Alongside thousands of community health workers, R. Scott Hawkins was dismayed by a story in USA Today about Community Health Centers (CHCs) falling short in critical measures of care such as helping diabetics control blood sugar.

Hawkins, former CIO of the Boston Healthcare for the Homeless Program (BHCHP), is a witness to the extreme challenges CHCs can face in providing care to the medically underserved.

“If you don’t know where you’re going to sleep tonight,” Hawkins explained, “the idea that you need to control your diabetes so you’ll be healthier in ten years doesn’t hold as much water” as it does in a stable and thriving population.

Medical disparities are exacerbated among the homeless by intractable poverty, frequently co-existing substance abuse and mental illness, and competing imperatives for finding food, shelter and clothing while maintaining personal safety.

Despite the harsh realities of its patient population, BHCHP perseveres to provide team-based medical, dental and behavioral health services to 12,000 people annually, 98% of whom earn incomes below the federal poverty line. The organization is a pioneer in using collaborative technology to treat patients at 100 locations in and around Boston—in shelters, clinics, hotels, motels, under bridges and along back alleys.

In fact, BHCHP’s mobile strategy is a model of security and accessibility: roaming physicians and clinicians carry “thin-client” laptops without hard drives as well as mobile wi-fi hotspots for access into the centralized EMR housed at Boston Medical Center, BHCHP’s main partner and neighbor across Albany St. No personal health information (PHI) is ever stored on the laptops, virtually eliminating the risk of a PHI breach. Eight large clinics connect to the data center via a wide area network (WAN); a dozen other provider sites have Internet access to it.

The technology exists for delivering similar access through smartphones and tablets. Uri Feldman, PhD, BHCHP’s current CIO, has rolled out iPads to clinicians, enabling instant access to patients’ charts from any site, including the streets, where a specially trained team delivers care. “The EMR interface is dense and complex and found that using external keyboards allow providers to enter information more quickly,” said Feldman. “The ability to do electronic prescribing from the field is at the core of Meaningful Use and allows for our street patients to immediately go to the pharmacy around the corner to pick up their prescriptions.”

Truly Meaningful Use of an EHR System
At BHCHP’s brick-and-mortar location across the street from Boston Medical, Hawkins oversaw an attestation for the Meaningful Use of an EHR that has been in use for a long time, at levels well above the federal requirements. Feldman is now shepherding the MU track for the organization. The EHR came about in 2001 when Boston Medical launched HealthNet as a way for CHCs to share in the costs of an EHR. There are no servers at BHCHP; the EHR data travels directly from Citrix terminals through a fiber optic cable underneath Albany St. to the basement of Boston Medical.

It made sense from a business standpoint to use an EHR, because the health center didn’t know where and when patients would show up, Hawkins said. Now, when a patient comes into any of the 20 connected sites, a physician can call up their chart and get their history, meds and appointment schedule.

The EHR, currently running GE Healthcare’s Centricity version 9, was upgraded in June 2012 to version 10, enabling BHCHP to attest for Meaningful Use. Version 9.5 provided that capability, but Hawkins wanted to wait for a significant interface upgrade in version 10; version 10.2 will be ICD 10-compliant. The center’s clinical measures for Meaningful Use are focused on women’s health, colonoscopies in general, men’s health, smoking and diabetes.

A variety of training options will be offered for the new interface, from PowerPoint decks and word documents for self-training to individual provider, team and small-group training sessions.

“Different people learn differently,” Hawkins said.

Brave New World of HIT Collaboration
Making the most of its EHR data, BHCHP also participates in a landmark Community Information Exchange (CIE) through Boston Medical’s Health Center Controlled Network.
What did Hawkins learn from all this collaborative data sharing? Three important things:

1. From a business standpoint, the DRVS model is reassuring because of its sustainability through fees paid by participants. “With someone else [like an affiliated hospital] paying, I worry about it going away when it becomes more expensive or difficult,” he said.

2. Standardization is a requirement for data quality. “We’ve gone from handwriting to typing, and now it’s time to standardize data inputs.” Is it being recorded in metrics, regular numbers or a narrative? The quality of data standardization is an important piece in making sure ‘bad’ data doesn’t corrupt the system, and that inputs are measured on the same scale, he said.

3. Data interchange standards such as the Direct Project protocol are needed to ensure seamless transmission between providers. Hawkins said he likes the way Direct Project came about, without a lot of regulation, as a partnership between government, technology companies and healthcare payers. Version 10 of Centricity will be Direct-enabled, but another version will be needed before BHCHP can exchange more than secure emails between the EHR and patients.

Technology as a Tool for Reducing Health Disparities and Costs

In addition to ambulatory care, BHCHP runs the 104-bed Barbara McInnis House, which provides 24-hour care to homeless patients who are too sick to return to a shelter, but not so ill they require an expensive hospital stay. The EHR is key to identifying patients who could be better served at lower costs.

BHCHP Teams Up With EasCare Ambulance Service for Mass HIway Collaboration

Boston Health Care for the Homeless Program (BHCHP) and EasCare Ambulance Service will soon be exchanging patient information electronically for patients who are moving to and from its respite facility, the Barbara McInnis House. Admissions, transfers, and discharges will now be coordinated electronically via the Massachusetts Health Information Highway (Mass HIway), which is the Commonwealth’s first and only statewide health information exchange (HIE). The information will include patient demographic and insurance data as well as relevant clinical information. This efficient information transfer will replace the current phone and paper handoff process.

This HIE will greatly improve patient care and reduce costs. EasCare plans to use the new relationship to encourage other providers and potentially payers to exchange information over the Mass HIway.

“When patient documentation is already in the system and readily accessible electronically, the EMT can focus on what’s most important – caring for patients and transporting them safely and not on filling out forms,” said Feldman.

The project has received grant funding from the Massachusetts eHealth Institute’s (MeHI) Last Mile Program, which is designed to catalyze and accelerate connections to the Mass HIway. The HIway is a collaboration between MeHI and the state Executive Office of Health and Human Services. EOHHS leads infrastructure development and operation of the Mass HIway, which will demonstrate measurable improvements in care quality, population health and reduce health care costs. HIway funding is provided by the Office for the National Coordinator for Health Information Technology (ONC), the Centers for Medicare & Medicaid Services (CMS), and is sustained through private contributions.