



ELECTRONIC HEALTH RECORDS IN ACTION



Stories of Meaningful Use

SPRING 2011

Blackstone Valley Community Health Care

Overview

Blackstone Valley Community Health Care (BVCHC) is a federally qualified, Joint Commission accredited health center located in Pawtucket and Central Falls, Rhode Island. Established in 1990, BVCHC provides a range of services, including pediatric, internal medicine, family medicine, midwifery and obstetrics/gynecology, dental, and behavioral health. BVCHC has 6 full-time and 4 part-time physicians, 4 physician extenders, 6 nurses, and 10 medical assistants. In 2010, BVCHC provided care to more than 11,000 patients.

EHR Implementation Process

In July 2007, BVCHC converted to NextGen Electronic Medical and Dental Record systems. Implementation of the system was "out of the box" and all available functions were put into use at the time of implementation. BVCHC acquired an enterprise-level NextGen practice license that supports deploying the system in 100 practices on a common database.

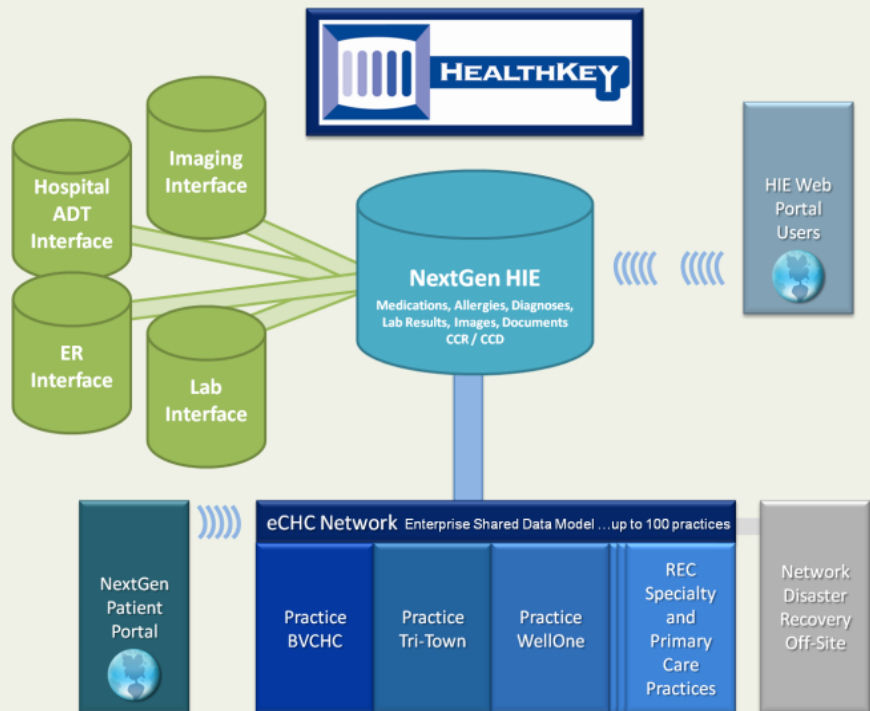
The system architecture facilitated the subsequent implementation of the NextGen Health Information Exchange (HIE) among other area practices also under the NextGen umbrella. This approach provides a common engine and system interfaces for use by participating practices, local laboratories and imaging facilities, hospitals, and consulting providers within the NextGen HIE network. It also enhances continuity of care for BVCHC patients.

NextGen HIE will push data directly from the interfaced entities to the ordering providers as well as to *currentcare*, the Rhode Island statewide HIE. Currently, BVCHC staff are working under a Beacon grant to automate the connectivity to *currentcare*.

BVCHC has branded its entire health information technology (health IT) system as HealthKey, providing a physician portal at the HIE level and a patient portal at the EHR/Practice level for patients.

Contact Information

Heather Budd
Director of Quality Management
Blackstone Valley Community Health Center
42 Park Place
Pawtucket, RI, 02860-4010
Tel: 401-729-0080, ext. 279
E-mail: hbudd@bvchc.org



Patient Portal Implementation

BVCHC implemented NextGen's Patient Portal system in December 2010 with a secure messaging function that supports communication between patients and providers. Providers can use this feature to send patients post-visit clinical summaries and lab results via an attachment. Additionally, patients can e-mail questions, schedule appointments, and request prescription refills at any time that is convenient for them. Providers can then respond to messages in between seeing patients and complete tasks more efficiently, rather than engage in instances of phone tag that tend to occur. The practice's dedicated triage nurse is responsible for reviewing all incoming messages and responding personally to patients or conferring with other providers, as needed, and then responding. BVCHC has committed to acknowledging all incoming messages

As one physician stated, "[The portal] is a great way to communicate with patients and involve them in their care." Similarly, a physician assistant noted, "I was concerned about the traffic with messages and how they would be triaged, but [the portal] has expedited the process of communicating with patients by phone."

within one business day of receipt.

Getting Patients Registered: Portal registration is a two-step process. First, patients provide their e-mail address to BVCHC staff during an in-person clinic visit and are issued a system-generated enrollment token. Instantly, a message is delivered to the patient's e-mail address encouraging him or her to complete the second step of the enrollment process. Processes are also being put in place to allow patients to complete enrollment while on-site during a visit.

To promote the use of HealthKey, BVCHC developed patient marketing materials consisting of a HealthKey reminder card and an enrollment form that introduces some of the benefits of using the patient portal and explains the registration steps. The reminder card includes a field for staff to record the patient's enrollment token, which

One physician assistant explained that "I can use the information in the EHR to address a patient's concerns with visuals. This gives the patient confidence."

serves as the access password for the portal.

Immediately after going live with the portal, BVCHC began a major effort to register patients. Front desk staff were tasked with introducing patients to the new resource and facilitating enrollment. However, within 3 months, BVCHC administrators noticed a decline in the enrollment rate and decided to shift enrollment responsibilities to the medical assistants because of concerns about the added administrative burden on front desk staff. Another concern was that patients who were given information about enrolling in the HIE (NextGen and the statewide *currentcare*) at registration might be confused about a separate request to

enroll in the patient portal at the same time.

To address the burden on front desk staff and other concerns, BVCHC found it helpful to have medical assistants promote the portal as a way for patients to establish a direct line of communication with their provider and to avoid using the BVCHC call center. Call volume at the health center is high and staff noted that the portal may ease patient frustration when trying to communicate with a provider or request a prescription refill.

According to BVCHC, many patients have e-mail accounts and many have Internet access via smartphones. If during registration patients report not having an e-mail account, staff explain how to set up free e-mail accounts with national carriers.

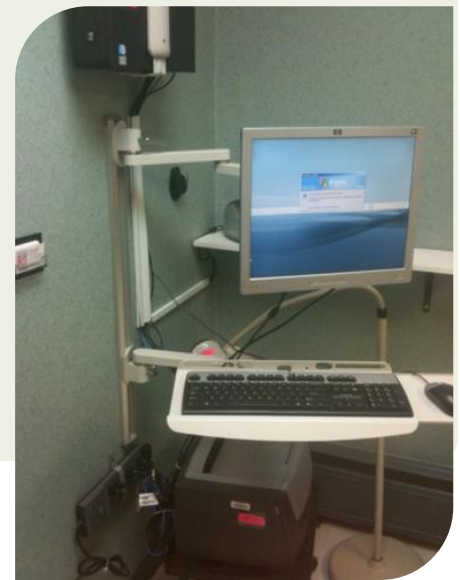
Meaningful Use Objectives Addressed

Provide Patient-Specific Education

Resources: BVCHC designed its clinic patient rooms to foster communication between clinicians and patients, as well as to educate and engage patients and family members in their care. Each room has a computer, printer, and an adjustable-arm monitor that allows clinicians to show patients information in their EHR. The clinician can use this interaction to facilitate discussions and to print out patient education materials.

Clinicians often use the patient EHR to display a graph that charts information, such as hemoglobin levels for patients with diabetes or growth charts for children. Displaying these types of graphics can be a helpful teaching tool to discuss a patient's self-management goals, particularly for people with diabetes or to help overcome language barriers.

BVCHC's NextGen EHR has an integrated patient education tool (from McKesson) that allows clinical staff to search and select from among over 600 summaries on diagnoses and symptoms and more than 1000 medications. The materials are available in English and Spanish. Clinicians can print materials in the room and use them to explain new medications and potential side effects or to discuss new diagnoses. As one physician explained, "The patients love it. I give [the materials] to them to spark conversation and help them do more



As a nurse explained, “When patients hear about the portal, they are excited about it. [Clinicians] can’t go into detail over the phone so there is an advantage to e-mail.”

research on their own. I see it as a stepping stone for patients.”

The EHR also provides links to UpToDate and a Merck database for additional clinician and patient education resources. Although this process requires opening a new browser, whereas the McKesson tool does not, access does not require the user to exit the individual patient EHR.

Provide Clinical Summaries: BVCHC provides patients with printed clinical summaries of their visit upon request or electronically via the patient portal. Automated clinical summaries are generated by the NextGen system, based on the structured data entered for each encounter. Providers can also generate and upload a tailored clinical summary into the portal for a more personalized summary of care.

When patients complete their portal registration, a summary of their most recent visit is uploaded automatically and they are notified via e-mail that there is information available in their portal account. This provides registered patients with a summary to review during their first visit to the portal.

Provide Electronic Access to Health Information: BVCHC provides routine lab results through the portal for registered patients. When lab results are published to the portal, patients receive an e-mail message telling them to check the portal for important information. Providers attach a message explaining the lab results and address anticipated questions, such as “Your test results are normal” or “Your cholesterol is high, please make an appointment within the next 30 days to discuss.” Patients can download any clinical reports shared via the secure messaging feature to their computers or a portable storage device.

Working with the Rhode Island Regional Extension Center (REC)—RI Quality Institute

BVCHC serves as the home and support center for a network of health centers committed to advancing health IT in Rhode Island. Since the health center converted to EHRs in 2007, BVCHC has supported several implementations by other practices and collaborates with the RI REC. As a result of acquiring an enterprise NextGen license and its capacity for additional practices, BVCHC is considered not only a participating provider by the REC but also an approved REC vendor.

Results

Although the enrollment rate for portal access and the volume of traffic via secure messaging on the portal have been modest, patients using the portal feel very positive about it overall. For example, they appreciate having an alternative to using BVCHC’s busy call center to reach providers.

Clinicians and staff also support using the portal because it can potentially reduce call volume and may contribute to better informed, more engaged patients. Also, all communications are saved to the EHR, which helps to ensure more complete documentation.

Challenges

Key challenges include getting patients to complete the second step of the portal registration in a timely manner. Completing enrollment may also be complicated by language barriers, as the majority of the BVCHC patient population comprises non-native English speakers who speak Spanish and Portuguese. BVCHC is working within the limitations of the selected EHR and portal, but they are not yet able to support secured messaging communications with patients in languages other than English, with the exception of patient education materials.

Lessons Learned

BVCHC found it helpful to designate point persons for portal enrollment, such as medical assistants, to engage patients one on one. Consequently, providers are not burdened with the enrollment process, but they can encourage patients to use the portal.

Having a dedicated triage nurse to serve as the gatekeeper for messages coming through the portal has eased provider concerns about e-mail volume and time required for patient communication.

Next Steps

BVCHC is purchasing computer terminal kiosks for use in the waiting rooms to help patients complete the registration process while still on-site so that they continue to be engaged after the portal is explained to them and subsequently begin using the secured messaging feature. The kiosks also will be used for patient education during downtime before visits.

BVCHC also plans to evaluate the patient portal implementation through patient satisfaction surveys and by comparing responses between groups of registered portal users and patients who are not using this resource. As portal enrollment and use increase, BVCHC is also planning to examine whether use of the portal results in a reduced burden on the BVCHC call center.

In accordance with the focus of the RI Beacon Program, BVCHC plans to target patients with diabetes who are using the portal to educate them about self-management and to connect them with the Diabetic Educator for more individual dialogue.

For more information about how these lessons can be implemented into practice, contact:

Allen Traylor, MPH, MBA
Office of Provider Adoption Support
Office of the National Coordinator for Health Information Technology
U.S. Department of Health & Human Services
email: allen.traylor@hhs.gov