



CHAIR:

Ronnie Musgrove
Jackson, MS

MEMBERS:

Kathleen Belanger, PhD
Nacogdoches, TX

William Benson
Silver Spring, MD

Ty Borders, PhD
Lexington, KY

Rene S. Cabral-Daniels, MPH, JD
Williamsburg, VA

Christina Campos, MBA, FACHE
Santa Rosa, NM

Kathleen Dalton, PhD
Chapel Hill, NC

Carolyn Emanuel-McClain, MPH
Clearwater, SC

Kelley Evans
Red Lodge, MT

Barbara Fabre
White Earth, MN

Constance Greer
St. Paul, MN

Octavio Martinez, Jr. MD
Austin, TX

Carolyn Montoya, PhD, CPNP
Albuquerque, NM

Maria Sallie Poepsel, MSN, PhD,
CRNA
Columbia, MO

Chester Robinson, DPA
Jackson, MS

Mary Kate Rolf, MBA, FACHE
Syracuse, NY

John Sheehan, MBA, CPA
Chesterfield, MO

Mary Sheridan, RN, MBA
Boise, ID

Benjamin Taylor, PhD, DFAAPA,
PA-C
Martinez, GA

Donald Warne, MD
Fargo, ND

Peggy Wheeler, MPH
Sacramento, CA

EXECUTIVE SECRETARY:

Paul Moore, DPh
Rockville, MD

Social Determinants of Health

National Advisory Committee on Rural Health and Human Services
Policy Brief, January 2017

Introduction

The social determinants of health are becoming an increasingly important framework for understanding and taking into account the broad range of factors that affect health outcomes in the United States. As the Department of Health and Human Services (HHS) considers how to incorporate the social determinants of health in its programs and policies, it will be important to understand the unique characteristics of rural communities that influence the ways that the social determinants manifest. For this reason, the National Advisory Committee on Rural Health and Human Services (NACRHHS or the Committee) offers this policy brief, informed by a field meeting and site visits in New Mexico, to provide recommendations as to how HHS can best contribute to addressing the social determinants of health in rural communities.

Setting a Rural Context

Over the years, the Committee has examined individual social determinants of health—poverty, access to services, economic opportunity, rates of chronic disease, homelessness, intimate partner violence, life expectancy—and found that rural communities often fare worse than their urban and suburban counterparts.ⁱ While the social determinants of health serves as a general policy construct, the Committee believes that there are distinct rural considerations that policymakers must keep in mind when deciding how to develop and align health and human service systems such that they are able to improve population health in rural communities. This will be increasingly important in the coming years as the social determinants of health framework becomes embedded into HHS efforts.

The Eightieth Meeting of the National Advisory Committee on Rural Health and Human Services

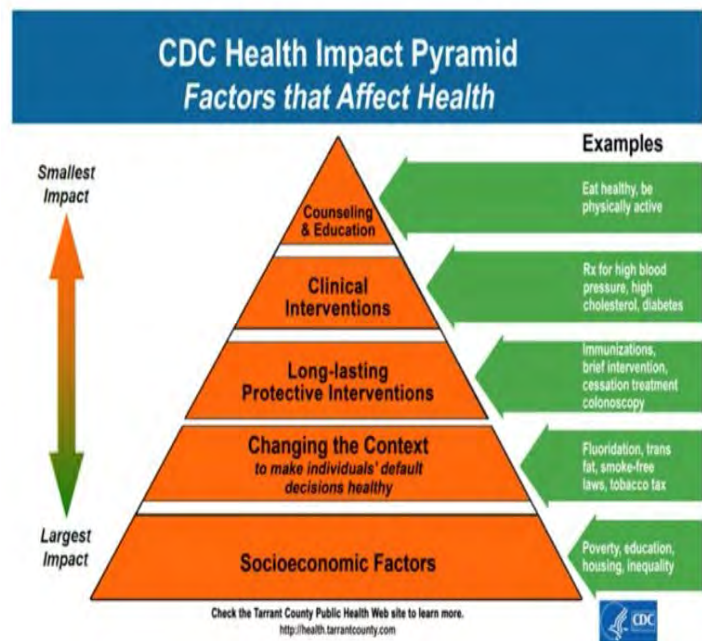
The National Advisory Committee on Rural Health and Human Services chose to meet in Albuquerque, New Mexico for its eightieth meeting. New Mexico presented a wide lens to view the subject of Social Determinants of Health in the rural United States. The Committee visited a Native Community Finance organization in Laguna, a small rural hospital in Santa Rosa and met with health care and economic development staff in Cuba.

This brief is informed by those experiences, and conversations providing insight to inform better policy making for families.

Social Determinants of Health

The Center for Disease Control's Health Impact Pyramid makes clear that, if policymakers want to have the greatest impact on health, approaches and investments must move outside of the clinic and target the places where people live, work, and age. According to the pyramid, efforts to address socioeconomic determinants are at the base, followed by public health interventions that change the context for health, protective interventions with long-term benefits (i.e. immunizations), direct clinical care, and counseling and health education at the top. While interventions at the top of the pyramid may improve individual-level health on a case by case basis, interventions that address structural factors at the bottom of the pyramid are necessary to improve population health.ⁱⁱ

The addition of the social determinants of health and associated measures to the Healthy People 2020 Topics and Objectives has brought additional focus on this issue for policy makers. This aligns with other HHS activities, such as the National Partnership to End Health Disparities and the National Prevention and Health Promotion Strategy, which all figure to guide HHS investments and policies in the years to come. The Committee believes it will be important to ensure that HHS leadership assesses these strategies with an eye toward the unique characteristics of rural communities. To date, the research literature surrounding the social determinants of health has not necessarily looked at the rural dimensions of this issue. This policy brief and its accompanying recommendations seek to provide a rural lens through which to consider how this policy framework affects small and geographically isolated low-population density communities.



The Rural Social Determinants of Health

While the Committee's site visits in New Mexico revealed community-level variation in the social challenges facing rural areas, the Committee believes that certain social determinants are especially influential in affecting rural population health outcomes. In order to best improve health and quality of life in rural areas, the Committee believes that HHS policy makers should consider these social determinants, particularly in determining resource allocations.

Geography

The White House Office of Management and Budget defines nonmetro (rural) areas as any county that is not part of or adjacent to an urban core area of at least 50,000 people.ⁱⁱⁱ Nonmetro counties

include areas with a core population of 10,000 to 49,999 and counties, known as noncore, which do not have core populations above 9,999. In 2013, according to the OMB definition, 62.8 percent of counties were considered rural encompassing 15 percent of the total US population.^{iv} Rates of chronic disease such as diabetes, COPD, heart disease, and obesity are all higher in rural areas than they are in other parts of the country.^v The result of high rates of chronic disease is higher mortality rates and lower life expectancies for people living in rural areas. From 2005-2009, the mortality rate in rural counties was 13 percent higher than in metro counties and residents of metro counties lived two years longer on average than did residents of rural counties.^{vi} In 2015, the Committee met in Kentucky in order to examine the issues of mortality and life expectancy in rural areas and made a series of recommendations to the Secretary of HHS as to how programs and policies could address these disparities.^{vii} Many of the programs within the Center for Medicare and Medicaid Services (CMS) and the Health Resources and Services Administration (HRSA) show that HHS currently has significant investments in this space.

Historical trauma and loss matter when examining the root causes of health

Loss of land rights, natural resources and the distortion of physical environments coupled with histories of trauma and profound loss greatly influence health. The Committee heard stories and saw first-hand the effects of loss of land and natural resources and how it impacts the development of communities. At Laguna Pueblo, stakeholders shared stories of disruption and displacement as the community made way for a railroad and then a highway. Stakeholders also legacies of enslavement and forced assimilation produce trauma communities still grapple with today.

Disparities in health status and life expectancy between urban and rural areas can be partially explained by the fact that rural communities are geographically isolated from the services provided in large, urban areas and that, given limited economies of scale, rural communities' struggle to sustain basic health and human service delivery. However, new studies that

show significant disparities in life expectancy and economic mobility across rural zip codes reveal a relationship between health, opportunity, and place that runs much deeper than the issue of geographic isolation. The zip code in which an individual lives determines the quality of the housing stock that is available, the opportunities to accrue wealth, and the extent to which the built environment promotes positive health outcomes by providing amenities such as exercise space and clean water infrastructure. In the same way that an inadequate supply of affordable housing may affect community health in one community, land ownership structures that prohibit asset building may have similar effects in another.^{viii}

Wealth, Income, and Poverty

The proportion of counties with more than twenty percent of residents living in poverty has increased from 12% in 2000 to 26% in 2010. Throughout this period, urban counties saw an increase from 4% to 15% whereas rural counties saw an increase from 17% to 32%.^{ix} More significantly, 64% of noncore counties^x are persistent poverty counties, or counties in which twenty percent or more of the population was living in poverty over the last thirty years, compared to just 14% of urban counties.^{xi} Though, similar to how the relationship between health and zip code runs deeper than the issue of geographic isolation in rural areas, the close relationship between health and poverty is much more complex. During a presentation from a human service

expert at the New Mexico meeting, Committee members learned that students who put even less than \$500 in a college savings account are four times more likely to go to college than students without a college savings account. This fact speaks to a larger point that perceptions of mobility significantly affect future success.^{xiii} In many rural communities, where poverty has been persistent and multi-generational for many individuals, low perceptions of mobility mean people feel as though they do not have control over their own lives. Ultimately, this feeling of a lack of control induces toxic stress and leads people to engage in risky behaviors—both of which can lead to a variety of poor health outcomes.^{xiii}

Multiple generational families can be strong sources of knowledge and expertise to improve health

The committee visited three distinct communities during the meeting: Laguna, Santa Rosa, and Cuba. It's not unique that in rural areas, multiple generations live under the same roof. On all three visits stakeholders shared stories about the resiliency of multi-generational families overcoming legacies of historical trauma and adverse economic conditions continually work to develop local health improvement strategies that adapt local knowledge and empower individual community members.

Education and Labor Markets

As with wealth, income, and poverty, educational attainment and employment also holds implications for the health status of individuals in rural communities. Whereas the percentage of young adults (ages 25 to 34) that have completed college rose from 29 to 35% in urban areas between 2000 and 2013, the percentage that have completed college in rural areas rose from just 15 to 19% in the same time period.^{xiv} In addition to having lower college completion rates, rural employment growth lagged behind that in urban areas in the post-recession period beginning in 2011, much of which can be attributed to rural areas having an older, less well-educated workforce.^{xv} Americans with fewer years of education have poorer health and live shorter lives, and that has never been more true than today. Among whites with less than twelve years of education, life expectancy at age twenty-five fell by more than 3 years for men and by more than 5 years for women between 1990 and 2008.^{xvi} While education levels have been increasing across all geographies between 2000 and 2010, 36.9% of rural counties have more than twenty percent of their population without a high school diploma, compared to just 18.9% in urban counties.^{xvii}

While improving low rates of educational attainment is often portrayed as the silver bullet to addressing poverty and workforce shortages in rural communities, the Committee heard from local stakeholders that educational interventions, which often focus on increasing the number of students who earn four year degrees, has limited benefits for rural communities. This is because students who leave their communities to attend four year colleges often do not return. For other students who remain in their home community, the employment sector is dominated by low-wage service sector jobs with limited benefits and opportunities for growth. As a way of improving education and employment outcomes in rural areas, the Committee heard about the need to foster apprenticeship programs, entrepreneurial and technical education, and cooperative development options.^{xviii} The Committee believes that two-year community and technical colleges are often the lifeblood of career training for rural communities, especially in the health care field where associate degree programs fill many of the workforce needs for rural hospitals, clinics, and nursing

homes. Additionally, the development and growth of broadband cooperatives in rural areas could be looked to as a successful model to link education and entrepreneurial career opportunities in rural areas. The Committee believes that HHS workforce and health professional training programs should consider these options as a way of improving educational attainment and employment outcomes in rural communities, both of which are shown to improve individual and community health.

Transportation

For rural residents without access to or the ability to drive a private car, a lack of reliable transportation options provides significant barriers for people to travel to work, doctor's offices, and grocery stores—all of which likely have negative effects on health outcomes. In rural areas, just 32 percent of counties have full access to public transportation services with another 28 percent having only partial access.^{xix} A lack of transportation options presents particular challenges in rural areas where distances to social and health services are often greater than in urban areas. In 2001, four times as many rural residents as urban residents traveled 30 miles or more in order to gain access to basic medical care.^{xx} The Committee understands HHS's ability to support transportation activities is limited, however, there are some HHS programs that currently include transportation components. States can support some transportation costs for getting to medical visits within the Medicaid program, and the Community Health Center program must provide enabling services that can include transportation. Similarly, Head Start programs can provide transportation to and from child care centers, and Medicaid's Program of All-Inclusive Care for the Elderly (PACE) includes transportation. While these program options can help address rural transportation challenges, there are many gaps for rural residents. In the context of social determinants of health, there may be no bigger challenge for linking rural residents to jobs, education, child care, and health care.

Key Rural Considerations

While many HHS programs that have the potential to help rural communities address the social determinants of health exist, the Committee believes that rural communities face unique challenges that often prevent them from accessing these resources. HHS should consider these challenges when structuring programs and policies that seek to address the social determinants of health in rural communities.

The Resource Problem

Throughout the meeting, Committee members, speakers, and New Mexico stakeholders expressed concern that current HHS and other federal funding mechanisms fail to provide rural communities with adequate resources to address the social determinants of health. The allocation method of both block and discretionary grant programs may disadvantage rural communities in competing with urban areas for these funds. Under the current block grant program, federal funds are distributed to states based on several factors and states then have flexibility over their use of such funds. While rural areas rely heavily on block grant funding to fund many of its social services, block grant allocation methods may disadvantage rural areas in two ways. First, because population size influences the share of grant money a state receives, states with a smaller population are likely to receive fewer resources. Second, because low population density in rural areas makes it more expensive to provide services on a per capita basis, states interested in resource

efficiency may be less likely to allocate block grant dollars to rural communities. This is especially problematic due to the overall reduction in available block grant funds. For the 13 block grants, the median funding change between its inception and 2016 is a decline of about 26 percent.^{xxi} Discretionary grant programs have similar disadvantages for rural communities, where local governments and community-based organizations often do not have the resources to engage professional grant writers—and collect community-level data in the way that the large, urban communities that they often compete against for resources do. These difficulties that rural areas have accessing federal resources may help to explain one Committee member’s observation that some rural communities may have become virtual “human service deserts,” a term she attributes to communities with the absence of human service providers. Given the importance of human services in addressing the social determinants of health, human service deserts may contribute to poor health outcomes in rural areas.

Beyond the possibility that grant allocations and competitions may disadvantage rural areas, Committee members also believe that rural communities may lack the resources and capacity to make full use of grants they do receive. Compared to universities and high-capacity organizations in urban areas, rural grantees may be less likely to negotiate an adequate indirect rate, the administrative overhead of an application that includes increased funds for part or full-time staff to administer the grant program, which ultimately limits the effectiveness of grants in improving community health. Furthermore, the Committee believed that, because many pilot programs are designed for and begin in urban areas, attempts to replicate these programs in rural areas fail to take into account the capacity and organizational structure of service providers in rural communities. Again, this has the potential to limit the effectiveness of grants’ impacts and contributes to a lack of resources to effectively improve community health in rural areas.

The Need for Local Autonomy

Throughout the presentations and site visits at the New Mexico meeting, the Committee heard multiple times from community stakeholders about the need for more local autonomy to define the factors affecting health in their area and to create their own strategies to address those factors in partnership with the larger state, federal, and philanthropic organizations that distribute funding. Several stakeholders believe that grant opportunities often try to impose solutions on communities without having a full understanding of what the true problems are or a full appreciation of how service delivery operates in the communities. This seemed to be especially true for tribal communities. As one speaker stated, “There are programmatic interventions [to define and address the social determinants of health] but it needs to be done in collaboration and partnership with local entities.”

Potential Rural Strategies

Emerging Financing Strategies and Payment Models

The Committee understands that moving beyond the term limited grant cycle by providing new avenues to support the infrastructure of coordinated community health systems and the interventions that improve population health is critically important to the long term goal of improved health within rural communities. A number of financing strategies have emerged in

recent years (1) new payment models for clinical services^{xxii}, (2) breaking down funding silos through blended resources^{xxiii}, (3) funding models that tap into existing public and private capital.^{xxiv} All of these strategies are designed on the basis of supporting local community determination, and rewarding health systems based on the outcomes they achieve rather than volume of services provided. The Committee believes strategies like global budgeting could provide a potential on-ramp for rural communities to be national leaders in the shift from fee-for-serviced based healthcare, however naturally new rules must consider all the “inputs” that might affect an individual or community’s health. A table of some emerging financing strategies and payment models can be found in the appendix.

Community Integrated Care

In addition to payment reforms, the committee believes that aligning resources for population-centered, population health-focused strategies are critical in addressing the social determinants of health. Critical to a community integrated approach is the leadership from a “backbone organization” and set of cross sector stakeholders such as hospitals, social service providers, employers, businesses, and the education sector. Demonstration projects like Rural IMPACT have shown the importance of strong partnerships and local coordination for rural communities working to change systems with limited resources.^{xxv}

Additional design principles of integrated systems may include^{xxvi}:

- reconciling diverse perspectives and defining a shared vision and goals
- assessing the needs of the community, identifying gaps and potential interventions and prioritizing actions to achieve shared goals
- allocating resources and creating the information systems and capability to assess performance and implement rapid cycle changes

Community collaboration is integral to align efforts between resource strapped areas and partner organizations like universities to improve health

Stakeholders from all three site visits emphasized the necessity of collaboration among and between sectors to improve community health. An example is the Health Extension Rural Office (HERO) model. HERO places full-time agents in rural communities across New Mexico that link community health priorities to University of New Mexico resources and monitor the effectiveness of university programs in addressing community health needs.

Hospital generated Community Health Needs Assessments (CHNAs) and Community Benefit Plans (CBP) to respond to findings from CHNAs

creates a tremendous opportunity for rural hospitals to play a significant role in improving the health of their communities in coordination with human service and workforce support organizations.

Recommendations

The important relationship between health status and social and environmental contributing factors is more complex that can be discussed fully in this brief and accompanying recommendations. To

significantly improve outcomes related to the social determinants of health in rural communities, a systematic approach consisting of a wide range of actions across the public, private, and philanthropic sectors is required. The recommendations presented below do not attempt a global reach, but rather, focus on connecting existing programs, policies, and priorities within HHS to some of the challenges the Committee learned about during the site visits.

- 1. HHS should develop a federal “Healthy Communities” designation that recognizes place-based, community-driven plans to address the social determinants of health and provides inter-agency federal support through preference points, technical assistance, and consolidated funding streams.**

Similar to how a variety of federal place-based initiatives have recognized community-driven plans for education, criminal justice, community revitalization, and housing, the Committee believes that HHS should develop its own place-based initiative to recognize comprehensive community plans that take holistic approaches to improving outcomes related to the social determinants of health. The Committee believes that this approach is particularly promising for rural communities for several reasons. First, competitive place-based initiatives evaluate applications in the context of their own community challenges and resources; therefore, low populations and geographic isolation from services would not disadvantage rural, frontier, and tribal communities. In many cases, place-based initiatives require that rural and urban applicants compete separately. Second, a federal initiative focused on the social determinants of health could help to solve the “resource problem” in rural communities by providing designees with technical assistance, which would help them to navigate federal grants and resources, and preference points, which would enhance the competitiveness of rural applicants by adding bonus points to the total scores of their grant applications. Finally, the Committee believes that a Healthy Communities initiative should consider the use of blended funding streams and program flexibilities as seen in the Performance Partnership Pilots—an interagency initiative in which the 2014 Consolidated Appropriations Act allowed multiple agencies to blend funding streams in order to improve outcomes related to disconnected youth. This flexible funding model would ease administrative burdens for rural communities, who often have limited capacity to comply with federal grant requirements, and allow them to pilot new, innovative models for improving outcomes related to the social determinants of health. Additionally, by creating less siloed approaches to human service funding and allowing for innovative human service programs to be delivered directly in rural areas, this blended funding approach may significantly improve the burden on rural health providers to address health-related social needs in rural communities.

- 2. HHS should facilitate coordination and collaboration among hospitals, health systems, and human service providers on Community Health Needs Assessments and Community Benefit Agreements to support the development of local strategies to address the social determinants of health.**

In addition to serving as health care institutions, hospitals are also increasingly being viewed as community anchor institutions, or institutions that are tied to their local communities through mission, invested capital, and community relationships. Given new payment reforms that seek to shift healthcare spending from volume outcomes to value outcomes, many hospitals embrace their role as anchor institutions by conducting Community Health Needs Assessments (CHNA) and creating Community Benefit Agreements (CBA). During the New Mexico meeting, Committee

members heard from speakers and stakeholders about the promises of this approach but also heard of its limitations and challenges in rural areas where hospitals may lack the resources and partnership structures to act on the needs assessments. For this reason, the Committee believes that HHS should offer a technical assistance package to rural communities in order to help hospitals, health systems, and human service providers to better coordinate efforts and develop local strategies to address the social determinants of health.

3. HHS should structure grant review panels to allow rural applicants to be reviewed as a separate cohort in order to compete against similarly resourced communities.

Considering the challenges such as low populations, a lack of resources to collect community level data, and a lack of capacity within health and human service organizations that rural communities face when applying for federal grants, the Committee believes that current grant competition mechanisms may disadvantage rural communities and leave them with a lack of resources necessary to address the social determinants of health in their communities. In order to put rural applicants on a more level playing field and increase the amount of resources flowing to rural communities, the Committee believes that rural applicants for HHS grants should be reviewed separately from urban applicants. The Committee believes it is important that the grant review panels for rural applicants consist of members who are familiar with issues related to rural health and human service delivery.

4. HHS should encourage the use of priority points for rural applications that face unique structural challenges related to the social determinants of health such as but not limited to geographic isolation, low population density, higher poverty and lower life expectancy.

In cases in which separate funding streams are not set aside for rural communities or in cases in which separate grant review panels for urban and rural applicants do not exist, the Committee believes that HHS should encourage the use of priority points for rural applicants in competitive grant programs. As outlined earlier in the brief, many rural organizations currently have to compete with large, urban organizations in order to receive discretionary grant awards. Because large, urban organizations are more likely to have the financial capacity to hire professional grant writers, the Committee believes that small rural organizations may be disadvantaged from receiving discretionary grant funding. Priority points would help address this problem by favorably adjusting rural applicants combined review scores by a pre-determined amount at the end of the review process. Given the distinct challenges that rural communities face with regard to the social determinants of health, the Committee believes that priority points are necessary to increase the flow of resources that could help rural communities address these challenges.

5. HHS should offer technical assistance and Funding Opportunity Announcements which highlight ways rural organizations can factor in the administrative costs of effectively managing grants into their budgets and project plans.

Rural communities, and organizations located in those communities, often lack the resources to develop comprehensive indirect cost rates that would help them cover the important administrative costs needed to manage grants they receive. The Committee believes that HHS should help guide rural organizations on creating grant budget proposals that incorporate appropriate indirect cost rates by offering technical assistance packages prior to when grant competitions open.

Furthermore, the Committee believes that Funding Opportunity Announcements should highlight the 10% indirect cost rate that organization can use under the Uniform Grant regulations and also explain how an organization can direct charge for administrative costs where necessary. The Committee believes that these strategies will help rural communities to make greater use of grant resources and help reduce urban-rural disparities with regard to the social determinants of health.

Conclusion

Overall, this brief seeks to be a tool for rule-making and policy conversations within the department as it relates to applying the social determinants of health as a framework to program and budgetary processes. Underserved people and populations continue to bear the burden of hidden costs and historical trauma associated with declining health status. The social determinants of health are a reminder that the sum total of the nation's health is more than what is spent on health care, but the total of what happens on the job, in the home, and throughout a community. Moreover, the recommendations associated within this brief encourage the department to build a more generative approach that works across sectors to address the multi-dimensional health and socioeconomic challenges of individuals and families.

Appendices

Appendix A: Asset Building in New Mexico

Children in New Mexico face some of the greatest odds in the country. The state has the nation's highest child poverty rate (31%, compared to a 22% national average) and an increasing number of children living in communities of concentrated poverty. This is the context in which families in the **Prosperity Kids** children's savings account (CSA) program are making gains in preparing their children financially, socially, and academically for success in college and beyond.

Prosperity Kids requires parents to take a ten week, evidence-based child development and community leadership course, and additional financial capability training. Accounts are then opened for their children from birth to 11 with an initial deposit of \$100, matched up to \$200 a year for ten years. At high school graduation, the accounts may be used for postsecondary education or training or cashed out at age 23 for a stable transition into adulthood. Parents may open an emergency savings account as well that is seeded by Prosperity Works and incentivized for five years for things that they do that support healthy outcomes for their children. These accounts have a secured credit card attached so that parents may learn to use the financial system without risk and also build credit.

"By demonstrating that college saving can happen—and can be transformative in the lives of children and families—even where odds are stacked against children's futures, Prosperity Kids is giving witness to the potential of CSAs to improve every child's chances." Dr. William Elliott, September 2016

Appendix B: Site Visit Profiles

Cuba, New Mexico	
Site Visit Host Organization	Cuba Health Center, Presbyterian Medical Services
Brief Description	<p>Health centers provide a safety net of medical care for thousands of New Mexicans of all ages. Everyone is eligible to receive medical services, ranging from primary care, behavioral health and dental care. In addition to private pay, accept Medicaid, Medicare, and private insurance. For the uninsured, a sliding fee scale is available based on income.</p> <p>The population of Cuba (Sandoval County) is 736. 60.34% of the residents are Hispanic and 26.7% are Native American. The median age is 32 and per capita income is \$11,192. There are 36.5% of families under poverty level.</p>

Step Into Cuba

In small, rural communities the opportunities for physical activity are often limited. The town of Cuba, NM has developed an innovative program, called Step into Cuba, to encourage the community to get out and walk.

Cuba’s population faces high rates of obesity, diabetes and cardiovascular disease, all of which can be reduced or prevented through physical activity. A community alliance, led by a local physician, partnered with other groups including New Mexico's CDC-funded Prevention Research Center to promote the development of pedestrian improvements including walking trails through the town, linking up with trails on land owned by the Federal government and ultimately the Continental Divide National Scenic Trail. Since 2008 Cuba has developed a network of over 20 miles of walking trails and sidewalks. The alliance has installed four kiosks and multiple brochure boxes with maps of places to hike. Events promoting hiking are also announced in the local newspaper. Surveys show that many in the community use the new sidewalks and trails to get out and walk.

When the Committee visited Cuba, the pride the residents take in their community and its trail system was evident. Dr. Richard Kozoll, the local physician, described an interesting difference in the use of parklands in rural and urban areas. In urban areas, people often use parks to get away from the crowd and find solitude. In Cuba, community members often gather to enjoy the trails they’ve created.

Santa Rosa, New Mexico	
Site Visit Host Organization	Guadalupe Regional Hospital
Brief Description	<p>Guadalupe Regional Hospital is what they now call a “micro-hospital” with only 10 beds. By partnering with a private primary care clinic, the public health office, and a dental FQHC branch the hospital serves as a model for collaboration in rural communities. The hospital has several telemedicine initiatives underway and host family practice residency rotations 8 months out of the year.</p> <p>The population of Santa Rosa (Guadalupe County) is 2,848. 81.16% of the residents are Hispanic, and the median age is 36. Per capita income is \$11,168. There are 18.9% of families under poverty level.</p>

New Medicare, Inc.

In addition to serving as critical health care facilities in rural communities, many non-profit hospitals also act as community anchor institutions—institutions that are rooted in their communities and, through long-term, strategic, place-based investments, work to improve outcomes related to the social determinants of health. At Guadalupe County Hospital, a county-owned hospital in Santa Rosa NM, a 501(c)(3) governing board called New Medicare, Inc offers several innovative practices for how small rural hospitals can fulfill their role as community anchor institutions.

One of New Medicare, Inc.’s most notable community benefits programs is a workforce development program in which it funds higher education scholarships for Santa Rosa residents interested in nursing and other health professions. Due to the success of this program, the hospital has been able to hire nurses directly from their community and has not had to rely on outside agency nurses to supplement their staff.

In addition to the health professional scholarship program, New Medicare, Inc. has made several other investments in its community such as purchasing the land on which Guadalupe County Hospital was built, hosting lifeguard trainings, and putting new exercise equipment in the community’s public park. New Medicare, Inc. has also provided funds to the municipalities and the county for youth employment initiatives. Overall, New Medicare, Inc. has invested over \$1 million in the Santa Rosa community in the past ten years.

Laguna, New Mexico	
Site Visit Host Organization	Laguna Pueblo
Brief Description	<p>Laguna Pueblo is one of 19 native pueblos in New Mexico. Located 45 miles west of Albuquerque and comprised of six individual villages (Mesita, Laguna, Paguante, Paraje, Encinal and Seama). Residing within a traditional clan system, there are over 7,800 enrolled tribal members. Members of the Laguna Pueblo value their unique native culture and tribal heritage.</p> <p>Laguna (Cibola County) has a population of 1,241. 96.45% of the residents are Native American, and the median age is 38. Per capita income is \$10,980 and 28.6% of families are under poverty level.</p>

Partners for Success

PARTNERS FOR SUCCESS (PFS) is a division of the Laguna Department of Education, established to improve educational services to the community. The Laguna Department of Education (LDOE) established Partners for Success through the Indian Employment, Training and Related Services Demonstration Act, Public Law 102-477. Five programs were consolidated to form PFS: Workforce Investment Act (WIA), Johnson O'Malley (JOM), Adult Education, Employment Assistance, and Higher Education.

By applying PL 102-477, PFS increases the effectiveness and efficiency of these programs. The law gives tribes the opportunity to consolidate their federally funded programs into one fully integrated program to allow for greater flexibility in the delivery of services. One advantage of this consolidation is that tribal members no longer have to apply to separate programs to obtain the services they need. The Pueblo of Laguna is the first tribe in New Mexico to become a 477 participant.

Appendix C: Emerging Financing Vehicles and Payment Mechanisms¹

Financing Vehicle	Payment Mechanism: How does it work?	Time Frame	Investment risk Profile	Status \
<i>Payment models for Care Delivery</i>				
Global budget/capitation	Payment budget set for provider group for expected services (or subset thereof) for a given population. When spending is under budget, providers share the surplus; when spending is over budget, providers are responsible for extra costs. Similar to “capitation” model but more sophisticated means of risk adjustment, and financial results are linked with performance.	Short	Moderate (with experience) two-sided risk.	Population measures are clinical.
Shared savings	Group of providers receive incentive to reduce healthcare spending for expected services (or subset thereof) for a defined patient population. Providers receive a percentage of the net savings. Access to savings often contingent on meeting performance measures for care access, quality, or efficiency.	Short	Low to moderate risk (with experience); range of one- and two-sided risk options.	Implemented widely, but population health measures are clinical.
Care coordination fee	Providers receive payment specifically for care coordination, ²⁶ typically in the form of a per-member-per-month fee for HMO enrollees or the attributed population in a multi-payer advanced primary care practice (aka “medical home”).	Short	Low risk.	Implemented with clinical health measures.
Fee for service with pay for performance (P4P)	Combines traditional fee-for-service physician payment system with a financial incentive based on meeting a set of performance or reporting standards over a specified period of time.	Short	Low risk.	Gaining traction, but incentives are small.
<i>Multi Sector Funds</i>				
Blended: co-mingled	Funds from multiple funding streams are combined into one “pot.” Programs and services are financed out of that pot without distinction of where original funding came from	Varies with funded intervention	Challenge to meet reporting requirements of various funders.	Implemented in early care and education and social services. ²⁹⁻³²
Braided: coordinated targeting	Funds from multiple funding streams are combined, with careful accounting for how dollars from each funding source are spent.	Varies with funded intervention	Must follow restrictions, reporting requirements for each funding stream.	
Medicaid waiver	States apply for waivers to test new ways to deliver or pay for healthcare services through Medicaid or the Children’s Health Insurance Program.	Medium	Loss of waiver or financial penalties for not meeting goals.	>450 waivers across all 50 states and DC. ³³
<i>Innovative Financing Vehicles</i>				
Charitable hospital community benefit	For tax exemption, nonprofit hospitals must file report to IRS of their community benefit. ¹⁹ Activities that meet this requirement must improve community health or safety, meet at least one community benefit objective, and respond to a demonstrated community need (determined through health needs assessment conducted every 3 years).	Varies with funded intervention	Low to moderate risk.	As ACA coverage for uninsured rises, charity care should decrease, freeing resources for non-clinical investment.
Pay for success or social impact bond	Government agrees to pay an organization for an intervention if it meets specific, measurable goals in a set time. ³⁴ Organization secures funding from investor(s) to cover program costs and providers. Third-party evaluator assesses outcomes. If intervention achieved goals, government pays the implementing organization, which repays its investors. If not, government does not pay; investors are not repaid with public funds.	Medium	Moderate risk (with experience). To attract capital, organizations must mitigate risks and offer high financial returns.	Several states use social impact bonds; 12 others considering them. ³⁶ Early involvement in health sector.
Community development financial institutions (CDFIs)	CDFIs attract public and private funds—including from the Treasury Department’s CDFI Fund—to create economic opportunity for individuals and small businesses, quality affordable housing, and essential community services. ³⁷ All are private sector, market driven, and locally controlled. Closely tied to the Community Reinvestment Act.	Long	CDFIs reduce financial risks for projects.	About 1,000 nationwide, with most focusing in urban areas.
Prevention and wellness trusts	State or community raises a pool of money that is set aside for prevention and community health. Funds for trust often come from taxing insurers and hospitals, but can come from pooling foundation resources or redirecting existing government funds.	Varies with funded intervention	Medium risk; mix of innovation and evidence-based interventions.	Model is the philosophy behind Prevention and Public Health Fund.

¹ Hester JA, Stange PV, Seeff LC, Davis JB, Craft CA. Toward Sustainable Improvements in Population Health: Overview of Community Integration Structures and Emerging Innovations in Financing. Atlanta, GA: CDC;2015. CDC Health Policy Series, No. 2.

-
- ⁱ See National Advisory Committee on Rural Health and Human Services' previous policy briefs at <http://www.hrsa.gov/advisorycommittees/rural/publications/index.html>.
- ⁱⁱ Frieden, Thomas R. "A framework for public health action: the health impact pyramid." *American journal of public health* 100.4 (2010): 590-595.
- ⁱⁱⁱ 2010 Standards for Delineating Metropolitan and Micropolitan Statistical Areas. *Federal Register* 79 (8 December 2014): 72760-72872.
- ^{iv} Office of Management and Budget. *Revised Delineations of Metropolitan Statistical Areas, Micropolitan Statistical Areas, and Combined Statistical Areas, and Guidance on Uses of the Delineations of these Areas*. Tran. White House Executive Office of the President. OMB Bulletin No. 15-01 Vol. Washington, DC., 2015.
- ^v Meit, Michael, et al. "The 2014 update of the rural-urban chartbook." *Rural Health Reform Policy Research Center* (2014).
- ^{vi} Singh and Siahpush. "Widening Rural-Urban Disparities in Life Expectancy, U.S., 1969-2009. *American Journal of Preventative Medicine*, 46, no. 2 (2014): e19-e29. Poverty level measured as percent of 2000 Census county population below the Federal poverty level.
- ^{vii} National Advisory Committee on Rural Health and Human Services. *Mortality and Life Expectancy in Rural America: Connecting the Health and Human Service Safety Nets to Improve Health Outcomes Over the Life Course*. Washington, DC., 2015.
- ^{viii} Chetty, Raj, et al. "The association between income and life expectancy in the United States, 2001-2014." *JAMA* 315.16 (2016): 1750-1766.
- ^{ix} Bennett, Kevin J. "Vulnerable Rural Counties: The Changing Rural Landscape, 2000–2010." *South Carolina State Documents Depository* (2016).
- ^x A noncore county has no urban cluster of at least 10,000 people.
- ^{xi} Miller, Kathleen, and Bruce Weber. *Persistent Poverty Dynamics: Understanding Poverty Trends Over 50 Years*. Rural Policy Research Institute, 2014.
- ^{xii} O'Brien, Rourke L., Atheendar S. Venkataramani, and Alexander C. Tsai. "Economic Mobility and the Mortality Crisis Among US Middle-Aged Whites." *Epidemiology* (2016).
- ^{xiii} Woolf, Steven H., and Paula Braveman. "Where health disparities begin: the role of social and economic determinants—and why current policies may make matters worse." *Health affairs* 30.10 (2011): 1852-1859.
- ^{xiv} USDA, Economic Research Service using data from the U.S. Census Bureau's 2000 Census and 2013 American Community Survey.
- ^{xv} Hertz, Thomas, et al. "Rural Employment in Recession and Recovery." *United States Department of Agriculture Economic Research Service*, sec. Rural Economy & Population: 2014.
- ^{xvi} Olshansky, S. Jay, et al. "Differences in life expectancy due to race and educational differences are widening, and many may not catch up." *Health Affairs* 31.8 (2012): 1803-1813.
- ^{xvii} Bennett, Kevin J. "Vulnerable Rural Counties: The Changing Rural Landscape, 2000–2010." *South Carolina State Documents Depository* (2016).
- ^{xviii} See Brief Appendix for New Mexico Prosperity Works – Assets for Independence Program.
- ^{xix} Brown, Dennis M., and Eileen S. Stommes. "Rural governments face public transportation challenges and opportunities." *Amber waves* (2004).
- ^{xx} Probst, J. C., et al. "Mode of travel and actual distance traveled for medical or dental care by rural and urban residents." *Mode of travel and actual distance traveled for medical or dental care by rural and urban residents* (2006).
- ^{xxi} Shapiro, Isaac, et al. "Funding for Housing, Health, and Social Services Block Grants has Fallen Markedly Over Time." *Center on Budget and Policy Priorities* 2016.
- ^{xxii} Hester, James A., and Paul V. Stange. "A sustainable financial model for community health systems." *Institute of Medicine, Washington, DC, (March 6 2014-last update, [Online]. Available: <http://www.iom.edu/Global/Perspectives/2014/SustainableFinancialModel>)* (2014).
- ^{xxiii} Erickson, David, Ian Galloway, and Naomi Cytron. "Routinizing the extraordinary." *Investing in what works for America's communities* (2012): 377-406.
- ^{xxiv} Cantor, Jeremy, et al. *How Can We Pay for a Healthy Population?: Innovative New Ways to Redirect Funds to Community Prevention*. Prevention Institute, 2013.
- ^{xxv} Landey, Alana, Pam Winston, and Pierre Joseph. *Implementation of the Federal Rural IMPACT Demonstration*. U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation, 2016.
- ^{xxvi} Ibid. See Rural IMPACT Lessons Learned.