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The Role of Small and Rural Hospitals and Care Systems in Effective Population Health Partnerships

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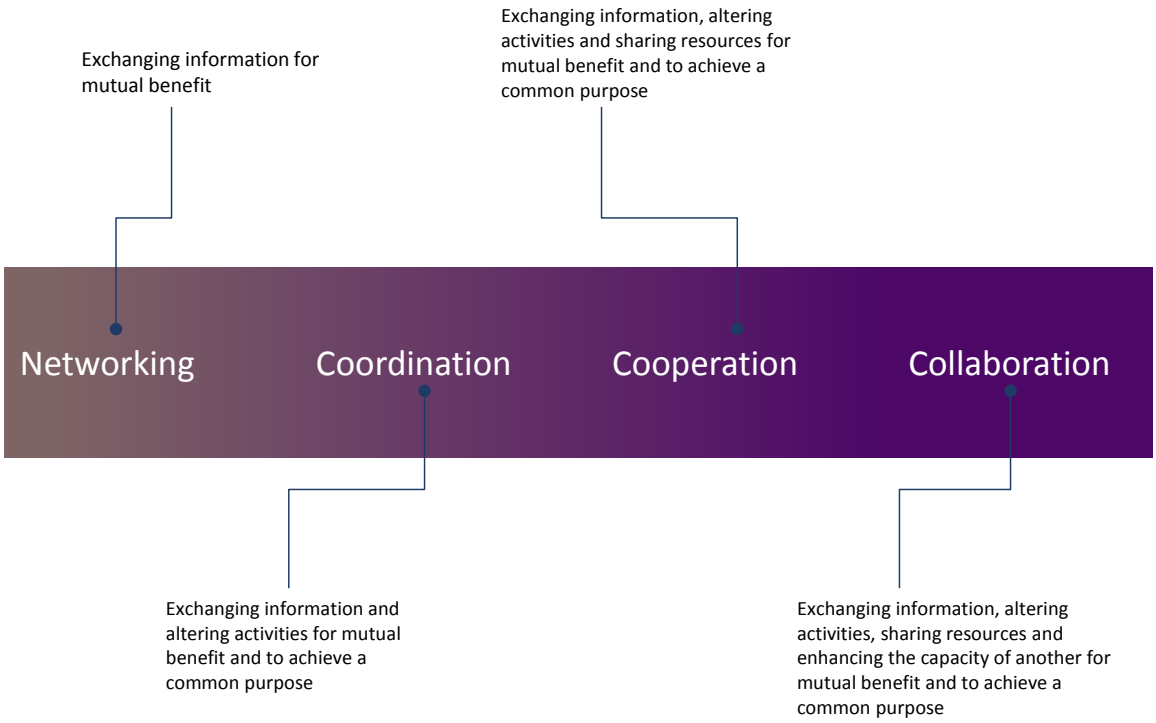
Executive Summary

Rising health care costs and greater demand for quality outcomes have led to a shift toward value-based payment models focused on better population health management. These market dynamics, along with new care delivery models and payment reform, are challenging hospitals and health care systems to develop population health approaches focused on prevention, improved chronic disease management and wellness activities. Hospitals and care systems that engage the community prepare themselves to meet these opportunities. Each type of hospital or care system—academic medical center, integrated health system, independent hospital, and small and rural hospital—engages the local community by providing resources, sharing knowledge and developing relationships and skills to manage its challenges and leverage its advantages.

To become an effective population health manager, a hospital must create effective partnerships. This guide describes how small and rural hospitals and care systems can develop effective population health partnerships that balance the challenges and opportunities encountered in providing health management. Hospitals and care systems can use one of several types of partnerships, as described in Figure 1.

Figure 1. Types of Population Health Partnerships



Source: Adapted from Robert Pestronk's Collaborating for Healthy Communities *and Arthur T. Himmelman's* Collaboration for a Change: Definitions, Decision-making Models, Roles and Collaboration Process Guide*, 2013.*[1]

Additionally, by using a checklist and a defined framework for population health partnerships, small and rural hospitals and care systems can work to form strong, well-structured relationships with community partners (see Figures 2 and 3).

Figure 2: Population Health Partnership Checklist

Leadership and Governance Roles	
	All primary and secondary partners have developed a decision-making model (committee structure, board, coalition and community infrastructure).
	Agreement has included representation and composition of leadership and governance group.
	Specific partner skills and competencies are aligned to the roles and responsibilities in the decision-making process.
	Partners have agreed on the program's mission and vision.
Program Resources	
	Partners have identified all anticipated resources required for the program in the agreement and have developed a process to identify future resources.
	Specific partner-related resources are determined.
	A schedule for the release of resources is included in the agreement.
Program Development and Implementation	
	Analysis of the population health status and/or assessment of community health needs is conducted with participation or input from all partners.
	Key trends and factors influencing health status outcomes are evaluated and prioritized, with input from key partners.
	Interventions and programs to improve population health status are developed collaboratively.
Program Communication	
	Partner communication methods (internally and externally) are defined, including meetings scheduled.
	Messages and branding used in communications are coordinated.
	Communication methods for each partner are identified and developed to allow information to be quickly disseminated to the community.
Care Delivery/Coordination Approach	
	Primary patient tracking mechanisms are identified.
	Each partner's role within the care delivery process is clearly defined.
	Biometric and other health-related data points that will serve as measurement tools for the population health program are identified.
Information Collection, Storage, Sharing and Utilization	
	How program data is collected, stored and shared between partners is predetermined.
	Methods and partner responsibilities for utilizing data to measure the impact of the program are identified.
	Any technology or data sources that are integrated to enable program success are identified (if applicable).

Source: American Hospital Association, 2013.

Figure 3: Framework for Defined Population Health Partner Roles

	Small and Rural Hospital or Care System	Community Organization(s)
Leadership and Governance	• Provide clinical expertise to the partnership • Assist in strategic planning for all population health programs • Work with all partners to create mission and vision statements	• Work with all partners to create mission and vision statements • Identify community leaders to coordinate with the small and rural hospital or care system • Assist in strategic planning for all population health programs
Program Resources	• Provide full-time employees (FTEs) for administrative purposes • Establish health center locations for health program	• Identify existing resources such as facilities, data or technology systems, communication vehicles or other capabilities that can be used for health programs • Identify community volunteers to assist the FTEs
Program Development and Implementation	• Coordinate with urban health centers to identify additional resources • Determine priority trends from a hospital perspective	• Analyze community health needs and assessment results to determine community perspective on possible health interventions • Determine priority trends from a community perspective
Program Communication	• Survey the community on health needs • Create a broad marketing campaign for the program • Create a broad communication plan for all partners	• Create targeted marketing campaigns for specific populations in the community • Create a communication plan for all community partners
Care Delivery/ Coordination Approach	• Outline patient handoffs • Outline administration of care for population health programs	• Identify potential community sites for care delivery • Coordinate resources from community partners
Information Collection, Storage, Sharing and Utilization	• Provide IT data storage for all program data • Provide data-mining expertise to the program	• Assist in data collection for the active population health programs

Source: American Hospital Association, 2013.

Introduction

Rising health care costs, increasing prevalence of chronic disease, an aging population, greater demand for quality outcomes and the recent passage of the Affordable Care Act have led to a shift toward value-based payment models focused on better population health management. New care delivery models such as accountable care organizations (ACOs) and patient-centered medical homes (PCMHs), as well as new payment models such as capitation, global payments and bundled payments, are emerging to improve quality, manage costs and improve the health status of defined populations.

These market dynamics are driving a shift toward population health approaches that are focused on prevention, improved chronic disease management and wellness activities. Population health models often include financial risk management elements by incorporating both upstream and downstream costs of care delivery. Additionally, population health models encourage responsibility among health care providers to provide continuous care delivery across larger populations—essentially providing total health solutions to patients across the continuum of care.

Population health management approaches are focused on understanding the health needs of the community, measuring and evaluating health status, and developing collaborative programs that will improve health outcomes. As a result, health care and community leaders are driving this shift toward population health management by focusing on assessment, prevention, wellness, chronic disease management and other initiatives to benefit the community. To address multiple health issues and improve the overall health status of the population, population health programs are becoming more complex and having greater reach.

Expansive and complex health programs necessitate an evolving role for hospitals and care systems, as well as greater integration with a variety of community organizations and other partners. Merging the resources and skills of hospitals and health care systems with community partners is essential for the integration and expansion of health management programs. Together, hospitals and care systems and their partners can create targeted population health programs that engage and communicate with the patient population and ultimately increase efficiency and quality of health care and improve health status in the community.

Population Health Definition

As defined in the 2012 American Hospital Association report, *Managing Population Health: The Hospital's Role* (available at http://www.hpoe.org/Reports-HPOE/managing_population_health.pdf), and amended in this report, population health can serve as a strategic platform to improve the health outcomes of a defined group of people, with a focus on three correlated stages:

1. Identification and analysis of the distribution of specific health statuses and outcomes within a population.
2. Identification and evaluation of factors that cause the current outcomes distribution.
3. Identification and implementation of interventions that may modify the factors to improve health outcomes.[2]

Population health resides at the intersection of three distinct health care mechanisms (see Figure 4). Improving population health requires effective initiatives to: (1) increase the prevalence of evidence-based preventive health services and preventive health behaviors, (2) improve care quality and patient safety and (3) advance care coordination across the health care continuum.

Figure 4. Mechanisms to Improve Population Health

Source: American Hospital Association, 2012.

Each type of hospital or care system—academic medical center, integrated health system, independent hospital, and small and rural hospital—engages the local community by providing resources, sharing knowledge and developing relationships and skills to manage its challenges and leverage its advantages. Each partner's role depends on organizational capabilities and market dynamics. Furthermore, some general challenges, opportunities and roles within the population health management process exist, based on the type of hospital or care system involved, which influence the success of any population health strategy.

Small and rural hospitals and care systems face unique challenges and opportunities in providing health care services, as outlined in the 2011 AHA report *The Opportunities and Challenges for Rural Hospitals in an Era of Health Reform* (available at http://www.aha.org/research/reports/tw/11apr-tw-rural.pdf). Typically, classification for small or rural hospitals is based on whether the hospital meets at least one of the following criteria: has 100 or fewer beds, has 4,000 or fewer admissions or is located outside a metropolitan area.

Many of these hospitals or care systems are one of the largest employers in their area, so they have a greater impact on their communities. For example, a hospital's internal wellness program focused on its employees could have significant, positive outcomes in a community of 5,000 residents where the hospital employs 400 residents or 8 percent of the population (not including families). Small and rural hospitals and care systems also face distinct challenges and opportunities that influence their relationships within the community. In some aspects, the role played by small and rural hospitals and care systems in working with community partners on population health differs from that of other types of hospitals and care systems.

This guide describes the role of small and rural hospitals and care systems in building and sustaining effective population health partnerships that balance the challenges and opportunities encountered. Implementing a successful population health initiative requires an organized effort in which all partners understand the roles and limitations they bring to the partnership. Hospitals and care systems highlighted in this guide's case studies used a strategic framework to construct working relationships with their community partners and create successful population health programs.

Challenges and Opportunities

Rural communities share common challenges that influence the health status of residents. The resources required to manage a population health program also create challenges for small and rural hospitals and care systems. Identifying and adjusting to market and organizational dynamics improve the impact of population health programs. Building on the 2011 AHA report, Figure 5 highlights the challenges that small and rural hospitals and care systems face in population health management, related to population demographics and health, financial pressure, inadequate infrastructure and data, lack of scale and limited staffing. [3]

Figure 5. Population Health Management Challenges for Small and Rural Hospitals and Care Systems

Population Demographics and Health	Financial Pressure	Inadequate Infrastructure and Data	Lack of Scale and Limited Staffing
• 23 percent of the U.S. population lives in a rural area. • 19.8 percent of the rural population is over the age of 65. • 16.6 percent of the rural population lives in poverty. • Almost half of rural residents report at least one major chronic illness, including higher prevalence of diabetes mellitus, respiratory infections, obesity and heart disease. • Patients must travel farther for medical care. • Patient engagement in medical care is lower due to societal factors.	• Nearly half of rural hospitals have 25 or fewer beds. • Rural hospitals make up half of the total number of hospitals but represent 12 percent of spending on hospital care. • 56 percent of gross revenue for rural hospitals comes from outpatient services. • Nearly 60 percent of revenues are from Medicare and Medicaid. • Medicare and Medicaid are the primary payers, covering 31 percent of the rural population. • 25 percent of rural residents under the age of 25 are uninsured.	• Small and rural hospitals and care systems lag behind urban health centers in demonstrating meaningful use for health information technology. • Integrated technology and informatics capabilities often lack the ability to measure population health status.	• Small and rural hospitals and care systems have challenges in becoming an accountable care organization or organizing a patient- centered medical home, due to limited scale. • Less able to recruit skilled and experienced health care workers. • Without sufficient volume for certain medical procedures, rural hospitals are unable to meet certain quality standards or have adequate /accurate data, which can affect reimbursement.

Source: American Hospital Association, 2013.

Offsetting these challenges, small and rural hospitals and care systems have several opportunities that other types of hospitals and care systems do not necessarily possess. By managing challenges and leveraging opportunities, small and rural hospitals and care systems can work with their communities to influence the population's health by adopting specialized population health programs that create positive health outcomes. The impact of these programs can be significant due to the strength of the relationship between the community and hospital. Building on the 2011 AHA report, Figure 6 highlights opportunities for small and rural hospitals and care systems in population health management, related to strong community and patient relationships, integration of services, and federal financial assistance.[4]

Figure 6. Population Health Management Opportunities for Small and Rural Hospitals and Care Systems

Strong Community and Patient Relationships	Integration of Services	Federal Financial Assistance
• One of the largest employers in their community, creates a stronger brand and perception. • Residents have a limited number of health care options, resulting in long-term relationships. • Hospitals use community residents for their workforce, increasing employment. • Working with urban health centers and larger health systems, small and rural hospitals offset costs and gaps in resources.	• Increased use of electronic tools and technology, including the use of telemedicine. • Partnering with other local health providers for care delivery (home health, prevention and post-acute care).	• Becoming a critical access hospital (CAH) provides opportunity for additional funding (as of September 2010, 1,328, or 26.5 percent, of rural hospitals are CAHs). • Graduate medical education redistribution of unused residency slots gives priority to rural training tracks.

Source: American Hospital Association, 2013.

A survey conducted by the Association for Community Health Improvement in 2012 identified several other factors that influence small and rural hospitals' and care system's population health programs. The survey had 1,198 responses total, with 336 from rural hospitals (see Figure 7).

Figure 7. ACHI 2012 Survey Findings

- Rural hospitals and care systems are more likely than urban hospitals to run their population health programs through the administration executive office (22.3 percent of the time for rural versus 9.8 percent for urban).
- Rural hospitals and care systems have fewer full-time employees dedicated to population health programs (3.6 FTEs for a small and rural hospital and care system versus 11 FTEs for an urban health center).
- Rural hospitals and care systems have fewer established partnerships on average than urban health centers (7.8 partnerships for small and rural hospitals and care systems versus 9.2 partnerships for urban health centers).
- Rural hospitals and care systems have fewer programs for heart/lung/diabetes than urban health centers (60 percent for small and rural hospitals and care systems versus 73.2 percent for urban health centers).
- Rural hospitals and care systems have fewer community clinics compared to urban health centers (66 percent for small and rural hospitals and care systems versus 73.9 percent for urban health centers).

Source: American Hospital Association, 2013.

Developing an Effective Partnership

Before building a complex and expansive population health program, the small and rural hospital or care system must establish a successful working relationship with the community for population health initiatives. This foundation allows the health care organization to develop more complex health management models such as a patient-centered medical home (PCMH) or an accountable care organization (ACO). To begin the relationship, a small and rural hospital and care system should:

1. Conduct a community health needs assessment with the local public health department
2. Work with the community to synthesize the assessment results
3. Identify potential community partners that are aligned with the population health mission or objectives
4. Form one or more partnerships to address health issues in the community

Before starting any population health program, the hospital or care system typically undertakes the community health needs assessment with the local public health department. The assessment is a process that describes the health of local people by identifying major risk factors and necessary health interventions. Working together, the hospital or care system and the public health department set out to assess and catalog the various health issues for the community and establish criteria to prioritize the identified health issues. The community often assists in data collection for the health needs assessment.

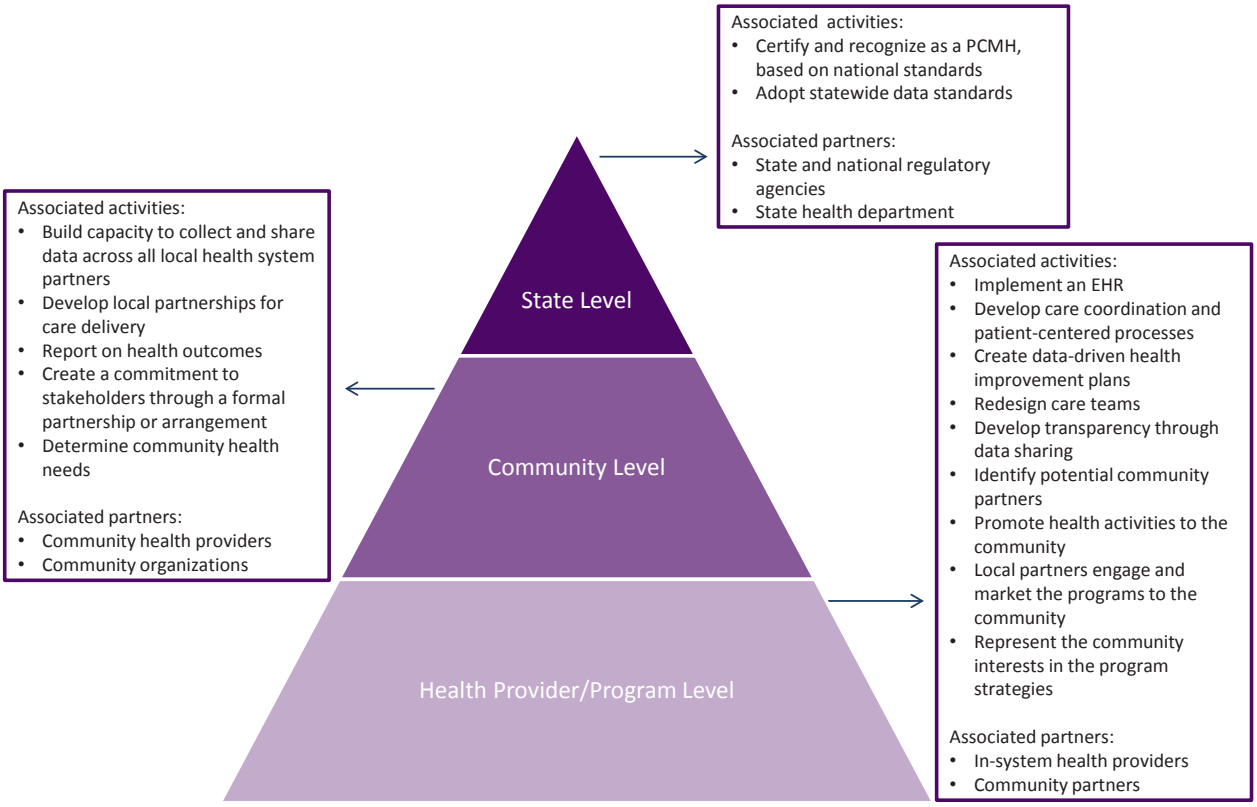
Once the data has been collected from the assessment process, a strategic planning session should be held with stakeholders to help identify and agree on high-priority initiatives. For more information on conducting the assessment, access the Association for Community Health Improvement's Assessment Toolkit at http://www.assesstoolkit.org/.

In ACO and PCMH models, the population may be defined more narrowly than the larger community. ACOs and PCMHs may include specific patient populations, which are defined by Medicare, Medicaid, a commercial insurance payer or even the hospital's own employee population. These types of models also require extensive partnerships at the local level.

As part of an ACO or PCMH, small and rural hospitals and care systems may seek partnerships in the local community to measure health status; educate, communicate with and engage patients; and implement wellness or chronic disease management programs. However, in a rural and small hospital setting, population health management through an ACO or PCMH also may require partnerships or affiliations with larger hospitals and health care systems, to provide health care across the entire care continuum.

Figure 8 illustrates a possible framework for developing a PCMH. Each level—health provider/program, community and state—has associated activities and partners. As the hospital and community explore the creation of a PCMH, it is important to identify all potential partners and their specific roles within the PCMH.

Figure 8. Framework for Development of a Patient-Centered Medical Home



Source: American Hospital Association, 2013.

Strategies for Creating Effective Population Health Partnerships

Forming a lasting and meaningful relationship with the community is critical for a functioning population health partnership. Hospital leaders should be aware of existing strategies and tactics (see Figure 9). Identifying and employing strategies that will be most effective working with the local community help ensure success.

Figure 9. Strategies for Creating an Effective Population Health Partnership

- Encourage hospital leaders to serve on community boards
- Provide community representation on hospital boards
- Survey the community on the effectiveness of the partnership
- Provide financial support to community groups
- Develop joint ventures with the community
- Provide outreach to the community to attract local volunteers
- Share health data with the community
- Develop a shared mission and vision for community health
- Analyze patient feedback on population health programs
- Develop focus groups that are comprised of members of the local community to gauge reactions and opinions on various population health initiatives
- Partner with other local health providers for care delivery (home health, prevention, post-acute care)

Source: American Hospital Association, 2013.

Potential Partners and Resources

Demographic challenges and resource limitations can impede the success of population health programs coordinated by small and rural hospitals and care systems. At the same time, the success of a population health program is built around the partnership between the small and rural health care organization and the community it serves. To deliver lasting impact on a community, collaboration is necessary. Engaging the community through local organizations provides the greatest chance for success. Some examples of community organizations that could be included are:

- Local public health departments
- Local health care providers
- Local businesses and chambers of commerce
- Community organizations, such as churches, libraries, educational institutions
- Local and national charities
- Health care payers
- Other government or municipal agencies (e.g., police, fire)
- Urban health centers
- Financial institutions
- Media
- Other not-for-profit groups

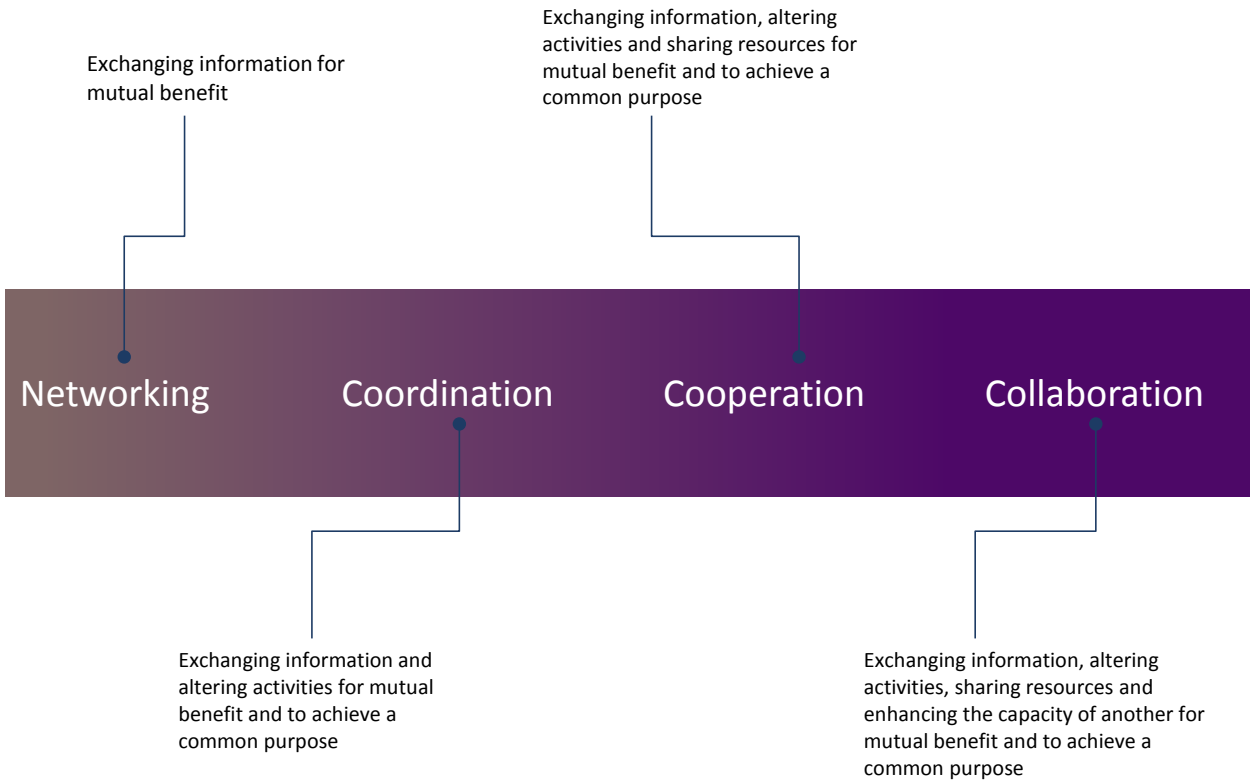
By engaging these types of organizations, small and rural hospitals and care systems can coordinate and disseminate community resources to improve the community's health. Community partners provide skills and resources, including:

- Marketing assistance to the community
- Logistical support, including meeting space, staff and volunteers
- Community-specific services such as translators
- Care delivery assistance
- Access to or support for health data via a disease registry or data storage
- Access to funding mechanisms (or provision of capital) for infrastructure and corporate initiatives

Types of Partnerships

The vetting process for potential partners should be strategic, selective and complementary of existing and necessary skill sets; otherwise, the partnership can become unmanageable. The depth of the interactions between the partners characterizes the relationships that form between the hospital and community. The types of relationships that exist between these partners fall into four main categories: networking, coordination, cooperation and collaboration (see Figure 10).

Figure 10. Types of Population Health Partnerships



Source: Adapted from Robert Pestronk's Collaborating for Healthy Communities *and Arthur T. Himmelman's* Collaboration for a Change: Definitions, Decision-making Models, Roles and Collaboration Process Guide*, 2013.*

Networking. Partners utilize a networking approach to exchange health information for mutual benefit; however, there is no shared vision and mission, no sharing of resources and no coordination of programs. Examples of networking partnerships are health information exchanges and disease registries. Organizations involved with these types of partnerships are providing data to each other—in this case, a third party—for the mutual benefit of data analysis and comparison. However, each organization that participates in these partnerships has a different mission, vision and purpose to its program. For example, a diabetes prevention program and a population health program for mental health each can be part of a health information exchange but have no other connection.

Coordination. Partners exchange information, and separate programs are coordinated to create a greater impact on the health issue. The programs are not merged into one entity, do not share resources, and have no singular mission and vision. Coordination partnerships involve multiple organizations that are running health programs and desire to work with each other to create a greater health impact. For example, several organizations that are administering obesity prevention programs may meet to share information and plan certain activities with each other, to offset gaps in their programming and have a larger impact. However, each program is separate and possesses a different mission and vision statement.

Cooperation. Partners exchange information and share resources between the programs. This information exchange and sharing of resources alters the program's operations, necessitating a common vision and mission. Although the programs share a common purpose, they are still operated by separate organizations. Cooperation partnerships involve multiple organizations running similar health programs and sharing resources and information to create an even larger health impact. A cooperation partnership is distinct from a coordination partnership in that all partners are actively sharing information and resources, suggesting a high level of collaboration. In addition, all the separate programs share a common mission and vision to allow for greater information flow and resource sharing.

Collaboration. Partners exchange information, share resources, possess one singular mission and vision statement and have merged the separate programs into a more formalized operational model. This new unified organization gives each partner representation on a new board for program operations and decision making on the direction of the group. The most advanced type of partnership, the collaboration partnership is found in a PCMH or ACO, as the hospital and its partners share a common mission and vision organized as one greater entity that manages the operations. In this type of organization, with a single mission and vision, the partners have established a new organizational framework that can include a new board representing all partners.

Regardless of the partnership type, partner organizations are charged with marshaling their resources to address the population health issue. However, more advanced partnerships have greater success sharing resources, are committed to a common mission and vision and include cross-representation across the hospital and within the community partner organizations. These factors are critical to the success and impact of the population health program because both the community and the hospital or care system must own the solution for the health issue.

Developing a Collaboration

Collaboration between the hospital or care system with the community is a critical factor in making a significant impact with a population health program. The success of a population health program hinges not only on proper role identification and full role ownership but also on a clear agreement between each partner to ensure a proper governance structure and resource contributions.

As hospitals and care systems and communities form collaborations, all partners achieve success by following a comprehensive organizational framework. Advancing an organizations framework between partners relies on detailing:

- Leadership and governance roles
- Program resources (e.g., time, staff, facility space, technology, etc.)
- Program development and implementation
- Program communication
- Care delivery approach
- Information collection, storage, sharing and utilization

Figure 11 provides a checklist for partners to ensure that any potential agreement between all the partners addresses the various organizational elements necessary to creating a successful population health program.

Figure 11: Population Health Partnership Checklist

Leadership and Governance Roles	
	All primary and secondary partners have developed a decision-making model (committee structure, board, coalition and community infrastructure).
	Agreement has included representation and composition of leadership and governance group.
	Specific partner skills and competencies are aligned to the roles and responsibilities in the decision-making process.
	Partners have agreed on the program's mission and vision.
Program Resources	
	Partners have identified all anticipated resources required for the program in the agreement and have developed a process to identify future resources.
	Specific partner-related resources are determined.
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	Messages and branding used in communications are coordinated.
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	Each partner's role within the care delivery process is clearly defined.
	Biometric and other health-related data points that will serve as measurement tools for the population health program are identified.
Information Collection, Storage, Sharing and Utilization	
	How program data is collected, stored and shared between partners is predetermined.
	Methods and partner responsibilities for utilizing data to measure the impact of the program are identified.
	Any technology or data sources that are integrated to enable program success are identified (if applicable).

Source: American Hospital Association, 2013.

Clearly defined roles allow partners to identify required resources and skills, which ultimately leads to successful implementation of population health programs. Depending on the type of partnership, some of these roles can overlap. Figure 12 provides a framework that outlines each partner's roles.

Figure 12: Framework for Defined Population Health Partner Roles

	Small and Rural Hospital or Care System	Community Organization
Leadership and Governance	• Provide clinical expertise to the partnership • Assist in strategic planning for all population health programs • Work with all partners to create mission and vision statements	• Work with all partners to create mission and vision statements • Identify community leaders to coordinate with the small and rural hospital • Assist in strategic planning for all population health programs
Program Resources	• Provide full-time employees (FTEs) for administrative purposes • Establish health center locations for health program	• Identify existing resources such as facilities, data or technology systems, communication vehicles or other capabilities that can be used for health programs • Identify community volunteers to assist the FTEs
Program Development and Implementation	• Coordinate with urban health centers to identify additional resources • Determine priority trends from a hospital perspective	• Analyze community health needs and assessment results to determine community perspective on possible health interventions • Determine priority trends from a community perspective
Program Communication	• Survey the community on health needs • Create a broad marketing campaign for the program • Create a broad communication plan for all partners	• Create targeted marketing campaigns for specific populations in the community • Create a communication plan for all community partners
Care Delivery/ Coordination Approach	• Outline patient handoffs • Outline administration of care for population health programs	• Identify potential community sites for care delivery • Coordinate resources from community partners
Information Collection, Storage, Sharing and Utilization	• Provide IT data storage for all program data • Provide data-mining expertise to the program	• Assist in data collection for the active population health programs

Source: American Hospital Association, 2013.

Conclusion

Although small and rural hospitals and care systems face several challenges—such as treating more patients who are older, have at least one major chronic disease and live in poverty; overcoming geographic limitations; and facing many financial pressures—they also have distinct opportunities. Small and rural hospitals and care systems can leverage strong relationships with their community and patients and with urban health centers and increase integration of services with other local health providers.

Small and rural hospitals and care systems that build partnerships with the communities they serve can have a significant positive influence on population health. Partnerships allow communities to create flexible and customized population health programs. Effective partnerships can be developed by conducting a community health needs assessment and employing the strategies and organizational framework outlined in this guide. Through networking, coordination, cooperation or collaboration, small and rural hospitals or care systems and partner organizations can marshal their resources to create successful community health initiatives and improve population health.

Case Study: New Ulm Medical Center, Minnesota

Background: New Ulm Medical Center (NUMC) is a critical access hospital that is part of Allina Health, a not-for-profit health care system that includes more than 90 clinics, 11 hospitals, 15 pharmacies, specialty care centers and specialty medical services. NUMC is located in New Ulm, Minnesota, a town of 13,500 residents. Key to NUMC's population health focus and rural health model is its strategic foundation, which includes an integrated health care team, electronic health record, coordinated clinical service lines and community health engagement.

In the mid-2000s, New Ulm government and business leaders identified health and wellness as a top priority. In 2006, New Ulm achieved "Governor's Fit City" status in recognition of the city's commitment to improve the health of its residents by encouraging physical activity. The community was approached in 2008 to see if it would be interested in improving health and preventing heart attacks through Hearts Beat Back: The Heart of New Ulm Project (HONU). Throughout all of the project's activities, the commitment and engagement of the entire community have been critical.

Interventions: In 2008, Allina Health collaborated with the Minneapolis Heart Institute Foundation to launch the Heart of New Ulm project. HONU is designed to reduce the number of heart attacks that occur in the New Ulm area over a 10-year period. The project aims to help residents make lifestyle changes to reduce their risk for heart attack, such as getting more physically active, making healthier eating choices, maintaining a healthy weight, managing stress and quitting smoking. HONU applies evidence-based practices in the community, health care, worksites and environment. To help plan and promote health initiatives, a 36-member steering committee includes representatives from a broad, multisector base, such as local employers, the City of New Ulm, Chamber of Commerce, churches, school district, local colleges, NUMC, Brown County Public Health and the general community.

Project interventions include worksite wellness programs and consultations with local businesses; tobacco control policy work; restaurant, convenience and grocery store programs; physician continuing medical education; free community heart health screenings; and community educational programs and health challenges. To help NUMC patients who are at high risk for heart disease or who have diabetes or heart disease, a free phone-coaching program is provided. Individuals are proactively invited to participate based on data from their EHR, as well as referrals from NUMC's primary care providers. The program provides patients with supplemental education and support between regular office visits with their primary care provider. The community provides an enthusiastic group of volunteers. Numerous local employers and their employees have embraced worksite wellness initiatives, local schools have developed opportunities to improve wellness for their staff as well as students, and local produce farmers are working to provide more delicious fruits and vegetables to the community.

Results: HONU has had considerable success in improving community health. Comparing data from community heart screenings held in 2009 and 2011, the project has recorded an increase in healthy lifestyle behaviors. Changes include:

- Increase in the number of people eating five or more fruits and vegetables per day from 19 percent to 33 percent
- Improvement in the number of people taking daily aspirin from 32 percent to 40 percent
- Increase in the percent of people getting 150 minutes a week of moderate exercise from 67 percent to 77 percent

Data trends from EHR data—which represents between 75 percent and 81 percent of the population in the 40 to 79 age group—show solid improvements in biometric risk factors:

- Decrease in the percent of residents with high blood pressure from nearly 21 percent to less than 18 percent
- Decrease in the percent of residents with high cholesterol from nearly 11 percent to less than 9 percent
- Decrease in the percent of residents with high triglycerides from nearly 34 percent to just under 32 percent

Lessons Learned: Community buy-in and a sense of ownership from the onset are critical. Throughout all of the project's activities, the commitment and engagement of the entire community have been important. By using the EHR as the primary population surveillance tool, project planners can target population segments and disease risk levels with the goal of identifying, implementing and tracking interventions. Strong support from physicians and the health care team is critical, as they play a key role in advocating for HONU's services and contribute significantly to improving the health of patients in the community.

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http://www.heartsbeatback.org/

Case Study: Wrangell Alaska Medical Center

Background: Wrangell Medical Center (WMC) is located in Wrangell, Alaska, a town of 2,300 residents. The city and borough of Wrangell own WMC, which employs 65 full-time employees with an annual budget of $8.8 million. WMC care services include an eight-bed acute unit, a 14-bed long-term care unit, emergency department, lab, physical therapy, home health and specialty clinics. Only accessible by airplane or boat, Wrangell has geographical limitations, and WMC is the sole health care provider for the community and one of the largest employers.

Intervention #1: Recognizing the economic and social challenges of the community and the need for qualified nursing assistants, WMC created the Rural Health Careers Initiative, in partnership with the local educational system that promotes the program to students. The program's purpose is to provide clinical education and training to students interested in becoming a certified nursing assistant. Students receive mentoring and financial assistance to take the year-long course. WMC pays 100 percent of the cost for its employees.

Results: To date, the program has trained more than 200 students, with more than $250,000 saved in education costs. WMC also employs the majority of students who complete and pass the state certification exam.

Challenges: Increasing the community's interest in the program remains an ongoing challenge for WMC, along with enhanced prescreening for acceptance. Before using an in-depth screening process, potential students not eligible to take the state certification exam were being accepted. Additional training methods, including hands-on training, also became necessary to increase the educational performance of the students.

Intervention #2: To further educate and engage the community, WMC provides an annual community health fair that more than one-third of the community attends. One of WMC's longest running health programs, the fair has seen considerable growth over the years, with more than 60 vendors in health, social services and education. The local community supports the health fair by partnering with WMC for promotion, assistance with registration and recruitment.

Results: With the significant growth of the health fair, numerous success stories have originated from the health screenings. The fair has reached its capacity on the number of vendors and continues to reach a high percentage of the population.

Challenges: WMC is faced with a growing space issue for the fair due to the demand of vendor participation. Currently, the fair has reached its vendor capacity, and vendors are limited in the types of educational displays. As the fair has grown, WMC staff members have increased responsibilities in coordinating and managing the fair, often outside their normal job duties.

Strategies and Tactics Used: Building on strong volunteerism in the community, WMC provides internal staff to run both the community health fair and the Rural Health Careers Initiative. WMC engages local businesses, including two grocery stores, to assist in registration and marketing for the community health fair. In the past, WMC has used schools and other state agencies to inform potential applicants of the career program.

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Case Study: Mt. Ascutney Hospital and Health Center Windsor, Vermont

Background: Mt. Ascutney Hospital and Health Center (MAHHC), located in Windsor, Vermont, is a 25-bed critical access hospital that includes a 10-bed rehabilitation unit and 25-bed nursing facility. Serving a local population of 21,000 people, the center offers a variety of care services, including outpatient primary and specialty care, acute care, transitional care and rehabilitative services. The per capita income is $21,936, with 54 percent of children living below the poverty level.

Intervention: Collaborating with the community, MAHHC formed a community health infrastructure, and the community and hospital worked together to close the fragmented and decentralized care services. The infrastructure has established several programs including the Mt. Ascutney Hospital Community Health Foundation, the Windsor Area Community Partnership, the Windsor Connection Resource Center, Patch Team Services, the Mt. Ascutney Prevention Partnership and the Windsor Area Drug Task Force. Community partners provide in-kind support including volunteers and administrative logistics.

Results: Through various initiatives of the community infrastructure, 14 major health promotions were managed, and communication and organization were improved among the various partners. A total of 3,248 individuals have received assistance in social services, and numerous antidrug programs have been introduced.

Lessons Learned: A systematic and organized framework that existed within the community health infrastructure allowed community partners to increase their impact on the community. The infrastructure provided an organized framework for the partners in determining how resources were allocated to meet the community health issues. Hospital leaders effectively coordinated and managed resources for these programs.

Challenges: MAHHC faced skepticism and mistrust from community partners over the control and management of the programs. Several segments of the community became concerned that they were losing their area of control.

Tactics and Strategies: To manage the challenges, MAHHC worked on building trust and allowing community partners to receive a large portion of the credit. MAHHC also decentralized grant funds to the community partners and celebrated every program success.

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Case Study: Yuma Hospital District, Colorado

Background: Yuma District Hospital, located in Yuma, Colorado, is a facility that houses acute inpatient health services, including 12 acute care beds, two labor/delivery/post-partum beds, surgical services and 24-hour emergency services. The hospital also has two provider-based rural health clinics, one of which is co-located in the hospital facility.

Intervention: Yuma District Hospital began work four years ago with several safety net clinics in Colorado to transform into a patient-centered medical home (PCMH). Selected by the Colorado Community Health Network to take part in a five-year demonstration project initiated and funded by Qualis Health in Washington State, the Commonwealth Fund, and the MacColl Center for Health Care Innovation at the Group Health Research Institute, these safety-net clinics focused on helping primary care safety-net sites become high-performing PCMHs. Through this initiative, the Colorado Community Health Network, a group consisting mostly of federally qualified health centers, provided technical assistance for these clinics to become PCMHs. Staff have spent three years working with consultants to get the Yuma clinics certified as a PCMHs. Yuma has developed provider teams and a process for assigning patients to those teams, and Yuma's IT department has been actively involved in creating new ways to track and monitor patients.

Because of the hospital's and clinic's efforts to adopt the PCMH model, Yuma Hospital District was invited to participate in the Medicaid Regional Care Coordination Organization managed by Colorado Access. Participating members of the PCMHs receive $2 per member per month, plus another $1 per member per month if the following goals are met: reductions in 30-day readmissions, ED visits and high-cost imaging. If the region's goals are not met, partners do not receive the additional incentive payment. Yuma will continue to be reimbursed on a fee-for-service basis for medical care provided to Medicaid patients. PCMH services include only patient care management.

Yuma patients require behavioral and social support, which they receive from a nearby health and social service agency, the North Colorado Health Alliance. A community service organization handles the nonmedical elements that influence health, like behavioral health care, arranging for transportation and helping with financial management. The alliance supplies a staff member to assist Yuma in accessing these resources.

Challenges: Similar to other rural towns, Yuma previously had physicians that served the community on an ongoing basis. Changing to the PCMH model removed the traditional model of physician service and created a care transition system where a patient may see multiple physicians. Switching to this new model created some community dissatisfaction as patients' traditional relationship with their physician was interrupted.

Results: Introducing the medical home process helped in developing communication systems to improve patient hand-offs and data access. A huge advantage of being part of the PCMH is access to the wealth of data available to help with patient care management. After reviewing the data, Yuma identified a pool of high-risk people who could benefit from patient care management. Contracting with the North Colorado Health Alliance gives the organization access to nonclinical services that have a significant impact on the health of the patient.

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Case Study: Cheyenne Regional Medical Center Wyoming

Background: Cheyenne Regional Medical Center (CRMC) consists of 206 beds, making the facility Wyoming's largest health care system with a total of 168 physicians and 1,850 employees. CRMC serves a patient population characterized as follows: 22.6 percent of the patients lack health insurance, more than 20 percent of the patients smoke and 24.3 percent of the adults are obese.

Intervention: Cheyenne Regional created the Cheyenne Health and Wellness Center (CHWC) in 2005 in South Cheyenne. CHWC partners with local community organizations including businesses, schools and child care facilities to provide general primary medical care, dental/vision services, flu shots/immunizations, diagnostic testing/screening, well-child visits, in-house pharmacy, translation services (English/Spanish), health education, family planning, pregnancy testing and referral, work/school physicals and case management. CHWC serves more than 5,000 patients annually, and 70 percent of patients have family income below 100 percent of the federal poverty level. Wanting to engage more proactively with patients with chronic disease, CHWC created Wyoming's first patient-centered medical home (PCMH) with the aim to improve access to care, help patients manage their symptoms, reduce acute events and improve patients' health outcomes.

Results: In year two, the PCMH has shown significant improvement for patients struggling with access to health care services and with high incidence of chronic disease, including:

- Overall, patient population size increased by 17.5 percent; over 5,000 patients served to-date.
- Breast cancer screening was improved to 41 percent (from 13 percent in 2011).
- Pneumococcal vaccination for the age target population improved to 19 percent (from 10 percent in 2011).
- Female patients receiving a Pap test increased to 68 percent (from 19 percent in 2011).
- BMI is now captured and recorded for 100 percent of the patients at the time of their visit.
- The average cost per clinic visit decreased by 20.84 percent.

Challenges: As CHWC evolved, the partners found it necessary to address quality improvement issues to streamline operations such as patient tracking and monitoring, clinical management and reporting.

Strategies and Tactics Used: CHWC has implemented a series of PDSA (Plan-Do-Study-Act) cycles of quality improvement to streamline the operations, the clinical management and the quality reporting processes in support of the PCMH transformation work. As a result, the team has successfully implemented chronic disease management programs, developed a streamlined process of medical referrals, increased access to care including same-day appointment availability and doubled the number of successful prescription assistance applications. The clinic had significantly reduced operating costs and increased revenues.

Lessons Learned: The safety-net PCMH is evolving into a more formal learning model, which includes the transformation of process and culture.

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Resources

American Hospital Association. (2012, April). *Managing population health: The hospital's role*. Chicago, IL: American Hospital Association.

American Hospital Association. (2011, April). T*he opportunities and challenges for rural hospitals in an era of health reform*. Chicago, IL: American Hospital Association

Arora, S., Kalishman, S., Dion, D., Som, D., Thornton, K., Bankhurst, A., and et al (2011). *Partnering urban academic medical centers and rural primary care clinicians to provide complex chronic disease care. Health Affairs.* 30(2011) 1176-1184.

Healthcare Financial Management Association. (2012, October). *HFMA's value project: The value journey: Organizational road maps for value-driven health care.* Westchester, IL: Healthcare Financial Management Association.

Himmelman, A. (2002, January). *Definitions, decision-making models, roles, and collaboration process guide*. Minneapolis, MN: Himmelman Consulting

Kellermann, A. and Jones, S. (2013, January). What it will take to achieve the as-yet-unfulfilled promises of health information technology. *Health Affairs.* 32(2013) 63-68.

McCullough, J., Casey, M., Moscovice, I., and Burlew, M. (2011, January 24). *Meaningful use of health information technology by rural hospitals. The Journal of Rural Health*. 27 (2011) 329-337.

Morrison, I. (2012, January). Reinventing rural health care. *Hospitals & Health Networks*. Retrieved on February 1, 2013 from http://www.hhnmag.com/hhnmag/HHNDaily/HHNDailyDisplay.dhtml?id=7460008361

National Advisory Committee on Rural Health and Human Services. (2012, December). *Options for rural health care system reform and redesign*. Washington DC: National Advisory Committee on Rural Health and Human Services.

National Association of Community Health Center. (2011, April). *Advancing the patient centered health home in California's community health centers*. Bethesda, MD: National Association of Community Health Center.

Pestronk, R., Elligers, J., and Laymon, B. (2013, February). *Collaborating for healthy communities*. Washington DC: Catholic Health Association of the United States.

Radford, A., Kirk, D., Howard, H. (2012, December). *Profile of rural health clinics: Medicare payments & common diagnoses*. Chapel Hill, NC: North Carolina Rural Health Research & Policy Analysis Center.

Shortell, S. Weinberger, S. (2012, February). *Safety net accountable care organization readiness assessment tool*. Berkeley, CA: School of Public Health, UC Berkeley.

Endnotes

1 Himmelman, A. (2002, January). *Collaboration for a change: Definitions, decision-making models, roles, and collaboration process guide. Minneapolis, MN: Himmelman Consulting.*

2 American Hospital Association. (2012, April). *Managing population health: The hospital's role*. Chicago, IL: American Hospital Association.

3 American Hospital Association. (2011, April). *The opportunities and challenges for rural hospitals in an era of health reform. Chicago, IL: American Hospital Association.*

4 Ibid.