



Ephraim McDowell Regional Medical Center Uses Internet to go Digital, Providing Medical Records in Milliseconds

Danville, Ky. — With strict security requirements and extremely sensitive patient data, it is essential for a busy hospital network to provide an effective and secure technology solution that offers mobility between exam rooms and offices.

Imagine during post-operative recovery the surgeon gives a simple voice command to order a set of x-rays and operation reports to be digitally delivered to your family physician and physical therapist for the next phase of your recuperation. It may sound futuristic, but it is a reality at Boyle County's Ephraim McDowell Regional Medical Center. Founded in 1918 as a community hospital, the medical center now serves more than 113,000 residents from 6 counties in Kentucky.

Doctors need to be able to access patient records within milliseconds. Using indoor antennas to maintain a solid wireless communication network, doctors are more mobile and attending to patient's needs is more efficient. Advancements in broadband have made possible the ability to send an X-ray to another hospital within seconds of receiving the request. Without broadband access, the hospital would be forced to either mail or drive the X-ray to another facility, wasting what could be very precious time.

"While technological advances have taken place, we have not lost sight of our #1 priority, our patients. We constantly strive to keep current with the latest medical technology to meet our patient's needs," says Barry Michael, president of Ephraim McDowell Regional Medical Center.

Advances in digital imaging technology are making X-rays, CT scans and other medical tests increasingly effective. However, they also create a huge challenge for hospital IT managers who are charged with storing and distributing all that digital data. Additionally, there is even greater demand and regulations requiring high-resolution digital images for diagnoses: the higher the resolution, the more the pixels, the more storage required.

"At Ephraim McDowell, we are taking advantage of the integration of digital data storage with the Internet. The first phase is the implementation of the healthcare provider's Picture Archiving and Communications System, or PACS."

"PACS connects us anywhere in the country with patients' data," says Robyn Pulliam, director of Diagnostic Services. "Referring physicians have access to x-rays and other information as soon as it is prudent to share information. We're one of a select group of healthcare systems in the country with this capability. Obviously this happens within the boundaries of maintaining patient privacy and confidentiality."

Moving from film to storing digital images allows the hospital to increase the number of patient images that can be viewed by medical technicians, and cuts out film processing fees.

"We're constantly upgrading our technology and equipment," Pulliam says. "As with other technology, most medical technology can be outdated after five years, some even sooner than that. In addition to doing standard upgrades, replacing some pieces, we add entirely new components as needed."

Also in the works is the integration of a voice recognition system, which will allow further data integration. Reports that once took up to 24 hours to be delivered can now be available for doctors to review in just minutes. Michael says that strategy, combined with a constant vigil to make sure software is leading-edge, will allow the medical staff at Ephraim McDowell Regional Medical Center to communicate with other healthcare facilities, providing patients in central Kentucky with excellent healthcare options.

About KY 120:

In the fast-paced world of technology-driven business, it should be recognized that best practices can be studied and emulated. As a part of the [connectkentucky](#) initiative, CiTE (Center for Information Technology Enterprise) is profiling business initiatives in each of Kentucky's 120 counties.

Name: Ephraim McDowell Regional Medical Center

Internet:
<http://www.emrhc.org>

Products/Services:
Health Care

Location:
Danville/Boyle County

Leadership:
Barry Michael, President

Employees: 1000

Founded: 1918

Reach: Regional

Innovative Insight: *"Ephraim McDowell strives to keep current with the latest medical technology. Most medical technology can be outdated after five years, some even sooner than that. In addition to doing standard upgrades, replacing some pieces, we add entirely new components as needed."*

Advice for Growing

Companies: *"Look at data storage capacity and analyze how technology can improve the process, increase service and cut expenses in comparison to long term return on investment."*

Way Internet Has Made You More Competitive:

"The Internet connects us anywhere in the country with patient data, allowing medical staff to provide quality health-care and save precious time. This takes place while maintaining utmost patient confidentiality."