

CASE STUDY:

IT Upgrades Benefit Cornell Scott-Hill Health Center Patients

New equipment speeds communication, saves time and sets stage for Electronic Health Record implementation

SITUATION

Serving over 33,000 patients annually at ten locations throughout New Haven County, the Cornell Scott-Hill Health Center is dedicated to providing the highest quality medical, dental and behavioral health care possible. Just as important, though, is the health center's commitment to patient satisfaction.

Many factors impact a patient's experience including computer technology. At the health center, outdated equipment was hampering its patient service efforts. Communication between departments and locations could be extremely slow, impeded by computers, servers, and wiring that were well past their prime. The old technology was also unable to support the health center's initiative to implement an integrated Electronic Health Record (EHR) system, a system that will have a significant, positive impact on patient service.

In order to improve patient service as well as lay the ground work for the EHR system, the health center needed to completely overhaul its computer technologies. It needed to bring in the latest and most efficient systems to significantly improve connections and expedite the transfer of medical information. The overhaul, while necessary, would also be expensive.

SOLUTION

As the Cornell Scott-Hill Health Center prepared to apply for a loan, the health center received a \$1.28 million grant under President Obama's American Recovery and Reinvestment Act (ARRA), also known as the Stimulus Package. According to its website, www.recovery.gov, "In addition to offering financial aid directly to local school districts, expanding the Child Tax Credit, and underwriting a process to computerize health records to reduce medical errors and save on health care costs, the Recovery Act is targeted at infrastructure development and enhancement."

The health center started by replacing its outdated computers with brand new ones. In addition, a high-speed Fiber Optic Network was installed to allow for faster communication between all of the health center's locations and multiple departments. Huge files can now be shared more quickly than before. At the Cornell Scott-Hill Health Center Richard O. Beldon Dental Clinic in Derby, dental x-rays that used to take three minutes to open now take one second.

Outdated wiring also causes slower communication. This was the case for the center's main location on Columbus Avenue. Using funds from the grant, the building was rewired. New networking switches were also installed as well as new servers. Twenty-five physical servers were replaced with virtual software, allowing them to now run off of only three servers. The new system is now more energy efficient; not only are there fewer servers to run, but there aren't as many fans needed to keep them cool. Remote access software was also implemented, allowing for the login of specific information (such as patient records, e-mail and financials) from any computer.

The major IT overhauls laid the groundwork for this year's EHR implementation, which will eventually be mandatory for all health care facilities by 2015. EHRs, in the form of computerized tablets, have replaced handwritten and paper medical files, making it easier for health care providers to track a patient's history, order medication and take notes.

The Cornell-Scott Hill Health Center will have its EHR up and running by mid-2011, making it one of the first Federally Qualified Health Centers in the country to have an integrated EHR, encompassing internal medicine, dental and behavioral health.

RESULTS

The IT overhaul has positively impacted patient service at the Cornell Scott-Hill Health Center by facilitating more efficient care and better communication. The upgrades have also set the stage for EHR implementation, which will further benefit patient care and service at the health center.

Since EHRs increase provider efficiency and act as a central source of information, they provide many patient benefits including reduced waiting times and increased time with providers. EHRs also contribute greatly to patient safety by providing physicians and other authorized individuals instant access to patients' complete medical histories and pertinent information such as blood pressure readings and weight.

EHRs also make medication processing easier and safer. Prescriptions can now be typed into the EHR and emailed or faxed directly to the pharmacy. And, since less handwriting is involved, there is less room for error when processing medications.

Ultimately, the biggest benefit to patients may be the ease by which EHRs allow the transfer of patient information between health care facilities and providers. Thanks to EHRs, health care providers from different institutions can easily obtain a patient's medical history—an important resource especially in an emergency situation.

Patients are not the only ones to benefit from EHR implementation. As a Federally Qualified Health Center, the Cornell Scott-Hill Health Center has specific information it has to report to the government and EHRs allow for the instant reporting of this information.

The Cornell Scott-Hill Health Center is located at 428 Columbus Avenue, New Haven.