Overview
Recognizing that traditional models of health care delivery and payment often produce fragmented and costly care and poor outcomes for those with the highest needs, many reforms under the Affordable Care Act (ACA) focus on realigning payment incentives and integrating care. These reforms presuppose the existence of supporting infrastructure and capacity, including dedicated care management staffing and health information technology and exchange. With a focus on community-dwelling older adults in need of integrated physical, behavioral health services, and long term services and supports (LTSS), this brief reviews the opportunities and challenges these reform initiatives present for rural communities: How easily can current models for integrating care be adapted to a rural context and culture? How well do they account for gaps and variations in local delivery systems, capacity, and infrastructure? Which strategies offer the greatest promise for addressing the needs of rural residents? Because Medicaid is a primary source of funding for LTSS, we focus this inquiry on models serving Medicaid-eligible individuals; in some cases these programs may also serve individuals who are also eligible for Medicare.

Background
Fragmented and uncoordinated delivery of physical and behavioral health care and LTSS often produces costly and poor outcomes, such as avoidable hospitalizations and unnecessary institutionalization. For medically or socially vulnerable older adults, improving care management may require crossing disciplines and delivery systems, as well as creating linkages with services and supports well outside the usual boundaries of health care. For example, an older adult's ability to maintain health and live independently might be undermined by cognitive impairment, depression, limited access to transportation, disability, poverty, or other social, functional and medical issues that make it difficult to comply with a plan of care. Persons who are dually eligible for both Medicare and Medicaid are often particularly vulnerable, with a greater need for coordinated care. This group is more likely to have multiple chronic conditions, including physical, mental and cognitive conditions, along with high service use and poor outcomes. Coordinating supportive and in-home service providers with medical care can help to address some of these challenges and improve care.

Rural residents tend to have many of the social and medical vulnerabilities that make the need for integrated care management so important. Residents of rural communities tend to be older, in poorer health, and are more likely to smoke and to be obese and sedentary. People in rural communities tend to have lower incomes and have less formal education than their urban counterparts. Access to transportation can be a challenge, where travel distances are greater and public transportation options are fewer.

Key Findings
Introducing an integrated care model in a rural community requires an investment in building relationships with local providers and adapting to local culture and services.

Integrated care models that cannot adapt to the local delivery system are more likely to face resistance from local providers and those they serve and potentially duplicate or displace existing rural capacity.

Most models of integrated care management have an inherent bias toward larger organizations and infrastructure. Most are built on an investment in health information technology and other systems and capacities.

The potential success of any integrated care model is limited by gaps in the continuum of health care services and long term services and supports available in a rural community.

"Wraparound" integrated care models can fill gaps in existing care coordination capacity, offering a flexible approach that can adapt to a local rural delivery system.

An investment of public resources in shared supports can lower the cost of integrating care in rural delivery systems.

For more information about this study, contact Eileen Griffin at eileeng@usm.maine.edu

To view or download the full report, please visit the Maine Rural Health Research Center website at http://usm.maine.edu/muskie/cutter/mrhrc-publications
At the same time, integrating care is in many ways harder to achieve in rural communities because rural areas are more likely to have gaps in the underlying delivery system, with limited access to quality primary care, specialists, and, in some cases, hospital care. Additionally, the cost of infrastructure and capacity—including health information technology, workforce, and other necessary core components of the infrastructure—is spread over fewer people, making rural care more expensive.

We assessed four types of organizational models for delivering integrated care management. Each of these models has different strengths and drawbacks, weighing for and against implementation in rural areas.

**Physician Led Models:** In a letter to state Medicaid directors, the Centers for Medicare & Medicaid Services (CMS) describe a continuum of integrated care models that progresses from the Primary Care Medical Home (PCMH), to the network-supported PCMH, and then to Accountable Care Organizations (ACOs), with each stage of the continuum having progressively greater integration and a wider scope of responsibility for services, beneficiaries, and performance. These models can be implemented using Medicaid primary care case management as the mechanism for reimbursing primary physicians for managing care patient care. The Medicaid “health home,” a state plan option made available under the ACA, is another model for reimbursing providers that integrate care for people with chronic conditions; the health home may, but does not have to be, physician-led. Colorado's Accountable Care Collaborative (ACC) provides an example of a newly implemented physician-led model that is building a capacity to manage the full range of medical and LTSS services for Medicaid beneficiaries. The ACC initiative has three core elements: primary care medical providers (PCMPs), seven regional care collaborative organizations (RCCOs), and a statewide data and analytics contractor. The RCCO has an agreement with all of the PCMPs in its region and is expected to create a “virtual network” among all of the Medicaid providers in its region. Colorado describes its ACC program as a hybrid model, modifying the Medicaid program's primary care case management (PCCM) features to incorporate the features of accountable care models (e.g., shared savings). The RCCO is accountable for the effective delivery of care coordination, putting the burden on the RCCO to ensure that gaps in the care coordination functions of the existing delivery system are filled. The ACC model is being implemented statewide, with RCCOs responsible for care coordination for persons living in frontier counties in the state.

**LTSS Provider Led Models:** Some integrated care models place accountability for integrating care with an LTSS provider rather than a medical provider. The LTSS provider might be a case manager, a home care agency, or an area agency on aging. For example, in its proposal for integrating care for persons dually eligible for Medicare and Medicaid, Vermont proposes to contract with Integrated Care Providers (ICP) to provide enhanced care coordination for dually eligible beneficiaries with complex needs. The ICP would be selected through a procurement process and might already be a provider of mental health, substance abuse, developmental or long term care services, or specialized care coordination programs. Each participating beneficiary will select a primary care medical home and an ICP, with each assuming a different level of responsibility depending on the individual's needs. Vermont proposes to identify and stratify the highest cost and highest risk population and those whose needs span multiple service domains, letting the ICP know which of its beneficiaries need enhanced care coordination. A triage protocol will be developed to ensure seamless care across the medical home, Vermont's community health team, and the ICP.

Georgia's Service Options Using Resources in a Community Environment (SOURCE) program provides a third example of this model. A Medicaid-funded program, the SOURCE program is statewide, serving a range of rural communities. The SOURCE contractor is responsible for coordinating all health and LTSS services for members. The Georgia Medicaid program contracts with eight regional SOURCE providers; depending on the region, the SOURCE provider might be an area agency on aging, a nursing facility, an adult day center, or another type of provider.

**Rural PACE Programs:** The Program of All-Inclusive Care for the Elderly (PACE) model is an integrated care model designed to integrate care for frail older adults, age 55 and older, who are dually eligible for Medicare and Medicaid. The PACE program is the sole provider of all Medicare and Medicaid services which are included in a prospective capitated payment. Services are integrated using an interdisciplinary team approach (IDT). Typically, a PACE program must operate a center that provides primary care services; social work services; restorative therapies including physical therapy, occupational therapy; personal care and supportive services; nutritional counseling; recreational therapy; and meals. In 2006, CMS awarded 14 grants to fund development of rural PACE programs. Most rural PACE programs are located in a larger health care system, although some are located in a local area agency on aging, a home health care organization, or another kind of home and community-based service provider organization.

*Vermont's community health team is a multi-disciplinary, locally based team that works closely with the medical home to effectively expand its capacity to provide an enhanced range of services.

**Capitated payments are fixed pre-arranged payments to cover a specified set of services provided to a defined population over specified period of time. Under a capitated managed care program, the PACE program is at risk for costs exceeding the capitated rate.
**Managed Long Term Services and Supports (MLTSS):**
Saucier et al. identify three types of MLTSS programs including those that make capitated payments for (1) LTSS alone, (2) LTSS and other Medicaid services, with exclusions of one or more major service categories (e.g., institutional care, behavioral health care, prescription drugs, and physical health care); and (3) comprehensive Medicaid services, including LTSS and all other major service categories. Managed care is often difficult to implement in rural areas. Because of the challenges associated with developing a provider network, many Medicaid programs do not mandate enrollment into the managed care program in rural areas. Where competition for Medicaid managed care contracts is strong in a state, however, the Medicaid program has some leverage for pushing managed care organizations (MCOs) to expand to rural regions. States that have implemented Medicaid MLTSS include Arizona, Minnesota (both its Senior Health Options and Senior Care Plus programs), Tennessee, Wisconsin and New Mexico.

Nevertheless, relatively few states have implemented managed LTSS in rural areas. New Mexico is in the process of replacing its Coordinated Long Term Services (CoLTS) program, an MLTSS program that covers LTSS and general health care benefits, with Centennial Care, a comprehensive managed care program that will stratify its Medicaid population, providing intensive care coordination to those with the highest level of need. Both CoLTS and Centennial Care are statewide programs serving very rural areas.

An assessment of these rural integrated care models suggests four major issues discussed below: rural gaps in care management capacity, the cost of building an integrated care management infrastructure, the trade-offs associated with targeted versus population-based approaches, and choices of formal versus informal provider relationships.

**Filling Gaps in Rural Integrated Care Management Capacity**

Generally, the goal of integrating care creates an inherent bias toward larger organizations, more infrastructure, and greater organizational integration. Integrated care involves a comprehensive approach, with trained and dedicated staff applying defined protocols and processes. The process of transforming relationships among individual providers to a team approach oriented around the patient requires leadership, expertise, and skills.

Gaps in health information technology (HTI) and health information exchange (HIE) also present a significant hurdle for successfully integrating care. Individual care can be improved where the electronic health record and HIE are integrated across multiple points of care, or where HIE supports evidence-based decision-making at the point of care. Service cost and utilization data can be used to stratify a population to identify who will benefit the most from integrated care management, as a means of allocating resources to their best use. Performance reports enable providers to monitor and improve their performance, increasing their ability to manage care and accept financial risk. Incorporating health information and data analytics into care management requires both an investment in technology and the skills to use it. Integrated delivery systems are better equipped than smaller, unrelated providers to build the necessary care management infrastructure and to respond to payment incentives.

Different models have different strategies for compensating for this bias in rural communities, where the organizational capacity of providers is more likely to be stretched thin. The PACE program imports infrastructure and a pre-defined program into the rural community. The majority of PACE programs adopt a “hub and spoke” model, leveraging the infrastructure and capacity of an urban center in service to the rural site. The contours of the PACE program are prescribed by CMS regulation. While some requirements have been modified to allow adaptation to the rural environment and some provisions may be waived (e.g., seven rural sites have obtained permission from CMS to allow enrollees to retain their personal primary care physician rather than change to the PACE physician), typically PACE programs have not made major adaptations in response to existing patient-provider relationships. Nor does the PACE program have the flexibility to adapt eligibility or the scope of managed services to the local rural population. In many states alternative home and community-based services (HCBS) programs (e.g., Medicaid HCBS waiver programs) compete with PACE programs for enrollees. In addition, PACE programs are not immune to resistance from providers who are reluctant to make referrals to a provider seen as competition. The limited adoption of the PACE model in rural communities beyond the original grantee states suggests that the challenges of implementing a PACE program may outweigh the advantages in some areas.

Colorado’s Accountable Care Collaborative takes the opposite approach. While the RCCO is ultimately accountable for integrating care, it is charged with filling the gaps in the system rather than duplicating or displacing existing capacity. This approach emphasizes a heavy investment in the human capacity needed to integrate care, including relationship building, provider training, and information sharing. Colorado is actively trying to promote integration at the point of care among existing providers. It is important to note that Colorado’s model is still largely untested when it comes to integrating medical care and LTSS; it too has met resistance from urban and rural LTSS care coordination providers who see the RCCO as disrupting their model of care.
Lowering the Cost of Rural Integrated Care with Shared Supports

Investing in a shared provider support network, including shared training and resources, has particular advantages for rural providers, where economies of scale make investment by an individual provider unrealistic. For example, treating investments in HIT as an investment in a public utility can help to make the efficiencies of information sharing more accessible to small, under-resourced providers, improving information sharing at both the client and management level.

States that have invested in shared support networks take one of two paths. Colorado has chosen more of a top-down approach, importing these supports through the RCCOs. North Carolina, Vermont, and Maine have taken a bottom-up approach, providing the supports through community-based providers. Colorado’s approach has required a heavy investment in building local relationships and learning about local resources. However, the RCCO comes with much of the needed infrastructure and expertise already in place. The “bottom-up” approach is likely to have a head start on building relationships but may require a greater investment in developing the necessary infrastructure and the capacity and expertise of the local workforce. Which of these two paths is best may depend on the relative cohesiveness of the rural delivery system and its readiness for building the necessary capacity.

Targeted versus Population-Based Approaches

The models reviewed here have different strategies for defining the service population for integrated care management. Georgia’s SOURCE program, the PACE programs, and New Mexico CoLTS program are all targeted to a specific subset of the general Medicaid population. These targeted populations are defined by age and level or type of disability: all three programs are available only to persons requiring an institutional level of care, with access to the PACE program limited to older adults and the SOURCE and CoLTS programs also serving persons with disabilities in other age groups. Targeting a specific service population allows the accountable entity to specialize, tailoring its care coordination to the specific needs of the target group. However, in a rural area, a too narrowly targeted program may keep enrollment low, making it difficult to serve a sufficient number of beneficiaries to justify the investment in integrated care management. Rural PACE programs, which pull their enrollees from a defined geographic area, are particularly challenged to maintain sufficient enrollment.

Colorado’s Accountable Care Collaborative and New Mexico’s not yet implemented Centennial Care program both take a population-based approach to identifying the population to be served by their integrated care

system. In these models, each beneficiary is assessed and intensive care management is provided to those individuals where it is likely to be most cost-effective, rather than based on a specific age or disability. For example, in the case of Centennial Care, eligibility for the highest level of integrated care management is based on medical complexity or fragility, excessive emergency room use, a mental health or substance use condition that causes high functional impairment, untreated substance dependency, significant cognitive deficits, contraindicated pharmaceutical use, or persons living in the community requiring assistance with at least two activities of daily living or instrumental activities of daily living.

Depending on the model, it is possible that a population-based approach might sacrifice some of the specialized expertise that a smaller, targeted program would offer. However, in a rural community, a population-based approach might be more likely to amass sufficient number of enrollees to support integrated care management. With the right level of shared practice support, a population-based model may also be the most realistic and effective means of influencing provider practice in rural communities, and health care payers interested in influencing provider behavior will have a greater impact when more of the provider’s patients are involved.

Formal versus Informal Relationships among Providers

The financial and legal levers for holding providers accountable for delivering comprehensive, integrated care vary by model. The PACE program offers the greatest level of control (and accountability), holding the PACE provider responsible for the complete range of Medicaid and Medicare physical and behavioral health and LTSS for its service population. An MCO operating under New Mexico’s CoLTS program is both accountable for coordinating a broad range of services and has control over payment for those services, at least for beneficiaries receiving their services through Medicaid only (and with the exception of behavioral health services which are provided through another entity).

The RCCO operating under Colorado’s Accountable Care Collaborative is also responsible for coordinating a broad range of services but, unlike an MCO, does not have the same leverage over all of the providers necessary for their success. In Colorado’s model, the RCCO has formal contracts with the primary care medical provider but does not have formal contracts with other providers. It facilitates integrated care through its own care managers and influences provider behavior through information, training, and relationship building. In Georgia’s SOURCE program, the SOURCE contractor has a provider panel including primary care and LTSS community providers, but does not have formal relationships with hospitals, specialists, or other providers. In both cases, the success of the care manager depends on informal partnerships.
Comprehensive, formal provider networks generally permit greater leverage and influence over provider behavior, in rural communities. Their absence in rural communities, where collaborative and interdependent relationships are often a necessity, may be less important than in larger communities where competition and service options are greater.

**Policy Considerations**

**Adapting to a Rural Context.** Implementation of integrated care management in rural areas needs to be incremental, respectful of the unique characteristics of the local community, and cognizant of the limitations of the model and the delivery system in which it operates. Integrated care models in a rural community require an investment in building relationships with local providers and adapting to local culture and services. Integrated care models that cannot adapt to the local delivery system are more likely to face resistance from local providers and those they serve and potentially duplicate or displace existing rural capacity.

**Addressing Gaps in Rural Capacity.** While models of integrated care management have an inherent bias toward larger organizations and infrastructure, including HIT, “wraparound” integrated care models can fill some of the gaps in existing care coordination capacity, offering a flexible approach that can adapt to a local rural delivery system. Public investment in shared supports can lower the cost of integrating care in rural delivery systems. However, even the most flexible wraparound model of integrated care management cannot compensate for certain gaps in infrastructure, including provider-level access to HIT and HIE, and provider-level staff trained to make the most of the tools and resources that support integrated care.

Similarly, any model of integrated care rests on the underlying continuum of health care and LTSS available in a rural community. Where gaps in the care continuum cannot be filled, the ability to improve health outcomes and support independent living for older adults may be limited. Creative care management staff and a flexible benefit design may help to compensate for some workforce shortages; a lack of access to needed services and supports will continue to present a barrier to optimal care and outcomes.

**Promising Models.** With these caveats in mind, policymakers interested in implementing integrated care management in rural areas may want to explore:

- **Alignment and adaptation of Medicaid and Medicare financing options to fit the rural context.**

  For older adults, integrated care often involves Medicare financing, and CMS, through the Medicare-Medicaid Coordination Office created under the ACA, is currently leading an initiative to integrate Medicare and Medicaid financing for persons who are dually eligible. As illustrated by the models reviewed here, it is especially critical in rural areas that provider payment incent or pay for the added level of effort associated with integrating care. CMS currently promotes a variety of Medicaid state plan options and waiver authorities that allow states to compensate providers for integrating care, including primary care case management, health homes, capitated managed care and other options. Each of these options comes with different requirements and constraints that may or may not adapt well to the needs of specific rural communities.

- **Strategies for incenting and supporting the development of shared care management supports for providers.**

  Shared care management networks have been characterized as a “public utility” meriting the investment of public resources. Investments in these “utility” services might include sponsoring a shared care coordinator across multiple practices, sponsoring learning collaboratives for disseminating information, creating linkages between hospitals and medical homes so that a medical home provider is notified when its patient is admitted, or using claims data and other sources to provide primary care practices with information about their patients’ service utilization.

States have used different strategies for financing and supporting these shared care management systems, including shared savings accrued under demonstrations (e.g., §1115 waivers), increased rates paid to MCOs so that the MCO provides practice supports or provider incentives, purchasing the supports through a vendor or through their External Quality Review Organization, or another strategy. Several CMS-funded initiatives have also supported some of these upfront investments. In addition, federal grant programs targeted to rural areas (e.g. the Medicare Rural Hospital Flexibility Program, Rural Health Network Development Program, Rural HIT Network Development Program, and the Rural Health Care Services Outreach Program) may be able to fill gaps in key capacity areas such as network development, training, and HIT development.

**ENDNOTES**


6. At a minimum, primary care, hospital care, medical specialty services, prescription drugs (including Medicare Part D drugs), nursing home services, nursing services, personal care services, emergency services, home care, physical therapy, occupational therapy, adult day health care, recreational therapy, meals, dental care, nutritional counseling, social services, laboratory/x-ray, social work counseling, end of life care and transportation.


