

BUILDING INFRASTRUCTURE TO PROMOTE
PRIMARY CARE TRANSFORMATION:
LESSONS FROM A FOUR STATE LEARNING
COMMUNITY

Larry Hinkle and Felicia Heider

SEPTEMBER 2013

BUILDING INFRASTRUCTURE TO PROMOTE PRIMARY CARE TRANSFORMATION: LESSONS FROM A FOUR STATE LEARNING COMMUNITY

Copyright © 2013 National Academy for State Health Policy. For reprint permission, please contact NASHP at (207) 874-6524.

This publication is available on the web at: www.nashp.org

ABOUT THE NATIONAL ACADEMY FOR STATE HEALTH POLICY

The National Academy for State Health Policy (NASHP) is an independent academy of state health policymakers. We are dedicated to helping states achieve excellence in health policy and practice. A non-profit and non-partisan organization, NASHP provides a forum for constructive work across branches and agencies of state government on critical health issues.

To accomplish our mission we:

- Convene state leaders to solve problems and share solutions
- Conduct policy analyses and research
- Disseminate information on state policies and programs
- Provide technical assistance to states

The responsibility for health care and health care policy does not reside in a single state agency or department. At NASHP, we provide a unique forum for productive interchange across all lines of authority, including executive offices and the legislative branch.

We work across a broad range of health policy topics including:

- Affordable Care Act and State Health Care Reform
- Coverage and Access
- Medicaid
- Quality, Cost, and Health System Performance
- Long Term and Chronic Care
- Quality and Patient Safety
- Population and Public Health
- Insurance Coverage and Cost Containment

Our strengths and capabilities include:

- Active participation by a large number of volunteer state officials
- Developing consensus reports through active involvement in discussions among people with disparate political views
- Planning and executing large and small conferences and meetings with substantial user input in defining the agenda
- Distilling the literature in language useable and useful for practitioners
- Identifying and describing emerging and promising practices
- Developing leadership capacity within states by enabling communication within and across states

For more information about NASHP and its work, visit www.nashp.org

Portland, Maine Office:
10 Free Street, 2nd Floor
Portland, ME 04101
Phone: [207] 874-6524

Washington, DC Office:
1233 20th Street, NW, Suite 303
Washington, DC 20036
Phone: [202] 903-0101

Follow us @nashphealth on Twitter

TABLE OF CONTENTS

Acknowledgements	1
Executive Summary	2
Introduction and Background	3
What is Primary Care Transformation?	3
The North Carolina Model	5
Primary Care Transformation Activities Provided through North Carolina’s Infrastructure	6
The North Carolina IMPaCT State Learning Community	8
State Learning Community Project Goals	8
Challenges Faced by the Learning Community States	8
State Strategies and Accomplishments	10
Conclusion	14
Appendix A – Profiles of State Primary Care Practice Transformation Initiatives	16
Idaho	16
Maryland	17
Montana	19
West Virginia	20
Endnotes	22

ACKNOWLEDGEMENTS

The authors of this paper are grateful to a number of people who participated in the North Carolina Infrastructure for Maintaining Primary Care Transformation (IMPACT) project. The authors particularly wish to thank Darren DeWalt, Associate Professor of Medicine, Division of General Internal Medicine, University of North Carolina – Chapel Hill and NC IMPACT Project Principal Investigator; and Kristie Thompson, Project Manager, NC IMPACT, University of North Carolina – Chapel Hill; for their guidance on this project and assistance with this paper. The authors also wish to thank Melinda Abrams, Vice-President, Patient-Centered Coordinated Care, The Commonwealth Fund, for her support on this project and paper.

The authors also wish to thank those who reviewed or contributed information to this report. Including:

- Laura Brown, Samuel Cykert, and Ann Lefebvre of the North Carolina Area Health Education Centers Program
- Jennifer Cockerham and Annette DuBard of Community Care of North Carolina
- Denise Chuckovich, Paul Leary, Neva Santos, Larry Tisdale, and Julie Wall of the Idaho IMPACT Team
- Linda Bartnyska, Niharika Khanna, Karen Rezabek, David Sharp, and Ben Steffen of the Maryland IMPACT Team
- Paula Block, Douglas Carr, Jon Griffin, Kristin Juliar, and Amanda Roccabruna Eby of the Montana IMPACT Team
- Nancy Atkins, Chris Clark, Joan Skaggs, and Nancy Sullivan of the West Virginia IMPACT Team

Finally, the authors greatly appreciate the contributions of NASHP's Neva Kaye, Carrie Hanlon, and Jill Rosenthal for their assistance on this paper. Any errors or omissions are those of the authors.

EXECUTIVE SUMMARY

In September 2011, the Agency for Healthcare Research and Quality (AHRQ) awarded “Infrastructure for Maintaining Primary Care Transformation – Support for Models of Multi-Sector, State-Level Excellence” (IMPACT) grants to four states: New Mexico, North Carolina, Pennsylvania, and Oklahoma. The purpose of these grants was to support model state-level initiatives using primary care extension agents to assist with primary care practice quality improvement.

These four states were selected by AHRQ as leaders in the field of practice transformation and primary care extension. Each state had established programs and models upon which they could build. Each was required to partner with other states interested in adopting or adapting aspects of those models to fit their own environments. As part of its project, North Carolina partnered with the National Academy for State Health Policy (NASHP) to disseminate its model through the North Carolina IMPACT Learning Community comprised of Idaho, Maryland, Montana, and West Virginia.

Over the course of a year and a half, the four states in the Learning Community received technical assistance from NASHP, experts in North Carolina, and other state leaders working on these issues. Teams from these four states visited North Carolina and participated in a series of webinars on topics related to transformation and primary care extension, and shared their strategies and progress.

During the project the states tested a number of strategies for supporting primary care transformation including:

- Partnering with key stakeholders involved in transformation, including engaging high-level state policy makers;
- Sharing lessons and collaborating with other states on best practices;
- Building on existing primary care and medical home initiatives;
- Identifying and integrating public agencies into plans for sustainable infrastructure;
- Identifying components of a quality data infrastructure;
- Advancing practice facilitation; and
- Building IMPACT projects into other initiatives to support sustainability.

This report summarizes the value of primary care transformation for these states and for AHRQ and describes the North Carolina model. It also describes the challenges the Learning Community states faced in adapting aspects of the North Carolina model to their own states. Finally the paper describes the strategies, listed above, that the states implemented to overcome those challenges and their accomplishments. Overall, the Learning Community states have lessons to offer for other states seeking to advance primary care transformation.

INTRODUCTION AND BACKGROUND

Strong primary care systems – serving as patient-centered medical homes – are considered critical to achieving the Triple Aim of better patient experience of care, lower costs, and better health.¹ States have identified primary care transformation as a strategy for promoting and supporting continuous quality improvement in primary care practice in order to achieve the goals of the Triple Aim. Primary care transformation is a focus of the Agency for Healthcare Research and Quality (AHRQ), which, in September 2011, awarded “Infrastructure for Maintaining Primary Care Transformation – Support for Models of Multi-Sector, State-Level Excellence” (IMPACT) grants to four states: New Mexico, North Carolina, Pennsylvania, and Oklahoma. The purpose of these grants is to support model state-level initiatives using primary care extension agents to assist with primary care practice quality improvement.

These four states were selected by AHRQ as leaders in the field of practice transformation and primary care extension because each had established programs and models upon which they could build and improve. Additionally these states would serve as an example to others, and each of the lead states partnered with three or four others to disseminate their work.² This paper describes the North Carolina model and the goals, strategies, accomplishments and lessons learned from the Learning Community of states that sought to adapt or adopt the North Carolina model.

WHAT IS PRIMARY CARE TRANSFORMATION?

Section 5405 of the Affordable Care Act (ACA) establishes a primary care extension program through AHRQ that will provide support and assistance to primary care providers to “educate providers about preventive medicine, health promotion, chronic disease management, mental and behavioral health services, and evidence-based and evidence-informed therapies and techniques.”³ Practices need the support offered through extension programs to assist in confronting a host of challenges currently facing primary health care delivery, including large patient rosters, too few providers, limited time to manage complex patients, a high cost burden of readmissions, and provider burnout as the result of increasing demands by payers and regulators. With all of these demands on providers, it is challenging for them to find time to transform their practices to keep pace with new disease management strategies, developments in health information technology, and other advances in medicine.

This primary care extension program was developed to advance the concept of shared resources (such as community care teams) to ease the burdens described above, and is based on the model of the Agricultural Extension Service.* Translated to health care, this model is the application of scientific research and new knowledge to practices through provider education – often led by other providers or practice facilitators.† Based on the success of the agricultural model and promise in several states in implementing this model, the IMPACT initiative has as its goal to support, expand, evaluate, and disseminate primary care practice support efforts to transform and develop sustainable infrastructure for quality improvement in participating practices. The end result is that the models tested by these states could potentially serve

* The Agricultural Extension Service, also known as the Cooperative Extension System, is a nationwide, non-credit educational network present in each U.S. state and territory. These offices are staffed by experts who provide research-based information to agricultural producers and others in rural areas and communities. For more information visit: <http://www.csrees.usda.gov/Extension/>.

† As defined by AHRQ practice facilitation is a strategy that improves the primary health care processes and outcomes, including the delivery of wellness and preventive services. This is accomplished through the creation of an ongoing, trusting relationship between an external practice facilitator and the primary care practices with whom they work. Practice facilitation activities vary and can include helping practices achieve medical home recognition, or more general quality improvement and redesign efforts.

as an example for a national primary care extension service should Section 5405 become funded. This report focuses on the states that were selected as dissemination states for the North Carolina IMPaCT project.

THE NORTH CAROLINA MODEL

North Carolina's model for primary care redesign and ongoing improvement is nationally recognized as an example of aligned state-level multi-sector practice support. The success of North Carolina's practice transformation work has its origins in several initiatives and organizations that operate within the state: Community Care of North Carolina (CCNC), the North Carolina Area Health Education Centers (NC AHEC), and the North Carolina Improving Performance in Practice project (NC IPIP).⁴

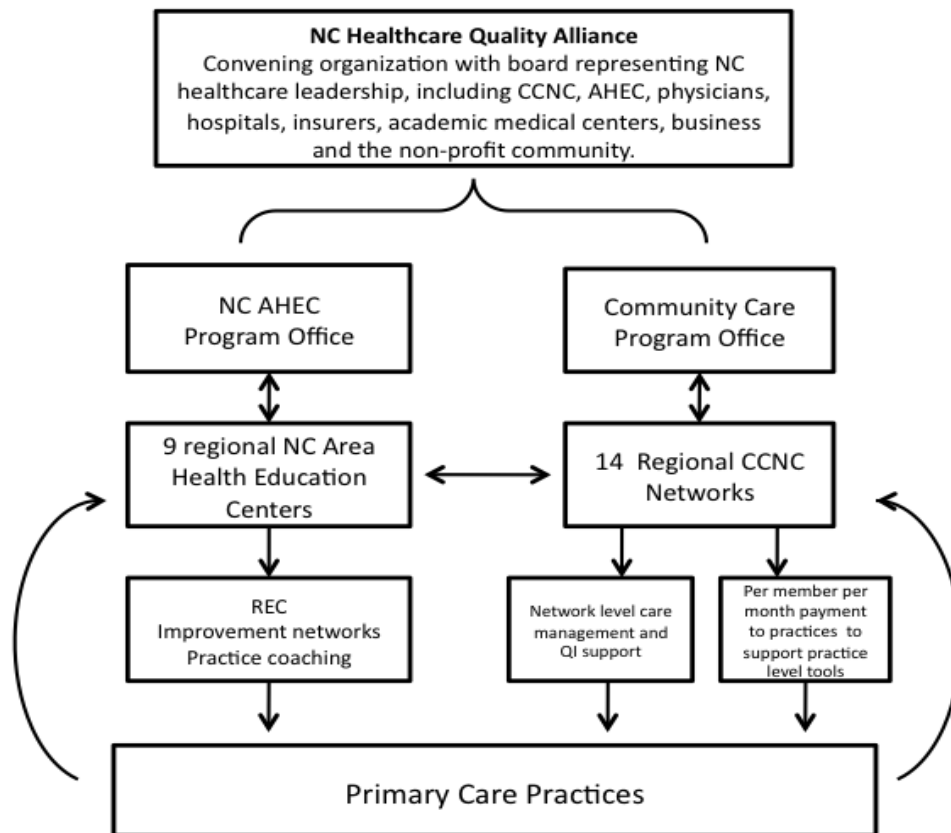
Many of North Carolina's practice improvement techniques can be traced back to its participation in IPIP. The goal of the NC IPIP project was to improve the quality of primary care in all primary-care practices across the state, and started by focusing on diabetes and asthma.⁵ The project used many strategies to affect change in individual practices that were taken from other quality-improvement initiatives; among these were: national measures, registries to provide information at the point of care, decision support tools, self-management support, protocols to standardize care, learning networks of practices and practice facilitators.⁶ The IPIP project provided a clear avenue to set up collaboration across several organizations in the state, including CCNC and NC AHEC.

Out of early collaborations around IPIP, North Carolina developed several tiers of practice support that primarily revolve around CCNC and the NC AHEC. The CCNC program has 14 distinct independent provider networks with 1,465 practices spread across the state. In terms of quality improvement, CCNC supports practices through the use of network Quality Improvement (QI) teams to employ the model of rapid cycle quality improvement developed by the Institute for Healthcare Improvement.⁷ The program has achieved Health Effectiveness Data and Information Set (HEDIS) scores that are in the top 10 percent nationally in several areas including diabetes, asthma, and heart disease. The program has achieved these scores while saving the state Medicaid program more than \$1 billion since 2003.⁸ North Carolina pays the CCNC networks a per member per month (PMPM) payment of \$13.72 for the aged, blind and disabled (ABD) population, and a \$3.72 PMPM for the non-ABD population. The networks use this payment to support participating practices to provide a medical home and participate in disease management and QI.⁹

The NC AHEC is the largest regional health profession network in the country and has a budget of more than \$200 million.¹⁰ It works with the state's four academic medical centers, universities, community colleges, and 20 primary care residency programs; it has trained 2,700 physicians during the past 25 years.¹¹ The NC AHEC has developed a large-scale practice facilitation and improvement network program and has implemented several projects that focus on performance improvement in primary care. It also serves as the Regional Extension Center (REC) in North Carolina, enhancing its importance as an agent of primary care transformation.

The North Carolina Healthcare Quality Alliance (NCHQA), a non-profit collaboration of leaders in the delivery of medical care across the state of North Carolina, helps coordinate these efforts, and was the focus of an earlier NASHP report.¹² Figure 1 below offers a graphic description of practice transformation activities in North Carolina and how the strategies and responsibilities flow across the different entities that provide support.¹³

Figure 1 – Overview of NC Primary Care Support Infrastructure



PRIMARY CARE TRANSFORMATION ACTIVITIES PROVIDED THROUGH NORTH CAROLINA'S INFRASTRUCTURE

The entities mentioned above that drive North Carolina's primary care transformation work provide a number of activities to support primary care. There are, however, four major categories that outline this work:

- **Practice Coaching and Facilitation.** The NC AHEC and CCNC offer practice facilitation on a number of topics including: performance improvement, advanced care planning, Meaningful Use, and Patient-Centered Medical Home recognition.^{*14,15}
- **Data and Informatics.** The Informatics Center is an electronic data exchange infrastructure that is managed by CCNC and maintained in connection with North Carolina's quality initiatives. The Informatics Center contains health care claims data provided by North Carolina Medicaid as well as health information about program participants obtained from health care providers, care managers, and/or the primary care medical record. The CCNC case managers use the Informatics

* Meaningful Use is a set of standards defined by the Centers for Medicare & Medicaid Services Incentive Program that governs the use of EHRs and allows eligible providers and hospitals to earn incentive payments by meeting specific criteria. For more information please visit: <http://www.healthit.gov/policy-researchers-implementers/meaningful-use>.

Center to perform the functions described above.¹⁶ Additionally, in its role as the REC, AHEC assists primary care practices in implementing Electronic Health Records (EHRs). The NC AHEC also teaches practices how to use data to meet requirements of other programs/initiatives, including pay for performance and maintenance of certification (MOC).¹⁷ These efforts are coordinated with CCNC networks.¹⁸

- **Payment Support.** North Carolina Medicaid and CCNC implemented an innovative payment structure, in which Medicaid provides CCNC practices and the regional CCNC Networks of practices and hospitals with per member per month (PMPM) payments to serve as medical homes and improve the quality of care provided to the Medicaid and ABD population.¹⁹
- **Care Coordination and Case Management.** The CCNC Networks provide population management support to practices, including customized reports, patient assessment and care planning, and medication management. The CCNC case managers are present in all 100 counties in the state.²⁰

THE NORTH CAROLINA IMPaCT STATE LEARNING COMMUNITY

The North Carolina IMPaCT State Learning Community consisted of Idaho, Maryland, Montana, and West Virginia. The four states were selected through a competitive application process designed to determine which states were best positioned to adapt North Carolina's model. The states attempting to adapt the other AHRQ-funded IMPaCT initiatives (New Mexico, Oklahoma, and Pennsylvania) were ineligible to apply.* In their applications states had to demonstrate:

- Commitment to advancing policy and practice changes to transform primary care practice for continuous quality improvement;
- Multi-sector, state-level collaboration among key stakeholders, including state agencies and private partners;
- Involvement of an entity that could or does serve as a primary care extension service in that state, such as an Area Health Education Center (AHEC); and
- Comprehensiveness of improvement strategy and the ability to maximize the impact of policy and practice changes.

The states in the Learning Community received individual and group technical assistance targeted to help implement a practice transformation initiative.²¹ This included participation in an in-person kick-off meeting and site visit to North Carolina to learn about the model and receive guidance from North Carolina faculty and experts. The states received support in the development of an implementation plan, peer-to-peer learning through a listserv and scheduled mentoring calls with North Carolina experts, webinars and conference calls on relevant topics, and individual check-in calls to identify technical assistance needs. The states also had opportunities to share lessons with one another via webcast.

STATE LEARNING COMMUNITY PROJECT GOALS

In their applications to join the North Carolina IMPaCT State Learning Community, states laid out their goals for achieving primary care transformation. Assisting practices in transformation to a PCMH model was featured prominently in the goals of the states. Several (Idaho, Montana, West Virginia) of the states proposed to engage rural practices, given the challenges that rural practices encounter in accessing needed supports. Each of the states reached out to new partners and stakeholders that could fill functions similar to the organizations operating in North Carolina, including AHECs, local health departments, RECs, and universities. Maryland and Montana also focused on data and informatics, including developing standardized quality metrics, helping practices implement EHRs, and connecting practices to state Health Information Exchanges (HIE).

CHALLENGES FACED BY THE LEARNING COMMUNITY STATES

First among challenges that Learning Community states faced was the fiscal environment: limited state budgets and a multitude of other initiatives related to health reform competed for staff support and other resources. The Learning Community states also experienced a number of other challenges more specific to the IMPaCT initiative itself that they needed to overcome to advance their projects. These included:

* The other IMPaCT Learning Communities include: New Mexico with Kansas, Kentucky and Oregon; Oklahoma with Arkansas, Colorado and Missouri; and Pennsylvania with New Jersey, New York and Vermont.

- **The changing environment since North Carolina developed its model.** The IMPaCT states received 18 months of technical assistance whereas the North Carolina model developed organically over more than 20 years. Additionally, much has changed since North Carolina began its work. North Carolina's model developed as a Medicaid model. The Learning Community states are all operating in a multi-payer environment, and when Montana joined the Learning Community their Medicaid program was not actively participating.

Health Information Technology (HIT) and HIE have also developed significantly since North Carolina began its transformation work. Both HIT and HIE are at the forefront of efforts to manage and coordinate care in many states, and while they present opportunities, they also complicate this work.

- **The rural environment in the Learning Community states.** Two of the Learning Community states (Montana and West Virginia) are among the most rural in the nation according to U.S. census data, and Idaho is not far behind.²² Many health care providers in these states are isolated and do not have access to community resources, and many also have limited patient volumes. North Carolina included rural practices within its statewide network system, which may be adaptable in Learning Community states.
- **Lack of knowledge about primary care extension by providers.** The field of primary care extension is still fairly new and many states have limited experience with shared resources across multiple unaffiliated practices. As a result, the Learning Community states noted there was a fair amount of provider skepticism, particularly around HIT and payment incentives. The states cited the need to engage primary care physicians (PCPs) about transformation in order to achieve the buy-in necessary to implement the changes. North Carolina has demonstrated success in overcoming similar challenges thanks largely to the presence of the NC AHEC and CCNC and strong statewide leadership that includes provider associations and organizations. Furthermore, none of the Learning Community states have organizations with the capacity to support practices to the extent that the NC AHEC or CCNC can.
- **Lack of resources for PCMH transformation.** As Learning Community states sought to advance PCMH as a part of their IMPaCT model, they found resources (infrastructure, staffing, money, etc.) needed to achieve PCMH transformation were scarce both on the state and provider levels.

Funding for this work, beyond support for the state team members to attend the North Carolina site visit, was not offered as part of the Learning Community. Several of the states pointed out that in the current fiscal environment it is hard for states to make effective policy and practice changes. Some participants noted that primary care extension programs might need to be funded nationally through CMS demonstration programs or through AHRQ.

- **Changing political environments.** Even though the project ran only for 18 months, many of the Learning Community states experienced significant changes in that time. West Virginia, for example, had three Secretaries of its Department of Health and Human Resources over the course of the project. Montana had a gubernatorial election during its project. Additionally, Montana's team, which focused on enacting legislation to support a medical home demonstration, had to contend with a state legislature that only meets bi-annually for approximately four months.

STATE STRATEGIES AND ACCOMPLISHMENTS

The Learning Community states tested a number of strategies to overcome the challenges described above. The states took different approaches to achieving their goals, but their projects shared similar strategies. Through careful implementation of these strategies the Learning Community states were able to initiate planning and meet several of the objectives and goals they outlined in their North Carolina IMPaCT applications. With the recognition that primary care infrastructure does not develop overnight, the states were able to identify opportunities to keep the momentum going by including this work in ongoing initiatives to ensure that their efforts will continue even after the IMPaCT project has ended. This section highlights the strategies the states used and their accomplishments* States:

- Partnered with key stakeholders.** Broad-based partnerships were one of the foremost strategies states used to advance primary care transformation. Any new or improved infrastructure will affect many stakeholders and aspects of the health care system, and as a result, states needed to engage a range of public and private partners in the planning process. The states also noted that in the current multi-payer environment, it is even more crucial to engage a variety of stakeholders. States engaged multiple state agencies (e.g. Human Services, Rural Health, Health and Welfare, Medicaid, Insurance Commissioners, Public Health), medical and primary care associations, universities and residency programs, community health centers, data repositories, private payers and more. The **Idaho** core team, for example, included members from the state Medicaid agency, the Idaho Hospital Association, the Idaho Medical Association, and the Idaho Primary Care Association. These team members were able to bring different perspectives and resources to the IMPaCT project. **West Virginia** in particular noted the importance of engaging new stakeholders in creating a white paper described below and in future success of the newly created West Virginia Health Care Innovation Initiative (WVHCII).

Maryland was able to build a strong partnership between the University of Maryland, which led the IMPaCT project, and state agencies by combining policy and practice-level knowledge and expertise. The University of Maryland reached out to practices one by one to build trust and create a safe space for practices to share among peers. According to Maryland, the NC AHEC model of practice facilitation and coaching was particularly valuable in this work.

- Shared lessons and collaborated with other states on best practices related to practice transformation.** The North Carolina IMPaCT State Learning Community states were able to learn from decades of work done by CCNC, NC AHEC, the North Carolina Department of Health and Human Services (including Medicaid and the Office of Rural Health), and many others in the state. The Learning Community states learned about innovations and best practices from North Carolina during a site visit to Chapel Hill, North Carolina. The states also identified topics of interest and benefitted from technical assistance from subject area experts in North Carolina, as well as from other IMPaCT states, including Oklahoma and Vermont. The Learning Community states were able to inform their work with the lessons from the other states.

In addition to learning from leaders on these issues, the Learning Community states also were able to learn from one another. The states noted that while it is important to learn from the leaders, it can be equally helpful to learn lessons from states that are confronting similar issues.

* Please note that much of the information in this section of the report comes from final reports submitted by the North Carolina IMPaCT State Learning Community teams to NASHP as well as conversations between NASHP and the teams.

- **Built on existing primary care and medical homes initiatives.** Each of the North Carolina IMPaCT State Learning Community states identified opportunities to build primary care transformation activities into existing initiatives and programs. For most of these states, the main avenue for building primary care transformation was to build on the momentum of existing or developing PCMH programs. As of April 2013, 43 states have adopted policies or programs to advance PCMH.²³ This momentum, combined with provider buy-in to the principles of PCMH as an approach to primary care that is patient-centered, comprehensive, coordinated, accessible, and committed to quality and safety, made it a natural fit as part of the IMPaCT project.²⁴ Practices also realize they need assistance to achieve this transformation, which created an opening for states to being practice facilitation and learning networks.

Maryland, for example, built off of the Maryland Learning Collaborative (MLC), which is funded through the Multi-Payer Program for Patient (MMPP) Centered Medical Homes.²⁵ To further enhance this initiative, the Maryland team trained practice transformation coaches to help practices meet National Committee for Quality Assurance (NCQA) standards to become certified as medical homes. **Montana** built off of similar efforts taking place in the state to help practices achieve NCQA certification. **West Virginia** built off an application for the Strong Start initiative, a national Pregnancy Medical Home Demonstration project. Even though West Virginia did not receive funding for Strong Start, the IMPaCT team was able to advance based on the plans and partnerships developed through the process. It is important to note, however, that while PCMH programs are a good place to start, achieving PCMH in and of itself is not an end to this work. Practices still need infrastructure that can provide ongoing support and shared resources as the delivery system evolves.

- **Identified and integrated public agencies into plans for a sustainable infrastructure.** Similar to North Carolina, many states sought to engage existing agencies or organizations to take on the role, or parts of the role, of the North Carolina AHEC or CCNC. These agencies included AHECs, local health departments, and public universities. **Montana** engaged its AHEC, which administers existing projects related to primary care transformation that the IMPaCT team was able to draw on. For example the AHEC is already providing training for Community Health Workers, and has applied to the Health Resources and Services Administration (HRSA) to train HIT professionals. Montana also partnered with its AHEC, the Montana Health Research and Education Foundation (MHREF), and Montana State University, to support a project that sends industrial engineering students supervised by faculty to implement LEAN processes in Critical Access Hospitals.* Additionally, residency programs in Montana have adopted the PCMH model of care in provision of services and graduate medical education. Finally, the Montana AHEC is planning a statewide care coordination workforce summit for Fall of 2013 to address training and workforce needs in the new health care environment.
- **Advanced practice facilitation.** **Maryland** trained two practice transformation facilitators using guidance from the NC AHEC; each full time facilitator can support approximately 15 practices at any one time. The Maryland team worked with each participating practice to identify a person who would be in charge of care management tasks. This person was a new hire in half of the practices and in the other half was an existing employee assigned to the task. The Maryland team used guidance from CCNC to develop its care manager description. These embedded care

* LEAN is a production practice that considers the expenditure of resources for any goal other than the creation of value for the end customer to be wasteful, and thus a target for elimination. It is increasingly considered a quality improvement tool for health care providers.

managers have become change agents within the program for all of the practices. Additionally, through a combination of academic detailing and practice facilitation, Maryland was able to have each of its 52 participating practices successfully receive NCQA tier 2 or 3 recognition as a PCMH.²⁶ The Maryland team added that after NCQA recognition, practices continue to need coaching and academic detailing to entrench transformation.

- **Engaged high-level state policy makers.** As a central part of its IMPaCT project, the **Montana** team introduced legislation to promote PCMH. The legislation contains provisions to allow multiple payers to share the costs of transforming a practice into PCMH without violating anti-trust laws, provides for state oversight of the PCMH program that maintains market-driven guidance, and provides broad rule making authority to the insurance commissioner to set standards for the program in consultation with a stakeholder council.²⁷ The IMPaCT team, with the help of its stakeholders, performed aggressive outreach to maximize the likelihood that the bill would pass. Montana undertook a major education campaign, reaching out to legislators, providers, interest groups, and both gubernatorial candidates. The education campaign included a five-part webinar series on PCMH as well as a one-page fact sheet about the legislation.²⁸ Montana considers its ability to raise awareness on the benefits of PCMH through this strategy that led to the passage of the legislation to be one of the biggest successes of their project.

Idaho, as part of its process in applying for a State Innovation Model Design Grant (see below), met and educated a number of stakeholders on its model. These stakeholders included major hospitals, health systems, state hospital association, medical associations, and the Idaho Legislature, as well as payers who had not previously been engaged. Idaho used information gleaned from the site visit in North Carolina to educate these groups on the North Carolina model and garnered support for development of an Idaho model.

The **West Virginia** team engaged high-level state policy makers and private sector stakeholders to articulate a shared vision of transformation through a white paper, *Building the Infrastructure for a Healthy and Prosperous West Virginia*. The white paper outlines a structure for creating an advisory team dedicated to better healthcare, better health outcomes, and lower costs through innovation. The paper also outlines the West Virginia Healthcare Innovation Initiative (WVHCII), which the state kicked off in May 2013 with its first round of stakeholder meetings.²⁹

- **Identified components of a quality data infrastructure.** Several of the North Carolina IMPaCT State Learning Community States explored partnerships with organizations that could serve as data hubs by synthesizing data from multiple sources and feeding information back to providers to support quality improvement. They explored partnerships with organizations that could train practices on how to use data and information technology to improve quality in practice. **Montana**, for example, partnered with a Quality Improvement Organization (QIO) to facilitate learning and action networks, and to bring practices together to share educational opportunities and best practices around patient-centered care and meaningful use of EHRs. Additionally, through its partnership with Blue Cross Blue Shield of Montana (BCBSMT), Montana supported practice transformation by setting up a technology platform that coordinates with the state HIE. Currently five of nine practices that have BCBSMT agreements have completed their contracts with HIE. Montana's PCMH council also recommended a set of quality metrics that practices must track

*"90/10 funding" refers to a 90 percent federal financial match available for design, development and implementation of state Medicaid IT systems, through 2015. For more information see: <http://www.medicaid.gov/State-Resource-Center/FAQ-Medicaid-and-CHIP-Affordable-Care-Act-ACA-Implementation/Downloads/Eligibility-and-Enrollment-Systems-FAQs.pdf>

to receive enhanced payments from insurers. **Maryland** likewise provided technical assistance to practices in adopting EHRs and assisted the practices in connecting to the state designated HIE. Each of the 52 participating practices adopted an EHR system, and 31 percent of practices are now participating on the state-designated HIE. Maryland also created a set of 21 metrics to measure performance.

- **Built IMPaCT projects into other initiatives to promote sustainability.** Each of the North Carolina IMPaCT State Learning Community states incorporated IMPaCT project workplans into new projects. Both **Maryland** and **Idaho** built their IMPaCT objectives into their State Innovation Model (SIM) Design applications.³⁰ In Maryland, several members of the IMPaCT team are also participating on the state SIM team; the Maryland Learning Collaborative and the Maryland Multi-Payer Program for Patient Centered Medical Home are both featured in the project.³¹ Maryland noted that SIM may be able to fund aspects of workforce training related to primary care transformation but it will not fund a primary care extension program. Identifying funding for a primary care extension program remains central to Maryland's planning.

Through SIM, Idaho seeks to further its IMPaCT goals through the Idaho Community Care Network (ICCN) model, which the state foresees will fill a role similar to CCNC in North Carolina. The ICCN will provide community-based, coordinated care with an emphasis on wellness and preventive care, and will emphasize disease management strategies for individuals with special health needs. Idaho has also identified four major areas that the model will address: 1) network development, 2) quality improvement, 3) information technology and data sharing, and 4) multi-payer models. The entire Idaho IMPaCT project team serves on the Integrated Delivery System Advisory Group, created through the SIM grant, and several members serve on other workgroups.³² Both Maryland and Idaho believe that inclusion of IMPaCT work in the SIM plan will ensure sustainability beyond the life of the project. Maryland added, however, that it is not yet clear how the SIM initiative will build upon the existing work.

- **Montana and West Virginia** built their IMPaCT vision into another project. Both states joined NASHP's Multi-Payer Medical Home Learning Collaborative: Building Primary Care Infrastructure through Public-Private Medical Home Pilots. This four-state learning collaborative is funded by The Commonwealth Fund to support states seeking to implement multi-payer medical home programs.³³ West Virginia's project is led by the Governor's office and Montana's is led by the Insurance Commissioner; both played important roles on the IMPaCT teams for their respective states.

CONCLUSION

In 18 months, the four North Carolina IMPaCT State Learning Community states attempted to adapt techniques pioneered by North Carolina over several decades. Despite many challenges to moving this work forward, each of the states made strides toward developing an infrastructure to promote primary care practice transformation.

The partnership with North Carolina was critical to each state's success. Having an identified model to adapt, and technical assistance in the form of an in-person meeting, calls and webinars with North Carolina experts across several aspects of the model enabled the states to form relationships with those experienced with the process. Participation by North Carolina state officials, primary care providers, NC AHEC and CCNC central and regional offices, NCHQA, and private payers enabled states in the Learning Community to understand both the visionary and the implementation aspects of the model. North Carolina experts offered general lessons and recommendations and also provided feedback to each state on aspects of its plan. The states found that learning about the different aspects of this work from multiple points of view gave a better sense of what each component of the system values in primary care practice transformation activities. The states also found CCNC's online toolkit, and resources on the NC AHEC site to be very helpful.³⁴

The Learning Community states have many lessons for other states seeking to advance primary care transformation in these areas. Although each state has its own emerging version of primary care transformation, there are common components that need to be included, such as network development, quality improvement support, data sharing and support, and payment models. Each of the states was able to build this work into ongoing initiatives to help ensure sustainability and continued progress toward a primary care extension system. The states discovered that while careful planning is important, it is equally important to identify areas to start implementing changes through pilot programs and other mechanisms. States must begin implementing transformation where they can, and use lessons to move the work forward as it evolves. For many states, implementation of PCMH may be that first step, but the PCMH model in and of itself is not an end to primary care transformation. Many of the states in the Learning Community focused on helping practices achieve PCMH recognition, but they continue to struggle with developing the sustainable infrastructure that can help practices continue to transform and make quality improvements as new advances are developed. These states leave the learning community at this stage. To view the next steps in this work for each of the states please refer to the appendices.

Overall the experience of the North Carolina IMPaCT State Learning Community states is valuable for other states in attempting this work. The diversity of the states involved and the variety of challenges faced – and overcome – by each offers many lessons and strategies. Other states can learn from the example of this Learning Community as they begin to build their own infrastructure for transforming primary care.

APPENDIX

APPENDIX A — PROFILES OF STATE PRIMARY CARE PRACTICE TRANSFORMATION INITIATIVES

IDAHO

Background

Idaho's plan to transform its primary care system began in 2007 when participants at a summit of health care leaders convened by Governor C.L. "Butch" Otter agreed there was a need to focus on patient-centered medical homes (PCMH). The Governor formed the Select Committee on Health Care, which generated a plan to support and expand the medical home model based on the Idaho Primary Care Association's (IPCA) experience in leading a practice transformation network for the Safety Net Medical Home Initiative. Idaho Medicaid also received a grant to execute the Children's Healthcare Improvement Project, aimed at linking the efforts of Idaho and Utah as they develop health data exchanges, a medical home portal, and pilot pediatric medical homes. In 2010, Idaho created the Idaho Medical Home Collaborative (IMHC) in an effort to align the state's various medical home initiatives and move toward a multi-payer medical home model. The IMHC developed a pilot to support up to 30 primary and community health centers as they transform into National Committee for Quality Assurance (NCQA) PCMH-recognized medical homes. Idaho Medicaid also established a functional primary medical care case management system called *Healthy Connections*. Finally, Idaho Medicaid received funding for a project team to aid the IMHC and for the implementation of the Health Home model defined in Section 2703 of the Affordable Care Act.

Building off the initiatives in place, Idaho joined the North Carolina IMPaCT State Learning Community to get training and technical assistance to develop the infrastructure needed to support its medical home practices. Idaho also wished to adapt key elements of North Carolina's successful continuous quality improvement system. Idaho aligned its objectives with CMS's three-part aim and sought to design a plan that would improve patient and provider experience, create a payment system that focused on value as opposed to volume, and decrease excessive spending.

Accomplishments

Idaho's key accomplishments during the IMPaCT initiative include:

- **Creating Strong Partnerships Aligned around a Common Goal.** Important partnerships have been formed with the North Idaho Health Network (NIHN), the Idaho Hospital Association, the Idaho Primary Care Association, the Idaho Medical Association, the Idaho Academy of Family Physicians, multiple health systems, and practitioners. Moreover the core public and private sector stakeholders leading Idaho's IMPaCT project have solidified their partnerships and now collaborate on broader transformation activities within the state.
- **Effectively Distilling Information Learned from North Carolina.** Idaho's site visit to North Carolina was a crucial learning experience during the IMPaCT project. Subsequently, Idaho made great strides in educating stakeholders throughout the state on the potential for health care transformation by sharing the successful aspects of the Community Care of North Carolina (CCNC) model and how those methods could be adapted to meet the needs of Idaho.
- **Building Capacity.** The foundation established through the NC IMPaCT Project has enabled Idaho to build the vision, capacity and momentum needed to transform its primary care system. Idaho has been awarded a State Innovations Model (SIM) design grant, which builds directly on

Idaho's plan to adapt North Carolina's model developed during the IMPaCT Project. As a result, Idaho will now be in a position to move forward on key considerations they need to address to develop the infrastructure necessary to implement real change in its health care system.

Next Steps

Idaho has the following plans to continue the advancement of its primary care practice transformation:

- **Participating in the SIM Initiative.** Idaho was awarded the SIM grant to create a State Healthcare Innovation Plan (SHIP). Idaho's SIM work will focus on four priority components: (1) network structures and integration with medical homes, (2) data interconnectivity and analysis (3) quality improvement systems, and (4) multi-payer reimbursement strategies. The project kick-off meeting for SIM took place in June 2013 with participation from a large and diverse group of stakeholders.
- **Looking Beyond SIM.** Once the SIM plan is developed, Idaho will continue to search for more grants and opportunities to implement and test the Idaho SHIP model. The essence of the Idaho SHIP model is primary care and health care delivery transformation.

MARYLAND Background

Prior to beginning work on the NC IMPaCT project, Maryland had several initiatives in place that focused on primary care practice transformation. In April 2010, Maryland passed the legislation necessary to launch its Patient Centered Medical Home (PCMH) Multi-Payer Pilot Program. The Maryland Health Care Commission (MHCC) established this Maryland Multi-payer PCMH Program (MMPP) in which the MHCC has the capacity to engage with the main commercial insurers in the state to create and employ a payment system. The MHCC also founded the Maryland Learning Collaborative (MLC), a multi-sector program designed to lead the advancement of Maryland's patient-centered primary care practices. The MLC plays a central role in this process by providing guidance and support to primary care practices that are becoming PCMHs through the MMPP.

In April 2011, the 53 primary care practices chosen to participate in the program began their transformation into PCMHs by working on meeting National Committee for Quality Assurance (NCQA) requirements. Building on the systems in place, Maryland's primary objective for the NC IMPaCT project was to incorporate more public agencies in the MMPP and ensure sustainability based on North Carolina's model. Similar to North Carolina, Maryland sought to include Area Health Education Centers (AHECs) and local health departments in its efforts. Maryland also aimed to engage practices in quality improvement measurement, such as the evaluation of clinical outcomes, patient experience data, finances, and access to care. Additional goals for Maryland included educating practices on utilizing Health Information Technology to enhance care, effectively managing high-need patients to reduce costs, integrating behavioral health and pharmacies into the PCMH, employing care managers to support high risk patients, and increasing primary care reimbursements for services.

Accomplishments

Maryland's key accomplishments during the IMPaCT initiative include:

- **Providing Support to Primary Care Practices.** With guidance from North Carolina AHEC and CCNC, the MLC has used an expert consultant to train two Practice Transformation Coaches who

provide logistical and educational support to primary care practices in the transformation process. They have also secured a care manager responsible for implementing the changes necessary for practices to become PCMHs in each of the pilot practices.

- **Sharing Data for Quality Improvement.** All of the practices participating in the MMPP have implemented an Electronic Health Record (EHR) system. Sixty-five percent of the practices also now participate in the State-Designated Health Information Exchange (HIE), and Maryland continues to encourage the use of the HIE's Encounter Notification System (ENS), which has the ability to feed practices real-time data about admissions, discharges and transfers.
- **Measuring Performance.** The MMPP utilizes a set of 21 metrics developed to measure performance of the practices. The results are shared with the practices and discussed during meetings of a quality improvement collaborative learning.
- **Implementing Care Improvement Strategies.** Approaches to facilitating organized care improvement include focusing attention on high-need patients, encouraging healthy lifestyle choices to prevent disease, creating care plans, integrating behavioral health into the PCMH, and using registries for population health.
- **Creating Strong Partnerships.**
 - Maryland created strong partnerships between state government and universities that effectively combined knowledge of policy and practice change to meet community needs.
 - Partnerships with hospitals and the Maryland Hospital Association have enabled Maryland to address transitions issues that are critical to successful medical homes.
 - Partnering with primary care providers has instilled a sense of ownership among the providers that has greatly encouraged their efforts.
 - Additional important partnerships have been formed with Million Hearts, MDQUIT (Tobacco Cessation Program), Medication Treatment Management, and the Patients, Pharmacists Partnerships (P3) Program. Partnership with these organizations has allowed participating practices to provide additional resources to patients in the areas of cardiovascular disease, tobacco usage, and medication management, thus expanding the capacities of Maryland's PCMHs.

Next Steps

Maryland has the following plans to continue the advancement of its primary care practice transformation.

- **Participating in the State Innovations Model (SIM) Initiative.** The MLC has been selected to participate on the Maryland SIM Design project to create a State Health Care Innovation Plan and will focus on the planning for a statewide Community Integrated Medical Home (CIMH) program from May to September 2013. The work for this project centers on developing roles and guidelines for community health workers.
- **Establishing a Program Office.** Depending on available resources for staffing, training, and data system management, Maryland would like to create a central program office to house the program and develop the kind of infrastructure needed to support primary care practices on an ongoing basis. Sustained funding support for practice transformation and for learning support is an aspirational goal.

MONTANA

Background

Montana began work on its primary care practice transformation in 2009 with a grant from NASHP awarded to Montana Medicaid to promote medical homes for Medicaid and CHIP participants. Montana Medicaid and NASHP convened a Medical Home Working Group that included a wide array of stakeholders. The group developed a definition for patient-centered medical home (PCMH) in Montana and in September 2011, the state chose members of the Medical Homes Working Group to participate in the Insurance Commissioner's Patient Centered Medical Home Advisory Council (PCMH-AC) and build a medical home model. The PCMH-AC was charged with learning about successful elements of other PCMH models across the country that it could adapt as part of its own plan to launch a medical home program. The PCMH-AC created a work plan and gathered input from primary care providers on PCMH. It also compiled recommendations for recognition standards, quality improvement metrics, and a payment structure. In addition to the PCMH-AC, prior to joining the NC IMPaCT project, Montana had several other key organizations working on implementing primary care practice transformation strategies including: Mountain-Pacific Quality Health (a Quality Improvement Organization) Montana Area Health Education Centers (MT AHEC), and community health centers (CHCs). The PCMH-AC also worked with HealthShare Montana, the state designated health information exchange, on promoting practice transformation.

Montana joined the North Carolina IMPaCT State Learning Community to enhance its primary care transformation efforts by learning from North Carolina's successful model. Specific objectives for Montana included: assisting practices to meet both NCQA and state standards for becoming a PCMH, using health information systems to stimulate quality improvement, promoting evidence-based care, using performance reporting to encourage accountability models for continuous quality improvement, and establishing payment incentives that encourage PCMH transformation.

Accomplishments

Montana's key accomplishments during the IMPaCT initiative include:

- **Forming Strong Partnerships.** The state has strengthened important partnerships, both among state agencies and with external partners including the Montana Primary Care Association (MPCA), HealthShare Montana (HSM), the PCMH-AC, Regional AHEC's, Parent's Let's Unite for Kids (PLUK), the Montana Health Research and Education Foundation, the Frontier Medicine Better Health Partnership, primary care practices, Mountain-Pacific Quality Health, and numerous other networks.
- **Promoting Awareness of PCMH.** Montana was very successful in promoting statewide awareness about PCMH. This is evident in the large number of organizations involved in its primary care practice transformation initiative, as well as the large stakeholder turnout during the legislative process. Montana developed a one-page fact sheet to provide key information about PCMH. The partnership was able to keep its message simple and straightforward to move the agenda forward.
- **Enacting PCMH Legislation.** Montana's PCMH legislation, Senate Bill 84, passed in April 2013 and removed major policy barriers to implementing the program. The law provides a "safe-harbor" from anti-trust restrictions that will encourage payers to participate in PCMH and allow multiple payers to share the costs of transforming a practice into PCMH. The law also provides

the insurance commissioner with broad rule-making authority to set standards for the PCMH program in consultation with a stakeholder council. This law positioned them to participate in another NASHP initiative, the Multi-Payer Medical Home Learning Collaborative.

Next Steps

Montana has the following plans to continue the advancement of its primary care practice support:

- **Promoting Widespread Adoption of PCMH Model.** Montana's PCMH legislation contains a sunset provision that the legislature will have the option to remove in 2017. Removal of this provision depends largely on Montana's success in transforming more primary practices into NCQA recognized PCMHs. Therefore, Montana is eager to get the program running and is currently completing a preliminary set of PCMH rules. The rules allow a patient-centered medical home to be provisionally qualified for up to one year after the submission of an application to the commissioner if it needs additional time to obtain accreditation or recognition from a nationally recognized accrediting organization approved by the commissioner.
- **Consolidating Primary Care Practice Transformation Efforts.** Montana has numerous primary care transformation initiatives taking place but currently lacks a central hub to align them. Montana plans to explore the centralized approaches taken by other states and then consider adapting these models to meet its unique needs and create a single entity that would be the driving force for primary care practice transformation efforts.

WEST VIRGINIA

Background

West Virginia's first large-scale efforts to transform primary care practice began in 2008 when the state's Legislature introduced the *Roadmap to Health Project* to improve West Virginia's poor population health rankings. As a result of this project, the West Virginia Legislature established the Governor's Office of Health Enhancement and Lifestyle Planning (GOHELP) to create and implement strategies that increase access, improve quality, and reduce costs of care. GOHELP developed four pilot programs to meet these goals: Chronic Care Model, Individual Medical Home, Community-Centered Medical Home, and Medical Homes for the Uninsured pilots. In addition to these pilot programs, West Virginia also had the following resources on which to draw: WV Connect (a program that provides free primary healthcare to working uninsured West Virginians), an extensive network of Federally Qualified Health Centers (FQHCs), the West Virginia Regional Health Information Extension Center (WVRHITEC), the WV Health Information Network (WVHIN), and the West Virginia Health Improvement Institute (WVHII).

Building off of the GOHELP program, West Virginia joined the NC IMPaCT project to transform primary care practice. Due to West Virginia's predominantly rural nature, a major objective for its transformation efforts was to develop community-based solutions to address the discrete problems of residents in rural areas. Another goal was to transition residents to using medical homes as their primary source of care in order to avoid the overuse of emergency room physicians and specialists. Finally, West Virginia sought to create a healthcare system that would more ably support people already diagnosed with chronic conditions, and also help prevent such conditions.

Accomplishments

West Virginia's key accomplishments during the IMPaCT initiative include:

- **Creating a Shared Vision.** West Virginia stakeholders developed *Building the Infrastructure for a Healthy*

and Prosperous West Virginia, a white paper developed to outline and share its design to improve health care. The paper touches on plans for performance measurement, care management, leadership development, and partnerships. The white paper has been shared with both the Governor and West Virginia Health Senate Committee.

- **Developing the West Virginia Health Care Innovation Initiative (WVHCII).** The WVHCII will bring together the necessary stakeholders to develop and implement a plan to improve West Virginia's health care system. It will be the driving force in West Virginia's primary care practice transformation.
- **Forming a Quality Review Team.** This team is comprised of the Medical Directors from the Managed Care Organizations (MCOs) that support West Virginia's Medicaid population. The Quality Review team reviews data and identifies potential areas for quality improvement. This team will be essential to West Virginia's quality improvement efforts when the state enrolls all new Medicaid recipients from its Medicaid expansion into managed care programs in 2014.
- **Building Strong Partnerships and Cohesive Teams.** West Virginia's IMPaCT initiative began primarily as a state government interagency core team and added private sector representation as it grew. The benefit of this approach, according to the state, is a strong interagency approach that crosses multiple initiatives and issues. The team recognizes the long-term nature of this effort and believes the infrastructure and passion for primary care support exists. Important partnerships have been strengthened with health care practitioners, local health departments, MCO officials, and medical school leaders around this issue. West Virginia also developed partnerships with OB/GYNs in an array of practices as part of its application for Strong Start, a Pregnancy Medical Home Program.

Next Steps

West Virginia has the following plans to continue the advancement of its primary care practice transformation:

- **Developing Care Teams.** A crucial next step for West Virginia's primary care transformation will be the development of a care team structure through WVHCII. West Virginia also hopes that these care teams can be integrated into networks to support rural practitioners.
- **Adopting a Medical Informatics System.** West Virginia would like to begin using a data collection system with a standardized platform that providers and care managers could access in order to share real-time data on patients.

ENDNOTES

- 1 Institute for Healthcare Improvement, “[The IHI Triple AIM](#).” Retrieved August 10, 2013.
- 2 Agency for Healthcare Research and Quality (AHRQ), “[IMPaCT \(Infrastructure for Maintaining Primary Care Transformation\)](#).” Retrieved June 4, 2013.
- 3 H.R. 3590, 111th Congress. (2010). “[Patient Protection and Affordable Care Act](#),” Section 5405.
- 4 Larry Hinkle and Jill Rosenthal, *The North Carolina Healthcare Quality Alliance: Lessons in Aligning Quality Improvement Strategies Statewide*. (Portland, ME: National Academy for State Health Policy, June 2012) p. 2. Available: <http://nashp.org/publication/north-carolina-healthcare-quality-alliance-lessons-aligning-quality-improvement>.
- 5 Newton WP, Lefebvre A, Donahue KE, Bacon T, Dobson LA, Jr, “Infrastructure for Large-Scale Quality-Improvement Projects: Early Lessons From North Carolina Improving Performance in Practice.” *Journal of Continuing Education in the Health Professions*, (2010) 30(2): 106–113, 106.
- 6 *Ibid*.
- 7 CCNC, “Improvement Process.” Available: <https://www.communitycarenc.org/quality-improvement/improvement-process/>. Retrieved June 7, 2013.
- 8 Community Care of North Carolina (CCNC), “Community Care Highlights and Facts.” 2010. Available: <http://www.ncafp.com/files/CCNCHighlights.pdf>. Retrieved June 7, 2013.
- 9 National Academy for State Health Policy, “Medical Home & Patient-Centered Care: [North Carolina](#) page.” Retrieved July 8, 2013.
- 10 Hinkle and Rosenthal, *The North Carolina Healthcare Alliance*, p. 3.
- 11 North Carolina Health Education Centers, “North Carolina Regional Extension Center Project Narrative.” Available: <http://www.ncdhhs.gov/healthit/regionalextension/>. Accessed June 28, 2013.
- 12 Larry Hinkle and Jill Rosenthal, *The North Carolina Healthcare Quality Alliance: Lessons in Aligning Quality Improvement Strategies Statewide*. (Portland, ME: National Academy for State Health Policy, June 2012). Available: <http://nashp.org/publication/north-carolina-healthcare-quality-alliance-lessons-aligning-quality-improvement>.
- 13 Darren DeWalt, “Setting the Context: North Carolina’s Primary Care Transformation Model.” Presented at *State Practice Transformation Learning Community: Adapting the North Carolina Model*. National Academy for State Health Policy, Chapel Hill, North Carolina, April 24, 2012.
- 14 North Carolina AHEC, “[Course Catalog](#),” Accessed July 2, 2013.
- 15 CCNC, “CCNC PCMH Resource Center,” Available: <https://www.communitycarenc.org/emerging-initiatives/pcmh-central1/>. Retrieved July 15, 2013.
- 16 Community Care of North Carolina, “[Truth in Numbers](#),” Accessed July 2, 2013.

-
- 17 Laura Brown, "Data-driven Improvement: NC AHEC Practice Support Program." Presented at *State Practice Transformation Learning Community: Adapting the North Carolina Model*. National Academy for State Health Policy, Chapel Hill, North Carolina, April 24, 2012.
 - 18 North Carolina IMPaCT Grant Proposal, "Introduction and Background," pg. 2.
 - 19 National Academy for State Health Policy, "Medical Home & Patient-Centered Care: [North Carolina](#) page." Retrieved July 8, 2013.
 - 20 Community Care of North Carolina, "[Care Management](#)." Accessed July 2, 2013.
 - 21 To view the project kick-off webinar, "State Support for Primary Care Practice Transformation: Replication of the North Carolina Model," describing the project and the technical assistance that was offered to states please visit: <http://www.nashp.org/webinar/state-support-primary-care-practice-transformation-replication-north-carolina-model>.
 - 22 United States Census Bureau, "[2010 Census Urban and Rural Classification and Urban Area Criteria](#)." Retrieved July 11, 2013.
 - 23 National Academy for State Health Policy, "[Medical Home & Patient Centered Care](#)." Retrieved July 15, 2013.
 - 24 Patient-Centered Primary Care Collaborative, "[Defining the Medical Home](#)." Retrieved July 15, 2013.
 - 25 For more information about Maryland's Multi-Payer Program for Patient Centered Medical Homes please visit: <http://dhmh.maryland.gov/innovations/SitePages/md-multipayer-patient-centered.aspx>.
 - 26 For more information about NCQA certification for PCMH please visit: <http://www.ncqa.org/Programs/Recognition/PatientCenteredMedicalHomePCMH.aspx>.
 - 27 For more information about the Montana Patient-Centered Medical Homes Program, and to review the legislation, please visit: <http://www.csi.mt.gov/medicalhomes/index.asp>.
 - 28 Montana Insurance Commission, "[Patient-Centered Medical Homes: SB 84 – Health Care that Puts the Patient First](#)." Retrieved July 8, 2013.
 - 29 West Virginia Department of Health and Human Resources, "[Building the Infrastructure for a Healthy and Prosperous West Virginia](#)." November, 2012.
 - 30 For more information about the State Innovation Model Design Awards please visit: <http://innovation.cms.gov/initiatives/State-Innovations-Model-Design/index.html>. Retrieved July 9, 2013.
 - 31 Maryland Department of Health and Mental Hygiene, "[Maryland SIM Design Project Narrative](#)." Retrieved July 9, 2013.
 - 32 Idaho Department of Health and Welfare, "[Idaho Comprehensive Health Care Innovation Plan Design Strategy](#)." Retrieved July 9, 2013.

33 For more information about the Multi-Payer Medical Home Collaborative please visit: <http://nashp.org/med-home-map>. For information specific to West Virginia's medical home work please visit: <http://nashp.org/med-home-states/west-virginia>. For information specific to Montana's medical home work please visit: <http://nashp.org/med-home-states/montana>.

34 To view the CCNC Toolkit please visit: <https://www.communitycarenc.org/population-management/care-management/toolkit/>. To view the NC AHEC site please visit: <http://www.med.unc.edu/ahec/>.