Million Hearts Case Study: New York Cardiac Population Health Initiative

Integrating public health and primary care can both improve quality of care for a population and lower health costs. Both components of the health system share a common goal of health improvement, have similar funding streams and resources, and share many partnerships. If aligned, public health and primary care working together could achieve lasting, substantial improvements in individual and population health in the United States. State and territorial health agencies can make a significant impact in this area by decoding the key elements for successful integration, which can then be shared with others to promote further integration efforts, increase healthcare quality, lower costs, and improve overall population health.

The New York Cardiac Population Health Initiative (NY CPHI) is a collaboration between the New York State Department of Health (NYSDOH) and IPRO (formerly the Island Peer Review Organization), New York’s designated quality improvement organization (QIO). CPHI is designed to achieve system-wide practice change and healthcare improvement by providing technical assistance and practice support to primary care practices statewide to improve performance and health outcomes around Million Hearts metrics, including the ABCS of heart health (appropriate aspirin therapy, blood pressure control, cholesterol management, and smoking cessation).

BACKGROUND

Heart disease is the number one killer of New York residents. In 2009, New York’s cardiovascular disease-related mortality rate was 254 deaths per 100,000, higher than the national mortality rate of 236 deaths per 100,000. Furthermore, the prevalence of adults with high blood pressure increased from 22.9 percent in 1999 to 28.6 percent in 2009, and the prevalence of elevated cholesterol rose from 28.6 percent in 1999 to 38.9 percent in 2009. Increasing access to high quality preventive care and clinical management of heart disease and addressing the risk factors associated with it including tobacco are priorities for New York State. These priorities are described in the Chronic Disease Action Plan that is part of the New York State Prevention Agenda 2013, the state’s health improvement plan.

CPHI is a national cardiac healthcare quality improvement initiative

Aim of the Integration:

By July 2014, reduce risk factors and improve health outcomes for patients with cardiovascular disease or at high risk of developing cardiovascular disease in approximately 150 primary care practices across New York State through improvements in the ABCS of heart health.

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funded since August 2011 through the Centers for Medicaid and Medicare Services (CMS). CPHI aims to reduce major risk factors for heart disease and stroke (e.g., high blood pressure, high cholesterol, and smoking) in the primary care setting by contracting with QIOs in each state to improve cardiac care management at the primary care practice level.

OVERVIEW OF THE INTEGRATION EffORT
IPRO received its CMS contract in August 2011, and the national Million Hearts initiative launched soon after. NYSDOH then contacted IPRO about collaborating because CPHI aligned with both partners’ priorities and existing efforts working in primary care settings to address hypertension. NY CPHI uses the Chronic Care Model to work at the primary care practice level to provide technical assistance and practice support to enhance access and continuity of care; identify and manage practices’ at-risk patient populations; plan, manage, and coordinate care; provide self-care support and community resources; and measure and improve performance around Million Hearts metrics, including the ABCS.4 Key activities to date include:

**Steering Committee Establishment** — The committee provides guidance on NY CPHI’s broad goals, supports IPRO in meeting its CMS statement of work requirements, and addresses the broader metrics of Million Hearts. Specifically, the committee has:

- **Developed a project charter** — The charter includes NY CPHI’s overall aim, desired outcomes, and strategies for achieving those outcomes. The current version of the charter can be viewed on the ASTHO website.
- **Established metrics** — The project has established goals and metrics that primary care practices track and report through their electronic health records (EHRs). These include Million Hearts metrics, particularly around hypertension control. See the Results section for more information.

IPRO and NYSDOH identified steering committee members, which include key stakeholders from across the state, including primary care providers, health plans, advocacy groups, and state and federal government agencies, as well as experts in hypertension control, health systems change, and quality improvement. A complete list of organizations represented on the steering committee is available on the ASTHO website.

**Primary Care Recruitment** — IPRO and NYSDOH, with assistance from the steering committee, are collaborating to recruit 150 primary care practices across the state to participate in NY CPHI. Since CMS has no formal requirements about the specialty or composition of the practices, the focus is on recruiting practices that have an EHR system in place to facilitate data collection and follow-up.

**Data Collection and Technical Assistance** — IPRO is collecting de-identified data from the recruited practices’ EHRs and provides training, technical assistance, and tools to practices to assist them in implementing changes that improve cardiovascular care management and health outcomes, as well as expand focus to the policy level. Some of the key resources that have been, or will be, created or leveraged include:

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4 New York State CPHI Charter.
• **EHR data analysis and online dashboard** — New York has many EHR vendors, and standardizing data across these systems is challenging. In addition, providers often don’t recognize the value of looking at population-level data and frequently have difficulty extracting data from their EHRs to examine population-level metrics. IPRO provides technical assistance to the recruited practices to better enable them to analyze and report on the NY CPHI and Million Hearts metrics. IPRO is also establishing an online dashboard that compiles data from participating practices’ EHRs. The dashboard will present the data in a format that will enable each practice to review data from its specific patient population for comparison with practices of similar size or geographic area (note: practices will not be identified). The practices can also request specific training and technical assistance to improve care management and workflow redesign.

• **Trainings** — NYSDOH has connected IPRO with Medical Care Development, Inc. (MCD), a Maine-based company that has developed a blood pressure measurement train-the-trainer program. The program is designed to improve competency in proper blood pressure management technique among healthcare workers and anyone regularly taking blood pressures, identify common blood pressure measurement errors and their cumulative effects, implement team-based care, and address quality improvement in participants’ practices. IPRO has a contract with MCD, and the train-the-trainer sessions will likely take place in fall 2013 among NY CPHI Steering Committee members, recruited practices, and IPRO and NYSDOH staff.

• **IPRO technical assistance products** — Through its role as a QIO, IPRO provides practices with many different services and products to help them address quality improvement. Many of these services are being tailored through NY CPHI to focus on quality improvement around hypertension control and better tracking of Million Hearts metrics at the patient population level. Key services in this area include training for patient self-management support, clinical decision support, patient-centered medical home support, data collection, facilitation of Learning and Action Networks, and focused technical assistance.

• **Other existing resources** — In addition to the materials available through the national Million Hearts website, NYSDOH will leverage existing resources from its previous cardiovascular disease prevention initiatives, including: a clinical decision support guide developed by a local federally-qualified health center that uses hypertension as an example; a toolkit and training guide developed during a previous cardiovascular health project for practices to use in assessing their staff’s competency in blood pressure measurement; and other resources related to its tobacco program quitline, tobacco cessation centers, and quality improvement work.

**Resources**
Financial support for NY CPHI comes from NYSDOH’s CDC Heart Disease and Stroke Prevention Grant (HDSP) and IPRO’s CMS contract. In the early phases of the project, NYSDOH hired a quality improvement consultant using HDSP funding. Other NYSDOH contributions include staff time supported by HDSP grant and state funds.

**Next Steps**

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5 “Learning and Action Networks” are facilitated by IPRO through its CMS contract and serve as information hubs for learning, collaborating and elevating the voice of the patient, with a goal of improving care delivery and patient outcomes. Source: IPRO. “Learning and Action Networks.” Available at: [http://www.ipro.org/index/lan](http://www.ipro.org/index/lan). Accessed 6-17-2013.
Longer-term goals for NY CPHI include broadening the stakeholder base of the steering committee membership, expanding data collection capacity, honing data collection processes, and disseminating the results.

RESULTS/BENEFITS

Successes
Because NY CPHI is in an early stage, there is insufficient data to determine to what extent participating practices are realizing improvements around care management for cardiovascular care and hypertension control. However, early process-related successes include effective practice recruitment - without the provision of financial incentives; increased attention to cardiovascular health and hypertension among participating practices; and a strong, viable partnership between NYSDOH and IPRO that is based on mutual learning and active, engaged collaboration.

Metrics and Measurement

The CPHI Project Charter currently identifies expected outcomes among participating practices to include quarterly EHR data reporting; participation in Learning and Action Networks; and improvements in documented aspirin use, blood pressure measurement and control, LDL cholesterol screening, and tobacco use screening among all patients, as well as tobacco cessation counseling when appropriate. A draft of the CPHI core measures is available on the ASTHO website. At the state level, NYSDOH is tracking progress on Prevention Agenda Toward the Healthiest State indicators, including objectives to increase the percentage of health plan members with hypertension who have controlled their blood pressure, as well as to reduce the age-adjusted hospitalization rate for heart attack.

As previously described, the data addressing Million Hearts metrics and the ABCS from practices’ EHRs present a number of challenges, including technical issues related to data accuracy and reliability, lack of data standardization across EHR systems, and inability to analyze EHR data at a patient population level. For example, since aspirin use is rarely recorded on medication records, recorded use rates are likely much lower than actual rates. IPRO’s expertise in EHR data collection and analysis, as well as its technical assistance products previously described, will help address these challenges.

LESSONS LEARNED

Key lessons learned and recommendations from NYSDOH and IPRO to date include:

- **Collaboratively define metrics** — Agreeing up front on how to define success and what metrics should be tracked makes the data collection and analysis effort more efficient and reduces burden on practices. This is true not only for external groups requesting information, but also across EHR systems.
- **Maintain longevity of focus and resources allocated to improve cardiovascular health** — Improving cardiovascular care at a systems level is a complex and time-intensive effort. Shifting focus and resource allocation at the national level do not support lasting, sustained change. Therefore, IPRO and NYSDOH encourage CMS to continue requiring focus and resource allocation toward cardiovascular disease in its next statement of work for QIOs.
- **Leverage public health-healthcare partnerships** — Forming public health-healthcare partnerships results in a more robust initiative, able to leverage each partner’s unique assets and resources. A proactive approach to establish partnerships is essential.
- **Build on existing initiatives** — Particularly in times of resource scarcity, building on the work of both public health and healthcare partners is key to maximizing impact.
INFRASTRUCTURE TO SUPPORT COLLABORATION AND SUSTAINABILITY

IPRO and NYSDOH have a long history of working together on chronic disease prevention projects. Although there is no formal written or financial arrangement between NYSDOH and IPRO for NY CPHI, each understands the unique, complementary strengths and resources the other brings to the table for the NY CPHI effort. This recognition will enable the partnership to co-facilitate and convene the NY CPHI Steering Committee in a structured, sustainable way that will foster on-going collaboration.

NYSDOH provides connections to training opportunities and technical assistance providers, as well as its extensive network of chronic disease self-management programs, which IPRO leverages to access practices statewide. NYSDOH’s ability to focus state-level community health priorities on specific topics, such as cardiovascular health, community food environments, and healthcare payment for community health services, is a powerful leverage point. IPRO brings to the partnership its connections and relationships with clinical practices, expertise in EHR data collection and analysis, technical assistance around quality improvement, and general knowledge of the healthcare system. IPRO’s network increases NYSDOH’s reach among clinical practices.

There is strong interest in enhancing the NYSDOH - IPRO partnership. Pending continued CMS funding, NYSDOH plans to help IPRO develop its workplan for the next QIO program statement of work in 2014. In addition to both partners’ commitment to continue collaborating through NY CPHI, a number of additional factors at the national and state levels support the initiative’s sustainability:

- Alignment and growing consistency across federal programs around reporting and improving cardiovascular metrics. Two specific examples include payment reforms and funding through CMS’ Center for Medicare and Medicaid Innovation grants through the Affordable Care Act, as well as the national Million Hearts initiative specifically.
- The New York state health commissioner’s commitment to Million Hearts’ goals, as well as the development of a state-level cross-agency group addressing cardiovascular health, provide NYSDOH with opportunities to link to and build on other quality improvement initiatives directed by CMS, the Health Resources and Services Administration, and other federal agencies.

Continued funding for NY CPHI through the next CMS statement of work will be critical to continued support for NY CPHI’s and Million Hearts’ goals. At the practice level, organizational culture and policy change will be essential to sustain the improvements that will be made through NY CPHI.

FOR MORE INFORMATION

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