, including the College of Health Professions, have access to it for the purpose of educational instruction and learning.



First-year Chicago Medical School student Kiel Melkus working with the Isabel diagnostic system in one of Rosalind Franklin University's standardized patient examination rooms.

Several major federal and private sector initiatives currently underway are focused on reducing medical errors, including misdiagnosis.

According to research conducted by Mark Graber, Chief of Medical Service at the VA Medical Center of Northport, New York, diagnostic error is twice as common as prescription error. Most medical error studies find 10-30 per-

cent of mistakes are in diagnosis as revealed by a study by Gordon Schiff and others at Cook County, Illinois John H. Stroger Hospital. Additionally, another review by Stroger Hospital researchers of 53 autopsy studies found an average rate of 24 percent missed diagnoses.

Diagnostic errors are often the result of a physician not considering all possible options, particularly in what is known as premature closure – when a doctor considers a patient's symptoms to be evidence of one specific diagnosis and then stops considering others.

Isabel is a decision support tool and knowledge system that starts at the same point that a patient's journey frequently begins—with symptoms, signs and results of tests. Isabel's interface enables physicians to quickly input a patient's key signs and symptoms, and then a list of differential diagnoses, including bioterrorism diagnoses, are instantly provided, determined by the context and meaning of the clinical terms entered, rather than by keywords alone.

Isabel includes information on more than 10,000 diseases and 4,500 drugs and is updated almost daily, with major updates every three to six months.

“Isabel searches through medical texts and journals and provides the clinician – the expert – with diagnoses to consider. It actually reminds the doctors of other diagnoses that he may not have remembered,” said Joseph Britto, M.D., one of the cofounders of Isabel. The other cofounder of Isabel Healthcare Systems is Jason Maude.

The company is named after Maude's young daughter, who almost died after a potentially fatal illness was not recognized by a physician.

A Better Way to EHR Adoption

Electronic Health Records (EHRs) have been available for more than 30 years. Despite promises of improving outcomes and lowering costs, still only 38% of the nation's 800,000 physicians use an EHR. The reasons for this low adoption rate are simple: most traditional EHRs fail to help doctors work smarter, see more patients, make more money, or deliver better care.

Now Washington has stepped in to spur adoption rates. The HITECH Act—part of the stimulus package—is intended to encourage adoption by providing \$44,000 in incentives from Medicare for “meaningful use” of an EHR.

These incentives won't compensate for underlying EHR shortcomings. Physicians could become saddled with expensive software-based EHRs that drain revenue with maintenance and upgrade costs.

There is a better way. athenaClinical(sm), our web-based EHR service, transcends the failures of the past with a bold, yet simple solution. It's rooted in a careful analysis of how EHRs can add value to patient workflow. It's designed with an understanding of fundamental practice economics. Rather than drain revenue, the right EHR can provide a gain in revenue.

athenaClinical allows doctors to achieve 100% of the benefits of a paperless EHR while documenting patient encounters as desired. It optimizes the patient workflow and helps reduce costs, including those associated with document management, patient orders, and results follow-up.

Ultimately, a fine-tuned workflow can drive higher EHR adoption, higher physician revenue, and better patient care.

The March 2010 KLAS report on EHRs found high doctor confidence that athenaClinical is the “closest to achieving the meaningful use standards” among EHR vendors. We are so confident that we can help you get Medicare payments for “meaningful use of an EHR” through the HITECH Act incentive program that we guarantee that you will get your payment in the first year.*

That's meaningful change that can truly benefit physicians and their patients.

To learn more about how athenahealth can provide a better way to EHR adoption, visit athenahealth.com/chicagonews or call (888) 254-9618.

* As a service-based EHR, our monthly fee is the only payment we receive from our clients for our EHR. If you don't receive the Federal Stimulus reimbursement dollars when they're available, we will credit you 100% of your EHR service fees for up to six months until you do. This offer applies to HITECH Act reimbursement payments only. Additional terms, conditions, and limitations apply.

Centegra Health System Launches New Physician Network

Centegra Health System and Dell Services have launched Centegra Physician Network, a health information technology sharing program that creates the region's first-ever Health Information Exchange (HIE). The program also provides local physicians with access to cutting-edge Electronic Health Records (EHR) and Electronic Practice Management (EPM) systems that will improve quality and healthcare delivery.

Centegra Physician Network will enable participating physicians and hospitals to better share and exchange life-saving medical information and patient histories seamlessly through a highly secure electronic network.

Centegra Physician Network offers physicians an opportunity to install an affordable EHR to advance and digitize their office records and enable patients to better maintain their medical histories, test results and other critical information. Additionally, Centegra Physician Network will enable participating physicians to implement EPM software in their practices, which streamlines certain key administrative functions.