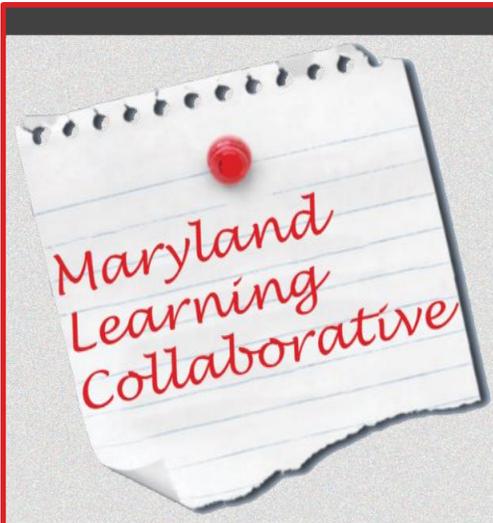


Field Notes



Problem:

Heart disease is the leading cause of death. There is an opportunity to control heart disease risk factors, such as high blood pressure, through quality improvement initiatives in health care settings.

Program:

From 2011 to 2013, the Maryland Department of Health and Mental Hygiene's (MDHMH) Center for Chronic Disease Prevention and Control (CCDPC) partnered with the Maryland Learning Collaborative (MLC) to improve state-level chronic disease outcomes, support quality improvement within health care settings, and advance primary care across the state. Specifically, the program focused on providing training and technical assistance to providers and practice managers on quality improvement activities that improve blood pressure control.

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Overview

The Maryland Department of Health and Mental Hygiene's (MDHMH) Center for Chronic Disease Prevention and Control (CCDPC) established a partnership with the Maryland Learning Collaborative (MLC) to support quality improvement activities in health care systems and primary care settings across the state of Maryland, and improve state-level chronic disease outcomes through a public health and clinical care partnership model.

Program Components

The MLC supported primary care practices throughout the state to improve the quality of care delivery and patient outcomes. As part of the CCDPC-MLC partnership, CCDPC provided the MLC with funding, technical assistance, tools, and resources necessary to implement chronic disease-focused quality improvement activities. By implementing these activities, the MLC contributed to CCDPC's ability to reach health care systems and primary care providers throughout the state of Maryland and achieve shared goals. For example, CCDPC worked with MLC to provide targeted training to practice care managers on how to properly measure blood pressure and promote self-management among people with high blood pressure. Practice care managers then shared their knowledge with medical assistants who were directly engaged with patient care.

The MLC implemented program activities that facilitated quality improvement for improved cardiovascular disease outcomes including control of high blood pressure. Quality improvement activities aligned with the objectives of the Million Hearts® initiative and the corresponding measures were guided by the Eighth Joint National Committee (JNC-8) and the National Quality Forum (NQF).¹

CCDPC-MLC Cardiovascular Disease and Hypertension-Focused Activities

- Trained care managers on team-based care approaches to help patients manage their high blood pressure.
- Disseminated evidenced-based guidelines for managing high blood pressure (i.e., the [2014 Evidence-based Guidelines for the Management of High Blood Pressure in Adults](#), report from the panel members appointed to the Eighth Joint National Committee (JNC 8)).
- Promoted use of American Medical Group Association's Measure Up/Pressure Down campaign for effectively managing and treating high blood pressure.
- Assessed team-based care among MLC practices using Agency for Healthcare Research and Quality's (AHRQ's) Teamwork Perceptions Questionnaire.
- Collected additional data points on specific quality measures for blood pressure and overall chronic disease self-management (NQF measures [0018](#), [0028](#), [0059](#), and [0575](#)).
- Offered collaborative events focused on quality improvement strategies targeting blood pressure control (NQF measure [0018](#)).

Intended Participants

CCDPC aimed to support quality improvement activities in health care systems across Maryland to improve chronic disease outcomes. By partnering with the MLC, CCDPC targeted primary care practices and the patients they care for to improve health outcomes, support quality improvement, and advance primary care across the state. Through the learning collaborative model, primary care practice managers incorporated hypertension and cardiovascular disease-focused strategies into care delivery protocols and quality metrics to improve patient outcomes.



Field Notes

Mutually beneficial partnerships can facilitate quality improvement efforts:

- The CCDPC-MLC partnership demonstrates an example of a state health department enhancing its ability to work with health care systems statewide by partnering with an organization that served as a bridge between public health and clinical care.
- Public health agencies can work to build partnerships with health care systems to optimize care in clinical settings and to better reach patients with cardiovascular disease risk factors.
- Public health agencies can improve population health outcomes by facilitating clinical quality improvement processes that increase the use of evidence-based care practices.

Goals & Expected Outcomes

The CCDPC-MLC partnership focused on the outcomes that align with the goals of the Million Hearts® initiative to

- Improve aspirin use when appropriate.
- Control high blood pressure.
- Manage cholesterol levels.
- Increase smoking cessation rates.

The overlapping aims of the MLC and the CCDPC were to intervene at the health care system and provider levels to improve clinical processes that would improve patient health outcomes. An enhanced evaluability assessment² (EEA) led by CDC documented the reach, impact, and implementation effectiveness of the CCDPC-MLC partnership.

Implementation Effectiveness

The CCDPC-MLC partnership put into action activities centered on hypertension-related quality improvement. Several key factors facilitated implementation of the MLC, including

- Continue engaging leadership.
- Access a wide range of partners.
- Use evidence-based guidelines and nationally recognized clinical measures for reporting.
- Understand the varying capacity among practices to implement team-based care principles and report data on an annual basis.

Practice and patient characteristics were the main factors that supported implementation of quality improvement activities related to blood pressure control within primary care organizations. For example, smaller practices were more adept at making changes to practice protocols to improve the way they identified and managed patients with high blood pressure. Larger practices often had to go through hierarchies before a process-oriented change could be made, which often delayed quality improvement activities. Patient characteristics such as socioeconomic status and cultural factors were important considerations to making specific recommendations about blood pressure self-management for a particular patient.

Reach and Impact

Through their partnership with the MLC, CCDPC was able to reach 52 primary care practices that served over 132,000 insured patients across 17 counties. The MLC measured practice-level performance on CVD quality measures between 2011 and 2014. Over time, participating practices demonstrated significant improvements toward measuring patients' blood pressure (NQF [0013](#)), assessing patients' tobacco use (NQF [0028a](#)), and recommending tobacco cessation interventions (NQF [0028b](#)). On average, participating practices significantly increased blood pressure measurement among patients with high blood pressure from 95.4% in 2011 to 99.5% in 2013 ($p < .0001$). Additionally, providers in participating practices significantly increased assessment of patient tobacco use and recommendation for tobacco cessation intervention among smokers by almost 40% each from 2011 to 2014 ($p < .001$).

The MLC also measured the progress practices made toward reaching Million Hearts® targets for prescribing aspirin when appropriate (NQF [0067](#)), controlling high blood pressure (NQF [0018](#)), cholesterol management (NQF [0075](#)), and smoking cessation (NQF [0028b](#)). Overall, more practices achieved 70% targets for prescribing aspirin for secondary prevention of cardiovascular disease and delivery of smoking cessation interventions compared with blood pressure control and cholesterol management. Although practice-level changes in proportion of patients achieving blood pressure control were not statistically significant, a total of 10,349 hypertensive patients that were previously uncontrolled achieved blood pressure control across 44 of the partnering clinics from 2011 to 2014.

This document does not constitute an endorsement of any organization or program by the CDC or federal government, and none should be inferred.

¹ Centers for Medicare and Medicaid Services. Benchmarks for Measures Included in the Performance Year 2013 Quality and Resource Use Reports Table. <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Downloads/PY2013-Prior-Year-Benchmarks.pdf>. Accessed February 1, 2017.

² Losby JL, Vaughan M, Davis R, Tucker-Brown A. Arriving at results efficiently: using the enhanced evaluability approach. *Prev Chronic Dis*. 2015;12:150413. DOI: <http://dx.doi.org/10.5888/pcd12.150413>. Accessed June 20, 2016.

