

Boston HealthNet Improves Community Health with Informatics and Patient Engagement

Boston Medical Center (BMC) is a non-profit 567-bed academic medical center in Boston, Massachusetts and the largest safety-net hospital and Level I trauma center in New England. Focused strongly on urban health, BMC founded Boston HealthNet.

Boston HealthNet is a network affiliate of the medical center, Boston University School of Medicine, and 15 community health centers and is one of the fastest growing and most influential community healthcare networks serving the city's underserved and working-class neighborhoods. Physicians who practice at HealthNet locations provide a wide range of healthcare services to adults and pediatric patients, with a focus on disease prevention and health education. Patients receiving primary care at HealthNet sites have access to highly trained specialists and cutting-edge technology at BMC while maintaining individualized and culturally sensitive care in their neighborhoods.

The Boston HealthNet team set out on a two-year journey to use health information technology in combination with a centrally-supported patient portal system and quality navigators to improve both patient engagement in their health care and the quality of that care, particularly around hypertension and cancer screening.

Funding the Model

Before the journey began, an initial six-month pilot project tested new clinical and patient education workflows with the support of quality navigators and a systematic patient registry to identify and report on target populations. The Boston HealthNet team then applied for grant funding for the broader, two-year initiative. The pilot also proved that patient access to health information technology would be critical to the success of the longer-term effort, and the team would leverage the EPIC EHR system and patient portal, MyChart. Azara DRVS is the registry and used for advanced data analytics, quality measurement, and patient population management.

The Boston HealthNet project referred to as Improving Community Health with Informatics and Patient Engagement (iCHIP) was funded by Partnership for Community Health, an initiative that designated \$90 million in grant funding through 2027 for Massachusetts Community Health Centers to develop and launch measurable programs that enhance health outcomes, service, efficiencies, and quality of care. In-kind support was also provided for iCHIP from the OCHIN MyChart team – the national nonprofit health IT services organization which supports Boston HealthNet's EPIC implementation.

“Providing easy access to performance data and registries with Azara DRVS was a critical component for iCHIP. This project demonstrated that well organized data in the hands of informed, proactive health center staff is a powerful driver of better healthcare and health.”

—Dr. Bill Adams, Informatics Director for the Boston HealthNet



Data Helps Improve Outcomes

Boston HealthNet medical directors identified the high priority population health goals for iCHIP. Then the Boston HealthNet team, two health promotion specialists, and seven community health centers, each assigned to a quality improvement lead and a shared navigator set out to improve:

- Overall MyChart patient portal adoption,
- Colorectal, breast, and cervical cancer screening, and
- Blood pressure control by encouraging patients to measure and share progress with their primary care physician via MyChart.

Azara DRVS was instrumental in identifying patients with Hypertension applying the Controlling High Blood Pressure Measure (NQF 0018) across participating communities as well as identifying patients due for colorectal, breast, and cervical cancer screening. Using data supplied from OCHIN's EPIC EHR data, DRVS pulls the clinical information into a centralized registry for comprehensive data analytics and patient population management. The quality navigators, a new role Boston HealthNet was testing during this project, then developed data use workflows to access quality data in DRVS and OCHIN in each community health center to set the foundation for the project. The registry would rerun data to obtain the most up-to-date and accurate information and help provide reporting on project progress and outcomes.

The readily available data enabled navigators to identify and contact patients with unmet needs and care gaps at their assigned centers. Medical assistants, administrative staff, and navigators worked tirelessly to educate patients on portal use and collaborated with OCHIN for necessary portal modifications and the use of text-based patient reminders. The health promotion specialists taught patient engagement tactics to all staff, and care providers and the centers met regularly to review the DRVS project dashboard and share best practices, lessons learned, and on-going project impact.

Boston HealthNet Realizes Short and Long-Term Outcomes

In only two years, the project achieved the set-forth patient improvements where the access and use of meaningful quality data and enhanced patient communications were keys to success.

- Hypertension control steadily improved across all sites.
- MyChart enrollment, understanding, and use increased.
- Colorectal, breast, cervical cancer, and HPV screenings are rising.

For the health centers, the project helped transform each practice in several ways.

- Staff now access and use patient-reported data and continue to increase their knowledge of using data for quality improvement.
- The centers are better engaging patients in self-care activities, technology access and use.
- Data, communications, and patient-centric workflows are helping centers achieve quality goals, increase revenue and reimbursements, and improve patient and staff experiences.

Today, Boston HealthNet employs quality navigators for patient outreach and engagement and MyChart patient education is a standard workflow. The entire Boston HealthNet network now optimizes EHR and quality data, scorecards, and reporting to continuously improve health outcomes for the all patients they serve.