The Roundup

A compilation of items about medical device news, regulations, and AAMI initiatives

Getting Smart About Smartphones

Not too long ago, doctors had pagers that beeped whenever they were needed.

These days, more and more doctors rely on smartphones to stay in touch.

But the widespread adoption of these phones has led to challenges for some healthcare facilities, as they must develop protocols for the devices and ensure that messages are reliably delivered.

Amcom Software, a hospital communications company based in Eden Prairie, MN, released a white paper called “Six Things a Hospital Needs to Know About Supporting The Adoption of Smartphones.” They are:

1. Smartphone use is exploding in hospitals and this trend is not going away.
2. Don’t use a smartphone service provider’s website to send mission-critical texts and other communications. Sometimes you have to travel to various websites, which can lead to delays.
3. An integrated messaging system is essential.
4. The world of smartphones is heterogeneous. It is impossible to just support one brand.
5. Smartphone applications should offer an improved audit trail.
6. Redundancy and escalation are critical. Establish multiple paths to get messages through to recipients in the event that high communications traffic is straining bandwidth or coverage dead spots occur.

A Banner Year For Certification Exams

More people applied to take one of the International Certification Commission’s (ICC) exams last year than ever before.

In 2011, 918 applied to take the exam to become a certified biomedical equipment technician (BMET), radiology equipment specialist, or laboratory equipment specialist. That is 50% more than in 2010, when 613 applied.

The vast majority of applications (813) chose the certified biomedical equipment technician (CBET) exam, followed by 83 for radiology, and 12 for laboratory.

Chris Nowak, who chairs the U.S. BMET Board of Examiners, which annually creates the exams, says one reason for the spike could be more employers are looking for certified technicians.

“If two candidates are sitting in front of an employer and they both have equal experience, but one is certified and the other is not, employers are choosing the certified applicant,” says Nowak, corporate director of clinical engineering services and healthcare technology integration for Universal Health Services in King of Prussia, PA.

Familiar Face Leads New TJC Department

George Mills is known in the healthcare technology management community as the go-to guy when it comes to questions about complying with
Researchers are working with BMW to develop a steering wheel with sensors to monitor the driver’s health.

Mobile Health Hits The Road
You’ve heard of healthcare technology migrating into homes, but what about cars? German auto manufacturer BMW is working with researchers at the University of Technology Munich to develop a steering wheel with sensors that the car maker says will allow motorists to monitor their physical and mental health while they travel.

“The driver can use his time behind the wheel for a minor health check,” the car maker says in a press release. “At the same time, the device might be used to recognize the onset of fainting spells or heart attacks.”

The sensors would monitor vital signs such as the driver’s heart rate, skin conductance, and oxygen saturation in the blood.

One researcher says that he hopes the project goes beyond just monitoring health.

“Our vision is to get the vehicle to detect when the driver is no longer feeling well and to initiate appropriate measures,” says Tim C. Lueth, a professor at the university and director of the study. “When a stress situation is detected by means of skin conductance values, phone calls can be blocked, for instance, or the volume of the radio turned down automatically.”

The Joint Commission (TJC). Now he will lead an entire department related to engineering and other environment of care matters, according to a November announcement from the Oakbrook Terrace, IL-based accreditation organization.

The new Department of Engineering will bring together the organization’s experts in engineering and related disciplines. Mills will also work on issues concerning the Life Safety Code regulations and emergency preparedness and response.

“George’s expertise in how the physical environment impacts health care quality and safety will be important in The Joint Commission’s efforts to introduce new knowledge that benefits accredited organizations and the patients they serve. I am pleased to know that his strong vision will help us realize our goals,” says Ana Pujols McKee, MD, executive vice president and chief medical officer for TJC.

The organization accredits and certifies hospitals and other types of healthcare facilities, making them eligible for Medicare reimbursements.

Occupant Wall Street, Occupy Healthcare
The Occupy Wall Street protest galvanized tens of thousands of people across the country this fall and winter with its criticism of corporate greed. One offshoot of the movement takes aim at inequities in healthcare.

The Occupy Healthcare movement offers a series of principles and actions it says are needed to help improve the U.S. healthcare system.

“Healthcare is a morass of competing interests and a majority of those competing interests are committed to maintaining the status quo (read—what benefits them or no change),” Occupy Healthcare’s website reads. “Make no mistake, there is a cacophony, and this cacophony is made up of the voices telling you that change in healthcare is impossible. They are wrong.”

The movement’s principles include that healthcare is a right for all, and that it is currently too costly and ineffective. The group also calls for monetary incentives to be tied to better outcomes and improved health, with increased rewards for improving the health of those most vulnerable.

AMA Chooses App Winners
An app to help physicians on their rounds and another to quiz them on clinical scenarios won the American Medical Association’s (AMA) App Challenge.

Cynthia L. Beamer, MD, a pediatrician in Texas, won for her Rounder app idea. The app would provide a data capture point for information on hospital patients, allowing physicians to track a patient’s progress, the AMA says in a press release.

Michael Ray Bykhovsky, a third-year medical student at Georgia Health Science University in Augusta, GA, won the Journal of the American Medical Association resident/fellow/medical student category.

His app presents “clinical vignettes and images along with medical case information, serving as a learning tool,” the AMA says. “Apps are among the many ways physicians and future physicians learn, stay connected and juggle busy schedules, and we congratulate Dr. Beamer and Mr. Bykhovsky for their innovative and winning ideas,” says AMA Chair-Elect Steven J. Stack, MD.

New Dashboard Targets Diabetes
Researchers at the University of Missouri in Columbia, MO, have developed a tool they say makes it easier for doctors to make the right decisions about diabetes treatments.

The diabetes dashboard allows doctors to view electronic information about the patient’s condition on a single computer screen, the researchers say in a press release.

“The diabetes dashboard is so intuitive that it makes it hard for physicians not to do the right thing,” says Richelle
Koopman, associate professor of family and community medicine in the university’s School of Medicine. “Doctors can see, at a glance, everything that might affect their decision. This frees up their minds and helps them make better decisions about patients’ care.”

A study on the tool says that physicians who use the dashboard were able to correctly identify data they were searching for 100% of the time, compared to 94% with traditional medical records. In addition, physicians needed only three clicks to find the information on the dashboard as opposed to 60 without it.

Many Police Cruisers Lack AEDs

The vast majority of state police cruisers in the United States lack automatic external defibrillators (AEDs), according to researchers at the University of Pennsylvania.

State police are often the first responders to a medical emergency on the highway. That is why some police cruisers equip automatic external defibrillators (AEDs) to use in response to a heart attack.

But few cruisers employ this life-saving technology, according to new research from the Perelman School of Medicine at the University of Pennsylvania in Philadelphia, PA. Researchers say they found that just 30% of the nation’s state police agencies reported they equip their vehicles with AEDs, and nearly 60% of those that do said that only a minority of cars in their fleet have the devices.

“Putting AEDs into more state police cruisers could provide a significant safety net for people who suffer cardiac arrest on our nation’s highways,” says senior author Benjamin Abella, MD, assistant professor of emergency medicine and director of clinical research in the university’s Center for Resuscitation Science.

Forty six of the nation’s 50 state police agencies completed the online survey.

Leading Practices Focus On Quality System Upkeep

Keeping a quality system compliant with the U.S. Food and Drug Administration (FDA) may be one of the most important duties for a device manufacturer. It also comes with a plethora of challenges and obstacles.

AAMI wants to help professionals in the field surmount those obstacles with the latest installments of its Leading Practices collection, which is a series of handbooks written to give quick, practical advice on various subjects.

One of these documents focuses on management responsibilities for maintaining a quality system, and the second looks at how to conduct a proper quality audit, which determines how effective the manufacturer’s quality system is and how well it conforms to FDA requirements.

“We hope that readers will use the information contained in Leading Practices to make their lives easier, helping them to improve patient outcomes as well as their own efficiency,” says John Gagliardi, author of both documents and president of the consulting firm Midwest Process Innovation LLC in Maineville, OH.

Both handbooks are available for $70 or $35 with an AAMI member discount. The order code for the quality audit handbook is LP-QA or LP-QA-PDF, and the order code for the management responsibilities document is LP-MR or LP-MR-PDF. The source code is PB. To order copies, call +1-877-249-8226, or visit the Marketplace at http://marketplace.aami.org.

Staying Connected With Connectivity

Want to know where things stand on medical device connectivity?

An interactive online town hall meeting on March 14 will examine the current state of connectivity, and clinical engineering and information technology’s roles in it.

The meeting is part of a
series held by the CE-IT Community, which includes members from AAMI, the American College of Clinical Engineering, and the Health Information and Management Systems Society.

Some of the objectives of the meeting include assessing current and future medical device adoption trends, and discussing the integration of devices with electronic medical records.

For more information on how to register for the town hall meeting, which is free, visit www.ceitcollaboration.org.

**Steps to Prevent Data Breaches in Hospitals**

Thanks to new federal legislation for health information technology (IT), data breaches of patient information are squarely in the spotlight, and that means higher scrutiny for hospitals, according to an article on SearchHealthIT.com.

The Health Information Technology for Economic and Clinical Health (HITECH) Act brought stiffer penalties for healthcare facilities for data breaches.

The website offers some tips for how facilities can protect themselves, such as:

- Keep networks secure. One way to do that is to partition the network and keep patient and guest data on separate partitions.
- As required by the Health Insurance Portability and Accountability Act (HIPAA) Security Rule, develop a disaster recovery plan that spells out exactly what will be needed to recover patient health information in the event of a fire, vandalism, natural disaster or system failure.
- Consider using an identity management system, which can help administrators manage login and authentication, access control, privilege validation, and ID decommissioning.
- When developing an electronic health record security program, adhere to standards published by organizations such as the National Institute of Standards and Technology, the International Organization for Standardization, and the Health Information Trust Alliance.
- Regularly educate employees on HIPAA’s privacy and security provisions. Emphasize the importance of keeping patient data safe and secure.

**Follow the EMR Golden Rules**

Rosemarie Nelson, principal of the MGMA Health Care Consulting Group in Englewood, CO, recently told Healthcare IT News her six golden rules for implementing an electronic medical record (EMR). They are:

1. Include the nursing staff. One of the cardinal sins associated with implementation is forgetting the nurses.
2. Recognize the opportunity to change and improve your workflow.
3. Schedule a lot of training, and budget for additional training costs.
4. Anticipate the stress and effort required over several months. Typically groups will be in the learning and adoption phase of EMR implementation for several months. The process can be tedious at times.
5. After you go live, go back and visit clinicians and nurses to gauge their EMR comfort level. Visit the staff thirty days after the implementation, and six months after that to see how they are doing.
6. Don’t try to force all physicians to do the same thing. Find several ways for clinicians to do the same EMR tasks.

**Report Touts Job Prospects for Medical Technology Field**

There’s new evidence highlighting the economic appeal of healthcare technology management as a field of study.

Graduates who majored in medical technologies have one of the lowest unemployment rates in the country at 1.4%, according to “The Lookout” blog on Yahoo News, which cited data from the Georgetown Center on Education and the Workforce.

Medical technology was among 10 majors that had very low unemployment rates. “That’s not bad considering last month’s joblessness rate for people with a college degree or higher was 4.4%,” the post reads.

This isn’t the first time the healthcare technology management profession has been recognized for its economic stability. U.S. News & World Report listed biomedical equipment technician as one of its best careers in 2008 and 2009, calling it stable and rewarding.

The other nine majors and their unemployment rates cited by “The Lookout” are:

- Actuarial Science—0%
- Astronomy and Astrophysics—0%
• Educational Administration and Supervision—0%
• Geological and Geophysical Engineering—0%
• Pharmacology—0%
• School Student Counseling—0%
• Agricultural Economics—1.3%
• Atmospheric Sciences and Meteorology—1.6%
• Environmental Engineering, Nursing, and Nuclear Industrial Radiology, and
• Biological Technologies—2.2%

IBM Supercomputer Takes on Healthcare
It took down two of the most celebrated champions in the history of the game show Jeopardy! and now it plans to take on healthcare.

The IBM supercomputer Watson will be used by insurance company Wellpoint Inc. to help clinicians make healthcare decisions. The supercomputer was created by IBM to rival a human’s ability to answer questions fast, accurately, and confidently.

“Watson’s ability to analyze the meaning and context of human language—and quickly process vast amounts of information to suggest options targeted to a patient’s circumstances—can assist decision makers such as physicians and nurses in identifying the most likely diagnosis and treatment options for their patients,” according to a press release from the Indianapolis-based insurance company.

Watson beat former Jeopardy! champions Ken Jennings and Brad Rutter in January 2011. Wellpoint says it anticipates employing the Watson technology early this year, and will work with select physician groups in clinical pilots.

Watson, the IBM supercomputer, proved to be a whiz at Jeopardy! Will it be as impressive with its use in healthcare?

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