The Rural Health Landscape: Navigating an Enhanced Model for Maryland’s Mid-Shore Region

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This is one of six Technical Reports prepared for the Maryland Health Care Commission by the University of Maryland School of Public Health and the Walsh Center for Rural Health Analysis at NORC at the University of Chicago as part of their study, entitled Health Matters: Navigating an Enhanced Rural Health Model for Maryland, Lessons Learned from the Mid-Shore Counties.
Introduction

In accordance with SB 707, this study examines the challenges to the delivery of health care in the five-county Mid-Shore region including: the availability of health care providers and services; the unique needs of vulnerable populations; transportation considerations; and, the economic impact of the closure, partial closure, or conversion of a health care facility. Our team was charged with taking the input gained through the workgroup, the advisory groups, the public hearings and focus groups to identify options for restructuring the delivery of health care services. This Technical Report presents some potential models for addressing the health care needs of residents and improving the health care delivery system in the five-county Mid-Shore region comprised of Caroline, Dorchester, Kent, Queen Anne’s and Talbot counties.

This report outlines the national rural health environment, introduces some state-based strategies for addressing access to rural health and models for community-based rural engagement and identifies some potential options for the Mid-Shore region with potential applicability to other rural Maryland communities. Together, these options provide a framework for the Mid-Shore and other rural Maryland areas as the state moves forward with new policy initiatives.

National Rural Health Environment and Issues

Rural communities across the U.S. face unique health challenges that require thoughtful, coordinated solutions. As such, it is important to understand the national rural health landscape as well as the issues impacting Maryland specifically. Many of the challenges identified in this report are representative of the Mid-Shore and other rural Maryland areas; state and national models may provide a path forward to identify potential solutions for Maryland.

RURAL HEALTH DISPARITIES

Overall, rural Americans face significant health disparities that accentuate the need for quality health care. These health disparities are due to myriad social factors or social determinants. Rural Americans are more likely to live in poverty than residents of metropolitan areas, and experience barriers related to transportation, isolation, access to healthy foods and education.\(^1\) Of the 353 persistently poor counties in the United States, more than 85% are non-metro counties.\(^2\) In 2015, an estimated 17.2% of non-metro residents lived in poverty, compared to 14.3% of metro residents.\(^3\) In addition, rural Americans face many inequities that influence their health status. For example, rural residents may encounter barriers accessing affordable housing, transportation, and healthy foods—all barriers most often linked to inadequate financial resources. As such, personal or family income is strongly related to most indicators of health status, health care access and use, and health-related behaviors.\(^4\)

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\(^1\) [https://www.ruralhealthinfo.org/topics/social-determinants-of-health](https://www.ruralhealthinfo.org/topics/social-determinants-of-health)


\(^4\) National Center for Health Statistics, 2012
Rural Americans also die at a faster rate than their urban counterparts. The annual rural mortality rate in the United States has declined at a slower pace than in urban areas, increasing the gap and disparity faced by rural populations. Compared to urban Americans, rural Americans experience a greater risk of death from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke; thus, rural Americans have shorter life expectancies. Individuals living in rural areas are also more likely to exhibit behaviors that contribute to the burden of chronic disease. For example, adults living in nonmetropolitan counties are more likely to smoke, be overweight or obese, and not meet aerobic leisure time physical activity recommendations, which are significant risks factors for chronic disease. The rural population is also older on average than the urban population, which contributes to the high prevalence of chronic health conditions.

Rural populations also have unmet mental health and substance use disorder needs. The current opioid epidemic disproportionately impacts rural communities with the highest mortality rates for drug overdoses in rural counties. Additionally, among the population 65 years and older, the proportion of emergency department (ED) visits related to mental health or substance abuse is higher in rural communities than urban communities. In isolated, small rural communities, over one-quarter of ED visits among the elderly population are mental health or substance abuse related. These factors all influence the need for accessible health care services given the population in rural areas is sicker and poorer than urban populations.

ACCESS TO CARE

Access to health care is also a challenge in some rural communities, particularly related to receiving adequate hospital care. Between January 2010 and July 2017, 81 rural hospitals closed, which meant the end of local acute inpatient care for those rural communities. Rural hospitals are vulnerable to closure due to negative financial margins coupled with added resource costs, such as implementing electronic health records (EHRs) and care coordination programs that are required for successful transformation to a value-based payment system. While some of these facilities continue to offer emergency services, many do not. Further, hospital closures have also led to a loss of primary care physicians as these providers typically want to practice in communities with hospitals, which limits access for rural residents and requires them to travel greater distances for primary care. These losses have a cascading effect. When primary care providers are lost, other essential rural health professionals, such as rural pharmacists, also leave. The loss of a hospital can create a downward spiral for a rural community affecting not only health care services, but also the broader local economy.

Rural hospital closures are not a new phenomenon. Between 1980 and 1998, there was an 11.8% decrease in the total number of community short-term general hospitals due to closings, mergers, and conversions—many located in rural communities. To explore alternative small, rural hospital structures

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6 Todd et al. 2013
and reimbursement models, demonstrations including the Medical Assistance Facility (MAF) and the Rural Primary Care Hospital (RPCH) were enacted. The Balanced Budget Act of 1997 combined the MAF and RPCH programs to create the Critical Access Hospital (CAH), which provides 101% cost-based reimbursement to CAHs. However, cuts to federal reimbursement coupled with increasing accounts receivables for people who are unable to pay for health care, such as the uninsured, have exacerbated fragile financial margins. Opportunities to implement alternative payment and delivery models, such as accountable care organizations (ACOs) and global budgets, may provide a path forward for some rural providers to continue meeting the health care needs of their communities.

WORKFORCE SHORTAGES

Federal and state programs have been implemented to help rural communities address rural health care workforce gaps. In 2013, there were 68 primary care physicians per 100,000 residents in rural areas, compared to 80 per 100,000 in urban areas. Physicians are often difficult to recruit and retain in rural communities because they feel isolated from colleagues or feel pressure to work beyond their capacities, while some rural communities have limited opportunities for their spouses and children. To address the shortage of rural physicians, there are federal programs to incentivize rural practice. The J-1 Visa Waiver program waives the two-year home residency requirement for international medical graduates and allows a physician to stay in the country to practice in a federally designated Health Professional Shortage Area) or Medically Underserved Area (, and federal loan repayment programs enhances rural communities’ ability to recruit physicians. In addition, at the state level, scope of practice policy changes (e.g., nurse practitioners and physician assistants are allowed to practice autonomously) and loan forgiveness programs have been implemented to support the recruitment and retention of rural providers. Yet, even with these programs, many rural communities continue to struggle to maintain a consistent healthcare workforce.

Rural Health Models: Options for Consideration

As mentioned earlier, rural communities across the U.S. face unique health challenges that require thoughtful, coordinated solutions. This section of the report introduces some state-based strategies for addressing access to rural health and models for community-based rural engagement and identifies some potential options for the Mid-Shore region with potential applicability to other rural Maryland communities.

HEALTH CARE SYSTEM SHIFT FROM VOLUME TO VALUE

New payment and delivery models, such as Maryland's Total Cost of Care Model, are focused on bending the cost curve, improving quality of care, and enhancing population health through a shift from a volume-based system to a value-based system. This shift is achieved through alternative delivery and reimbursement models that require health care organizations and systems to manage the health of the

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7 Ricketts 2000
8 American Academy of Family Physicians, 2013
9 Stamm, 2006
patients they serve while containing costs. These models are based on an increased focus on population health as well as a shift toward outpatient care and a focus on primary care and prevention.

MARYLAND RURAL OPTION CONSIDERATIONS

Given the all-payer history of Maryland, many of the rural payment models are not applicable to Maryland. Historically, despite its alignment with the national trend to shift from volume to value, Maryland has not participated in these national models due to its longstanding all-payer rate system and the recent establishment of global budgets under the New All-Payer Model. Maryland is now focused on aligning its all-payer system with the Maryland Primary Care Program. Under this model, care management will be embedded, where possible, with additional regional care coordination resources. An aligned and consistent set of quality outcome metrics also will be developed and, through efficient and robust data exchange, providers will receive enhanced real-time feedback. It is important to note that some of the existing regulations set forth by the MHCC and HSCRC place some restrictions on possible innovations. Innovations must occur within the parameters of global budget revenue methodologies and the specifications of the type and location of acute care services. As such, Maryland’s unique reimbursement system poses some distinct challenges and opportunities in the development of option models. The following sections describe what options may look like in the Mid-Shore region and other rural Maryland communities as well as some considerations for implementation based on the lessons learned from other communities.

GLOBAL BUDGET INITIATIVES AS A SOLUTION FOR RURAL HEALTH

Although Maryland has led the implementation of a global budget, Pennsylvania and Vermont are adopting global budget initiatives to help address rural health issues. Global budgets that include a shared savings component have been used by states to stabilize financial variability, inherent in paying for care based on volume, and to define care quality metrics. Global budgets provide hospitals with a predictable level of revenue with an incentive to operate more efficiently while reducing health care expenditures. In addition to containing costs, global budgets are effective in incentivizing a reduction in the number of admissions because “the volume of admissions is an important approach to reducing hospitals’ variable costs.” As identified through the qualitative data collected in this study, access to hospital care is a concern in some rural Mid-Shore communities, particularly those rural hospitals that are vulnerable to closure due to declining revenue. Similar to Maryland, Pennsylvania and Vermont have pursued state-based initiatives in recent years through a mix of legislative efforts and federal funding. The experiences of these states can provide some additional lessons to consider in option development for Maryland and the Mid-Shore, particularly as Maryland moves to the next phase of global budget implementation.

10 Ibid.
Alignment of Financial Models with Rural Limitations in Pennsylvania

Pennsylvania’s global budget focuses solely on rural hospitals and was developed specifically to address the financial viability of rural hospitals. Pennsylvania focuses specifically on rural hospitals due to the additional challenges that these hospitals face, such as “licensing barriers, outdated regulatory requirements, and other matters that impede their long-term sustainability.”30 In addition to financial challenges, these hospitals are often the sole providers of care for the communities that surround them—rural residents are dependent on their services. By focusing on population health initiatives, such as telehealth interventions, a population health dashboard, and the prescription drug monitoring program (PDMP), Pennsylvania expects to improve the quality of care and health outcomes of populations in rural areas, to redesign the delivery of rural health care throughout the state, and to reduce overall health care costs. Although the Pennsylvania global budget model was approved by CMS in January 2017, the implementation is delayed until July 2018. (Additional Background on Pennsylvania’s Model is in Appendix 1).

Integration of ACOs in Vermont’s Model

In Vermont, the state has integrated its accountable care organization (ACO) provider network into its global budget model. In 2014, Vermont implemented its Shared Savings Program (SSP) with Medicaid and the commercial insurance markets. Under the SSP, the ACO provider network is tracked using metrics, such as quality of care and total cost, and, in return, receives a portion of the accrued savings. Vermont expects to move away from fee-for-service payments to delink quality of care from cost, particularly for inpatient and outpatient services. Over the five-year agreement, Vermont is committed to capping its annual average net health care spending increase at 4.3%. (Additional Background on Vermont’s Model is in Appendix 2).

RURAL COMMUNITY MODELS

In addition to statewide initiatives, some rural communities have implemented specific programs to support the shift from volume to value to increase rural provider engagement in value-based models. These models have been developed in response to community needs and have placed a focus on the population and individual to improve the health and well-being of the communities. These models align with work group discussions and qualitative data findings.

Community-Based Coalition Model

Another option for integration of services and improved care coordination and population health is the formation of a coalition that comes together to identify priorities and implement evidence-based interventions, which are driven by data and measured over time using concrete benchmarks. A rural health coalition is “a general term that refers to a collaboration between diverse organizations or constituencies that agree to work on a specified action-oriented opportunity, typically at the policy, system, and environmental level.”11 As seen in rural communities across the country, these coalitions

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11 https://www.ruralhealthinfo.org/community-health/networks/1/definition
bring together different community partners, health providers and services in a unified group working to a common goal. The following two coalitions strive to improve the health of the communities they serve and provide valuable lessons and elements that can be adopted by or adapted to the Mid-Shore region.

**Rural Model Example: Healthy Monadnock**

Based in the Monadnock region of New Hampshire, Healthy Monadnock is “a community-engaged engagement initiative” that seeks to make that region “the healthiest community in the nation.” The coalition is comprised of 11 community partners including schools, community and service organizations, healthcare, local government, non-profit organizations and local coalitions addressing the food system, the built environment and transportation. These individual and partner champions serve as the backbone of the program and are key players in its success. Together, these different champions work to “create a culture of health and improve the quality of life for everyone in the Monadnock region.”

Through policy and environmental changes, Healthy Monadnock aims to improve the health of the community through evidence-based prevention strategies and policy changes. Twenty-six key evidence-based strategies under four themes – health behaviors, healthcare access/quality, socioeconomic/environmental factors and social capital – were selected by the community in 2011 and 2013. A coalition, such as Healthy Monadnock, demonstrates how a community addressed specific challenges and needs and developed a program targeted at improving its health and well-being. The program’s success and progress indicate how community partnerships can be powerful ways to improve health outcomes.

**Rural Model Example: North Country Healthcare**

North Country Healthcare consists of four affiliated New Hampshire hospitals: Androscoggin Valley Hospital, Littleton Regional Healthcare, Upper Connecticut Valley Hospital and Weeks Medical Center. This network of hospitals is working together to “improve quality, increase efficiencies and lower the cost of health care delivery in the North Country.” The aim of North Country Healthcare is to build a collaborative network which focuses on improving the quality of care and sustainability as well as maintaining access to high-quality, affordable health care.

North County Healthcare is an example of a hospital-based coalition model in which several competing hospitals came together to improve the collective health of their patients. Although in different health systems, the collective effort of the hospitals to improve population health led to a stronger result than the efforts of the individual hospitals. Elements of the model could potentially be used on the Mid-Shore and other rural Maryland communities to address the changing health care market and market pressures.

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**Patient-Centered Medical Neighborhoods**

Traditionally, health care has been provided in a fragmented manner with patients typically interacting with several systems of clinicians and networks. This fragmentation has led to added pressure on patients and caregivers to navigate many competing systems. In addition, many patients do not understand the linkages between the different clinical centers let alone the connection between clinical centers and other social services and community-based resources.

To bridge this disconnect, the patient-centered medical neighborhoods concept was developed to expand upon the concept of patient-centered medical homes (PCMHs). Although effective, PCMHs individually can only do certain tasks given their position within the primary care setting. The patient-centered medical neighborhoods (PCMNs) are a clinical-community partnership that expand the PCMH model to include the medical and social supports necessary to enhance health. The PCMH serves as the patient’s primary “hub” and coordinator of health care delivery with other “neighbors” supporting its goals.\(^\text{15}\) Within the model, community entities work to collaborate with “medical neighbors” to help promote cross-collaboration between both clinical and non-clinical partners. The model “focuses on meeting the needs of the individual patient, but also incorporates aspects of population health and overall community health needs.”\(^\text{16}\) Together, the community, clinicians and patients come together to “promote care coordination, fitness, healthy behaviors, proper nutrition, as well as healthy environments and workplaces.”\(^\text{17}\)

**Rural Model Example: North Dakota and the Patient-Centered Medical Neighborhood**

Sakakawea Medical Center, a 25-bed critical access hospital and 24-bed licensed basic care facility, is located in Hazen, North Dakota.\(^\text{18}\) The Coal County Community Health Center, a Federally Qualified Health Center (FQHC), is based in Beulah, North Dakota. Together, these two facilities have come together under a shared chief executive officer to provide coordinated services to the larger community through a patient-centered medical neighborhood model. The shared vision of the two organizations is to work “together as partners to enhance the lives of area residents by providing a neighborhood of patient-centered healthcare services that promote wellness, prevention, and care coordination.”\(^\text{19}\)

For these communities, this collaborative framework has led to a joint community health needs assessment, which involves agencies and organizations outside of these two organizations. The community health needs assessment reflected the larger community goals and the results, in turn, were used to develop a comprehensive strategic plan that holds all organizations accountable. This collaborative approach has led to improved outcomes for the patients and organizations.

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\(^{15}\) Patient-Centered Primary Care Collaborative --https://www.pcpcc.org/content/medical-neighborhood

\(^{16}\) AHRQ

\(^{17}\) Patient-Centered Primary Care Collaborative --https://www.pcpcc.org/content/medical-neighborhood

\(^{18}\) https://ruralhealth.und.edu/projects/flex/cahprofiles/hazen.pdf

\(^{19}\) Interview with Darrold Bertsch CEO of Sakakawea Medical Center (CAH) and Coal Country Community Health Center (FQHC), Hazen and Beulah, North Dakota
ELEMENTS FOR A MARYLAND RURAL PATIENT-CENTER “HEALTH” NEIGHBORHOOD

Increased public awareness and understanding of the intersection of health, social, economic and other environmental factors, similar to the communities described above, have led to an increased public interest in health integration and collaboration with a broader set of partners to address health on the Mid-Shore. In order to work towards better collaboration, Mid-Shore residents may benefit from implementing a Patient-Centered Health Neighborhood (PCHN) model (slightly changing the common name to focus on a “health” neighborhood rather than a “medical” neighborhood to recognize a comprehensive strategy that addresses health) in which they would receive ambulatory care at a “one-stop shop” close to their homes and places of employment. The one-stop health and social services entity—the PCHN—would address most ambulatory health needs and integrate primary care, behavioral health services, oral health, public health and social services with a focus on population health. The scope and size of the PCHN would vary depending upon location and resources. The PCHN model has the potential for improving patient outcomes, decreasing health care costs and improving patient satisfaction.

The rural PCHN would serve as the epicenter of health care delivery on the Mid-Shore with a patient-centered technical support hub providing the technological components necessary to integrate and coordinate care, and track progress. The PCHN would provide a solution to the challenges surrounding access to primary care, specialists, emergency services and hospital care as well as address provider shortages and potentially reduce distance from residents to their providers. As Maryland seeks new solutions for containing the total cost of care and for implementing changes in the health care delivery system, this PCHN model would support clinicians delivering care to their patients in new ways.

The PCHN in the Mid-Shore region could be comprised of the following components:

Healthcare and Other Services: The rural PCHN would address access to primary care, ensuring that it is available and accessible when needed by the Mid-Shore residents. A community’s main PCHN facility could be a standalone physical location or, in some instances, may be co-located in a nursing home, EMS facility or a school. The auxiliary community services would work with the main facility to create the “neighborhood.”

Similarly, when primary care is not available, prevention and management of chronic diseases could be emphasized through a holistic community approach. For example, the Mid-Shore PCHN may consider implementing school-based health care programs to improve overall population health when primary care services are evenly distributed throughout the region.

Technology: One of Maryland’s greatest assets is the Chesapeake Regional Information System for Patients (CRISP), the state health information exchange (HIE), which is central to the implementation of any new models in the Mid-Shore region and other rural Maryland communities. The patient-centered support hub would serve as the convener between the PCHN health care providers and may also support other key community stakeholders (e.g., social services and community-based resources) to share pertinent health data. For example, when social services or law enforcement come into contact with county residents, these entities would be able to triage care. A data model that supports this level
of integration is the Data Across Sectors for Health (DASH) program, which is funded by the Robert Wood Johnson Foundation. Through its 10 grantees, DASH has supported “projects that improve health through multisector data sharing collaborations.” These cross-sector projects could serve as examples for integrating data from various sources. Many of the DASH programs merge existing data sets from various sectors to provide a more comprehensive view of residents’ conditions.

**Economic Development:** The PCHN model is already being considered by some of the counties in the Mid-Shore. For example, in Caroline County a new center is slated to open in 2018 which will be a “hub of primary care, diagnostic lab and imaging services, suites for specialist rotation and telemedicine visits, outpatient rehabilitation services, community education and support groups and outpatient behavioral health services.” The plan is for this medical pavilion to serve as a hub for a cluster of related social services and health providers in the future.

**Workforce:** As recommended by study participants, the PCHN must be built upon a strong primary care foundation. This network of primary care providers would need to be integrated electronically as well as operationally. PCPs must be able to share records and best practices to enhance and strengthen care coordination, and improve patient outcomes.

To increase access to providers, recommendations include increasing the utilization of mid-level providers, such as nurse practitioners and physician assistants, adding community health workers to the care team, and adding new primary care sites to meet community needs. In order to accomplish this workforce expansion, the PCHN may consider additional incentives by expanding local training programs to recruit additional providers. One such model is the Rural Opportunities in Medical Education program at the University of North Dakota School of Medicine and Health Sciences in which third-year medical students live and train in rural communities under the supervision of physician preceptors. Similar rural programs with rural rotations for primary care and allied health care students offer opportunities to experience a rural practice environment.

Another workforce enhancement example, Project ECHO, was developed in New Mexico to bridge workforce shortages, particularly for specialty care. The program is comprised of “hub-and-spoke knowledge-sharing networks, led by expert teams, who use multi-point videoconferencing to conduct virtual clinics with community providers.” Project ECHO trains primary care clinicians to provide some specialty care services to solve the shortage of specialists in rural and underserved communities. Primary care physicians serve as the spokes in the model and are guided by specialists at an academic hub. The goal of this model is to treat some of health care’s most intractable problems through enhanced workforce capacity. The PCHN may consider incorporating components of Project ECHO to enhance access to specialty care.

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Transportation: Currently, Mid-Shore residents often travel to receive care and rely primarily on their own transportation or rides from family and friends. To address transportation barriers, the PCHN could include transportation services, either through using its own drivers and vehicles or through an arrangement with a vendor. As noted previously, reinforcing the partnerships between the PCHN and other community partners will improve the coordination of medical transit and help to streamline existing community programs such as the Veterans’ Health Administration bus, County Ride and Partners in Care. Other rural communities have also implemented voluntary transportation programs that have a central coordination center to match drivers with riders.

RURAL COMMUNITY PROVIDER MODEL OPTIONS

Several states across the nation have piloted new models for rural community providers. These models provide alternatives for rural communities in which an acute care hospital is located but where challenges exist to maintaining acute care services. Although the models differ, the general components include a functioning 24/7 emergency department which supports limited observational stays as well as some outpatient surgical capabilities. As discussed by the workgroup, a rural community provider model could be part of a PCHN demonstration project, potentially authorized by the state legislature or the Mid-Shore Coalition. The hospital component could be a state-local partnership with investment from the communities. The community provider model demonstration project would include timely, measurable benchmarks which, if met, could lead to scaling up in other rural communities in the state.

NEW MODELS FOR EMERGENT CARE AND CORE SERVICES

Not all communities can support a full acute hospital, yet need to have access to 24/7 emergency care, outpatient services and some limited observational beds for patients when their condition or weather warrants this type of acute stay. Several states – Kansas, Oklahoma, New Mexico and Minnesota – have developed new community models to address declining inpatient/acute care volume while providing essential health care services locally. All the models incorporate 24/7 emergent care with a core set of services provided, with the potential for additional services lines based on demonstrated community need. The models exist within a larger network that emphasizes care coordination and disease management. All of the models also have flexible finance components and a decreased dependence on inpatient revenue to support operations that accommodate a shift to value-based reimbursement. In addition, the model architects recognize that rural-relevant measures should be considered as part of these efforts as the “development of more rural-relevant measures is critical to perceived fairness of results.”

Together, these various state activities provide examples of how Maryland could configure new types of care delivery models for rural hospitals and other essential providers. Under changing market pressures

22 https://register.mitre.org/CMS_Rural_Health_Solutions_Summit/landon_nmha.pdf
and reimbursement incentives, these aforementioned states developed programs that provide essential health care services for rural community residents tailored to meet unique, local needs.

Summary

The Walsh Center team routinely presented to the workgroup, providing an overview of the national state of rural health policy, detailed highlights of innovative programs (mentioned in this report and others) that have been successful in improving the health and well-being of rural communities, and proposed policy options that are aligned with Maryland's health care reform initiatives. Guidance also was provided during the conceptualization and development of the Guiding Principles for Healthy Rural Communities. Finally, the Walsh Center team's input was critical to designing the final study recommendations, with an emphasis on the essential importance of "community-driven solutions with a focus on population health and a commitment to address the needs of vulnerable populations." Based on the Walsh Center’s input, the overall study recommendations are streamlined purposefully to reflect the critical emphasis on establishing a coalition that has funded administrative support, developing an operating demonstration program to obtain evidence and experience before scaling up programs, continuing work on essential programs, and working within the state's reform activities.
Appendix 1:

ANNOTATED BACKGROUND ON PENNSYLVANIA’S MODEL

Unlike Maryland’s statewide global budget, Pennsylvania’s global budget focuses solely on rural hospitals and was developed specifically to address the financial viability of rural hospitals. Pennsylvania focuses specifically on rural hospitals due to the additional challenges that these hospitals face, such as “licensing barriers, outdated regulatory requirements, and other matters that impede their long-term sustainability.” For example, nearly half (45%) of the 42 rural hospitals in Pennsylvania had negative operating margins in 2014, and an additional 33% generated margins of 0-3%. Besides financial challenges, these hospitals are often the sole providers of care for the communities that surround them—rural residents are dependent on their services. As Pennsylvania’s report on health innovation notes, if these hospitals were to close, the care that these rural hospitals provide would mostly likely shift to “less convenient and typically higher cost urban centers.” Similarly, the state faces challenges with quality of care—some of these rural hospitals have sub-scale service lines that “pose a risk of lower quality when a minimum threshold of procedures is not performed on a consistent basis” By focusing on population health initiatives, such as telehealth interventions, a population health dashboard and the prescription drug monitoring program (PDMP), Pennsylvania expects to improve the quality of care and health outcomes of populations in rural areas, to redesign the delivery of rural health care throughout the state, and to reduce overall health care costs.

Pennsylvania’s plan was initially funded through a $1.5 million grant from CMS Innovation Center under the State Innovation Model (SIM) Design grant in 2013. Under this grant, Pennsylvania set the goal of expanding care to underserved and rural parts of the state through an expanded use of telemedicine. In December 2014, Pennsylvania was awarded an additional $3 million through its SIM grant. The Health Innovation in Pennsylvania Plan that includes establishing a Rural Health Redesign Center is a product of SIM funding.

Pennsylvania is currently pursuing a global budget initiative pilot through the Pennsylvania Rural Health Transformation Pilot, an effort to develop and implement a multi-payer global budget in the state for rural hospitals. The impetus for Pennsylvania to pursue a global budget system is similar to Maryland and Vermont—a commitment to shifting hospital incentives from volume to value in an effort to better control costs while improving health care outcomes. The state worked to develop a plan that “would improve care quality and reduce costs for patients and emphasize population health management and coordination with public health and social supports.” By creating incentives that support population health, it is also expected that long-term health care use and costs will be more efficiently managed to meet the unique health care needs of the rural communities. As such, Pennsylvania’s value-based payment strategy will involve both population-based and episode-based payment models. Architects of the global budget pilot anticipate that using these two models together will be complementary and will ultimately lead to an overall improvement of health care quality while reducing health care expenditures. Pennsylvania’s model illustrates the importance of aligning state financial models with the limitations of practicing in rural areas.
Appendix 2:

ANNOTATED BACKGROUND ON VERMONT’S MODEL

In Vermont, the state has integrated its ACO provider network into its global budget model. In 2014, Vermont implemented its Shared Savings Programs (SSP) with Medicaid and the commercial insurance markets. Under the SSP, the ACO provider network is tracked on metrics, such as quality of care and total cost, and in return, receives a portion of the savings that are accrued. “Entities operating under the SSP-ACO agreements have incentives to reduce unnecessary utilization, much of which will be hospital inpatient and outpatient volume.”

The core governing body supporting this initiative in Vermont is the Green Mountain Care Board. The state of Vermont passed legislation to create the Green Mountain Care Board (GMCB) in 2011. The GMCB consists of five members appointed by the Governor and serves as the regulatory body of the state’s health care system. The GMCB was granted “the authority to address health care costs, quality, and access” through Act 48 of 2011. Act 48 also provided the GMCB with the authority to regulate costs and propose payment reform pilot programs across all payers in the state.

The GMCB was responsible for developing guidance to govern the hospital review process for fiscal years 2014-16. For FY 2014 to 2016, GMCB budgeted for a target rate for increases in hospital net patient revenue (NPR) of three percent. For 2015, the state experienced a modest growth due to GMCB enforcing its NPR rate target. As negotiated between the state and hospitals, five hospitals submitted a budget to the state in 2015 that included a negative rate increase.

By September 2015, Vermont attributed a savings of $14.6 million in health care costs to the SSP. Based on these initial cost saving reform efforts, the GMCB developed an all-payer Global Budget model which includes “inpatient, outpatient, and employed physician and net revenues,” covered under the SSP. The expectation was that implementing a Global Budget system would allow the state to move away from the volume-based incentives inherent in Fee-For-Service (FFS) payments and shift incentives to a value-based system that incentivizes high quality of care. The SSP also put a fixed limit on total hospital revenue regardless of the operating costs or patient service activity of the hospital in a given year.

In 2016, Vermont proposed to partner with the Center for Medicare and Medicaid Innovation (CMMI) at CMS to develop an “all-payer” model. After receiving approval from CMS, the Green Mountain Care Board voted in October 2016 to approve the all-payer waiver as a way “to explore new ways of financing health care with Medicare’s participation, through an Accountable Care Organization (ACO) delivery model.” Under this model, the state plans to cap cost growth for health care providers and hospitals for the three main payers of health care in Vermont -- Medicare, Medicaid and private insurance -- over the next five years. Vermont expects to move away from fee-for-service payments to delink quality of care from cost. Over the five-year agreement, Vermont is committed to capping its annual average net health care spending increase at 4.3 percent.