

Shaping the Health and Long-Term Services and Supports Infrastructure Serving Older Adults:

Historical Trends and Future Directions

by Julie Fralich

Julie Fralich provides a detailed overview of the confluence of demographic and policy changes shaping the future of Maine's long-term care services and supports (LTSS) system. She notes how policies are driving a shift from nursing facility-based services toward home- and community-based services and describes the challenges Maine faces as it tries to make living at home a viable option for more older adults.

Over the last few decades, federal and state policies have been driving a shift away from nursing facility-based long-term services and supports (LTSS) toward home- and community-based services (HCBS). This process was accelerated by *Olmstead v. L.C.*, a landmark civil rights decision handed down by the Supreme Court in 1999, requiring that individuals with a disability receive public services in the most integrated settings appropriate for their needs. In the coming decades, as Maine's aging demographics generate increasing demand for LTSS, Maine faces a number of significant challenges as it tries to make living at home longer a viable option for more and more older adults who need assistance to do so. This article reviews the confluence of demographic and policy shifts that will shape the future of Maine's LTSS system.

BACKGROUND

Long-term services and supports is a term that generally refers to services provided in institutions, such as nursing homes and facilities for people with intellectual disabilities, and in other settings, such as group homes, assisted living facilities, adult family homes, adult daycare settings, and in one's own home. (See glossary for definitions of terms used in the article.) LTSS are financed primarily with public dollars through the Medicare and Medicaid programs. Private funding

for LTSS is not a sustainable option for most Maine people. The median annual private-pay costs for nursing home services totals 303 percent of median household income for persons aged 65 and older, while the median annual private-pay costs for home care totals 96 percent of median household income for the same age group (Reinhard et al. 2014).

Unpaid family caregivers provide the greatest share of LTSS. In 2013, national spending on LTSS was \$310 billion, with Medicaid paying for 51 percent of total expenditures; other public payers (such as Medicare) paying for 21 percent of care; private insurance covering 8 percent; and out-of-pocket expenditures representing 19 percent of total payments (Reaves and Musumeci 2015). Medicaid, the primary payer of institutional and community-based LTSS had outlays totaling over \$123 billion, or 28 percent of total Medicaid expenditures in 2013.

In Maine, Medicare and Medicaid (MaineCare) expenditures for older adults and adults with disabilities totaled over \$629.5 million in 2010. This included all hospital, medical, behavioral health, long-term services, and MaineCare pharmacy costs. Of this, approximately \$447.7 million or 70 percent was paid by MaineCare and 30 percent by Medicare. Nursing facility costs represent the greatest share of spending at \$272.3 million, followed by costs in residential care settings of \$96 million, and acute care hospital costs of

Glossary

Activities of daily living (ADL) and instrumental activities of daily living (IADL). ADLs are activities related to personal care and include bathing or showering, dressing, getting into or out of bed or a chair, using the toilet, and eating. IADLs are activities related to independent living and include preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, and using a telephone.

Adult day health services. Adult day health services are health and social services provided to promote optimal functioning, provided in a community-based setting. Adult day health services are sometimes referred to as “adult day care.”

Adult family care home. Adult family care homes are residential care services provided in a residential style home for eight or fewer residents. Residents may receive personal assistance, personal supervision, care management, and nursing services when medically necessary.

Adult foster home. Adult foster homes are residential care services provided in group settings of up to six residents. Rooms may be semi-private bedrooms, with a common living and dining area shared with the provider’s family. Residents receive care coordination, transportation, and nursing services when medically necessary.

Assisted living. Residents live in private apartments with access to common dining and may receive personal assistance, care management, medication administration, and nursing services.

Capitated payment. A capitated payment is a fixed amount of money paid in advance to a managed care

organization per individual (e.g., a per member per month payment rate) to cover a defined set of services that an individual may use over a defined period of time. The managed care company is at risk for any service costs that exceed the capitated payment.

Federal medical assistance percentage (FMAP). FMAP is the federal government’s share of expenditures for Medicaid services; it varies by state based on a state’s per capita income as a percentage of national per capita income.

Home and community-based waiver. An HCBS waiver is a waiver of certain federal Medicaid requirements, granted by the Centers for Medicare and Medicaid Services (CMS) under §1915(c) of the Social Security Act, that allows states to provide home- and community-based services as an alternative to institutional services (e.g., nursing facility services), for individuals requiring an institutional level of care.

MaineCare. MaineCare is the name for Maine’s Medicaid program, a public health insurance program administered as a state and federal partnership, through the Maine Department of Health and Human Services.

Residential care. As used in this article, residential care refers to services provided in facilities reimbursed as private nonmedical institutions under Section 97 of the MaineCare Benefits Manual (10-144 CMR Chapter 101, MaineCare Benefits Manual) that are case mix reimbursed and primarily serve older adults. Case mix reimbursement indexes payment based on a resident classification system that reflects residents’ assessed conditions and the resources required to care for them.

\$75 million. Other MaineCare and Medicare home and community-based costs totaled \$37.9 million (McGuire et al. 2012).

Older adults and younger adults with disabilities are most likely to be covered by both Medicare and Medicaid. In 2010, 83 percent of the 14,855 MaineCare members who were 65 and older, or younger with a disability, were eligible for both Medicare and Medicaid services. People with dementia and/or impaired decision making are more likely to use long-term services and supports than

those without dementia, particularly residential and nursing facility services. In 2010, approximately 57 percent of all MaineCare LTSS users had some form of dementia or impaired decision-making skills. The proportion of people with dementia increases with each higher level of care. In MaineCare-funded residential care facilities, almost half of the residents had dementia, and in nursing facilities, nearly two-thirds of the residents had dementia (Fralich et al. 2013).

EMERGING TRENDS

Consumer Preference for Services in the Home

It is well known that older adults prefer, if possible, to receive long-term services and supports in their homes. Furthermore, more people with disabilities are living in the community, even those with higher levels of disability (Redfoot and Houser 2010).

A survey by the AARP Maine of registered Maine voters over 50 found that most respondents indicated that it was extremely or very important to remain in their home as they age. Eighty-four percent of voters age 50 and older in households earning less than \$20,000 say it is extremely or very important to them to be able to remain in their homes as they age. Recent studies have also shown that the preference to remain at home depends on the level of functioning and health status of individuals. People with low levels of functional impairment have a greater preference for care at home; that preference weakens as the level of disability increases and for people with more severe dementia (Guo et al. 2015).

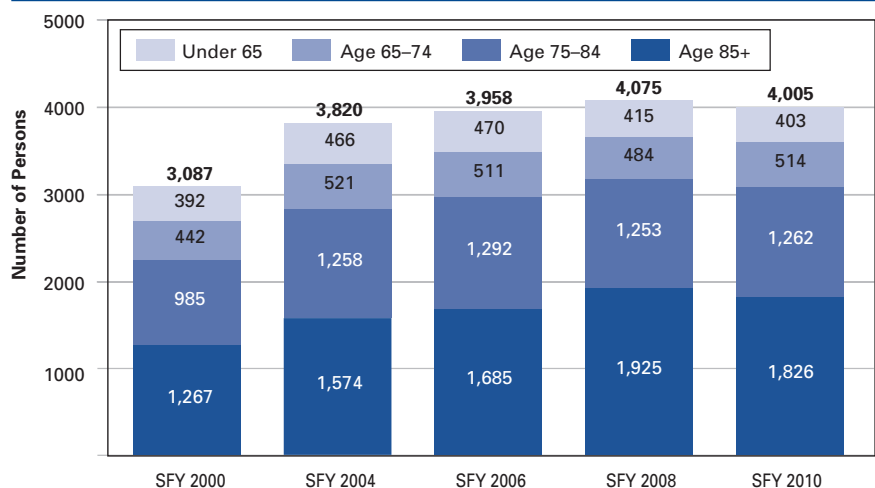
Although Maine has a comprehensive array of MaineCare- and state-funded home care services, the number of people using any one of those services on average in a month remained relatively constant from 2000 to 2010, with great variations among the different types of services. The largest increase in home care services occurred with the use of private duty nursing/personal care services, where the number of people using personal care services increased from 735 in 2000 to 1,272 in 2010. From 2006 to 2010, use of state-funded home care services (for low-income people who do not meet the Medicaid income threshold) declined approximately 23 percent, but the use of homemaker services increased by 95 percent (Fralich et al. 2012). This program is driven by the availability of state funds and often has wait lists that will influence access to these services, and thus their use.

Increasing Use of Assisted Living and Residential Care Services

The use of residential/assisted living services has been increasing dramatically in Maine and nationally. In the last 20 years, assisted living facilities have emerged as an important option for housing and services for older adults. The model of housing and service options in assisted living varies widely across the country. The Assisted Living Quality Coalition was formed, in part, to provide some consistency within the industry and developed the following definition of assisted living as “a congregate residential setting that provides or coordinates personal care services, 24-hour supervision and assistance, activities and health related activities” (Stevenson and Grabowski 2010: 42). Growth in this sector has been driven largely by consumer preference and has occurred with little or no government financing or regulation. As a result, assisted living facilities are located disproportionately in areas with higher educational attainment, income, and housing wealth (Stevenson and Grabowski 2010).

States have been cautious in expanding Medicaid coverage for services in assisted living facilities. Unlike care in nursing homes, Medicaid cannot pay for room and board expenses in assisted living facilities. States pay for assisted living costs (other than room and board)

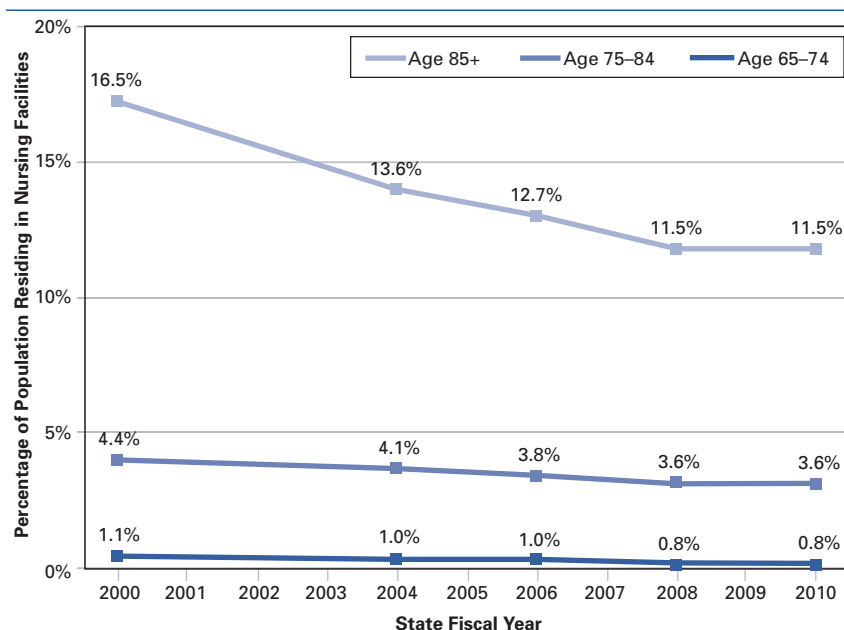
FIGURE 1: **Monthly Average Number of Residents in Residential Care Facilities Receiving MaineCare**



Bold numbers = Total number of residents for whom age is known

Source: Fralich et al. (2012)

FIGURE 2: Change in Percentage of Maine Population Residing in Nursing Facilities, by Age Groups



Source: Fralich et al. (2012)

under a Medicaid waiver or under the Medicaid state plan. Maine also uses state dollars to reimburse for services at assisted living facilities. To the extent there is oversight of the quality of services provided, it remains largely within state purview.

In Maine, use of MaineCare-funded residential care facilities increased significantly in the 10 years from 2000 to 2010. As shown in Figure 1, the number of people over age 85 who lived in a MaineCare-funded residential care facility increased 44 percent, from 1,267 people in 2000 to 1,826 older adults in 2010.

Decreasing Use of Nursing Facilities

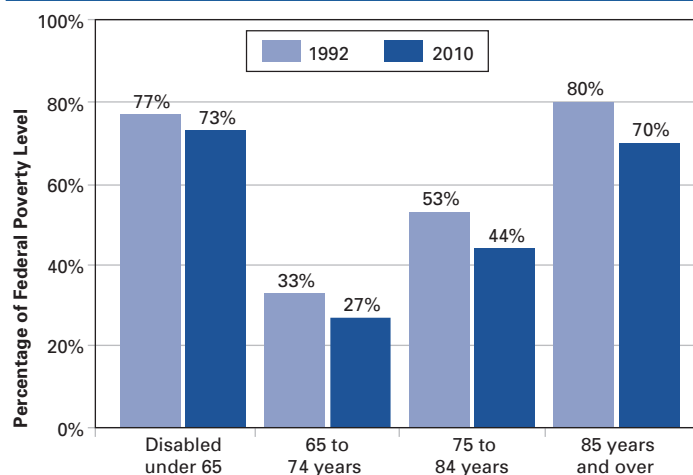
At the same time that the use of assisted living and residential care facilities has grown, the use of nursing homes has declined, largely because Maine has tightened the medical eligibility criteria for accessing nursing facility services. The number of nursing home residents per 1,000 people aged 75 over has decreased substantially nationally and in Maine. Between 1997 and 2007, the nationwide number of nursing home residents per 1,000

people age 75 and over fell by 19.9 percent (Weiner, Anderson, and Brown 2009). In Maine, the number of nursing home residents declined 15 percent from 2000 to 2010, even when the population age 65 and over increased 15 percent (Figure 2). For the oldest old, i.e., persons age 85 or above, Maine nursing home use rates fell from 16.5 percent in 2000 to 11.5 percent in 2010 (Fralich et al. 2012).

Decreasing Rates of Functional Disability

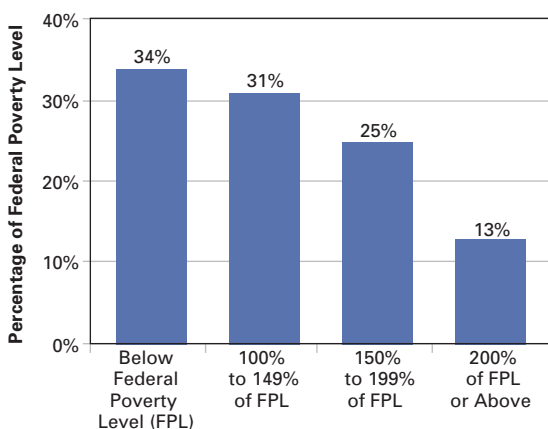
There have also been dramatic improvements in the overall health and physical functioning of older adults in the last 20 to 25 years. Between 1992 and 2010, a survey of national Medicare beneficiaries, found that the percentage of people over age 85 with either an instrumental activity of daily living (IADL) or activity of daily living (ADL) need fell from 80 percent to 70 percent (Figure 3). Similar trends

FIGURE 3: Percentage of Medicare Beneficiaries in United States with IADL or ADL Need, 1992 and 2010



Source: NCHS (2014): Table 129

FIGURE 4: **Disability Rate in Maine by Income as Percentage of Federal Poverty Level**



Source: American Community Survey 2013 (<http://www.socialexplorer.com/data/ACS2013/metadata/?ds=American+Community+Survey+2013&table=B18131>)

were seen in the younger age groups as well (NCHS 2014). The literature suggests that these declines may be primarily a result of social and housing innovations as well as the expanded availability of assistive devices. Other contributing factors include investments in biomedical research, innovative and more effective therapeutic and preventive care, increasing levels of education, better nutrition, more emphasis on exercise later in life, and changes in smoking rates and alcohol use (Manton, Gu, and Lamb 2006).

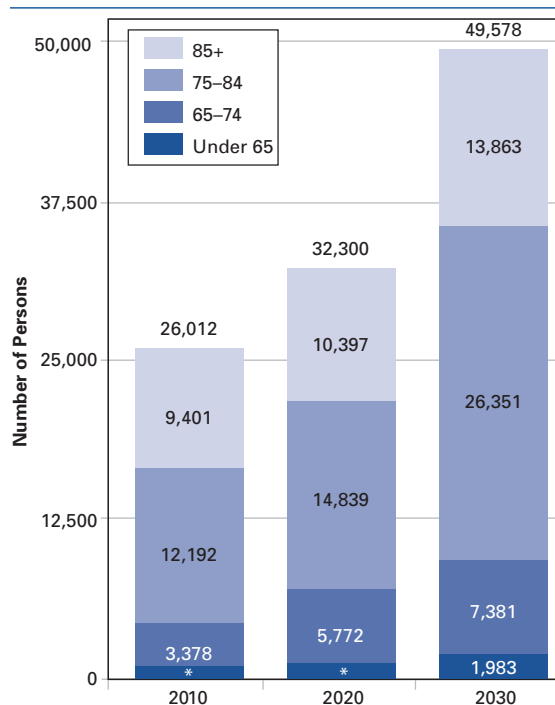
Increased Rates of Disability with Lower Income

The relationship between poverty and disability is another factor to consider in a state such as Maine. According to the American Community Survey, a higher proportion of poor adults are disabled compared to adults with incomes at least 200 percent of the federal poverty level. In Maine, 34 percent of adults 18 and over with incomes below the FPL reported having a disability while 13 percent of those with income at least 200 percent of the FPL reported having a disability (Figure 4).

Increasing Rates of Dementia with Older Population

Caring for people with dementia will continue to be a challenge in an aging state. As the number of people over age 65 continues to grow, the number with dementia

FIGURE 5: **Projected Growth in Maine's Alzheimer's Population, 2010 to 2030**



*Under 65: 2010=1,041, 2020=1,292

Source: Fralich et al. (2013)

will increase significantly. It is estimated that 18 percent of people between the ages of 75 to 84 have dementia and 32 percent of people over 85. Overall, approximately 12 percent of people over 65 and 4 percent of people under 65 have dementia (Hebert et al. 2013). The number of people in Maine with Alzheimer's, the most common type of dementia, is expected to almost double between 2010 and 2030 (Fralich et al. 2013). (See Figure 5.)

MAINE'S LONG-TERM SERVICES AND SUPPORTS SYSTEM

The greatest share of LTSS is provided by unpaid family caregivers. For the United States as a whole, the economic value of family caregiving was estimated at \$450 billion in 2009, greater than both the federal and state share of all Medicaid spending that year (\$361 billion) (Feinberg et al. 2011). For many older adults, the family caregiver has the most important role in

making it possible to continue to live at home. Unpaid caregivers assist with household tasks and personal care, handle bills, provide transportation, arrange for and coordinate services, and provide a host of other needed supports. While the contribution of family caregivers is great, the toll on the family caregiver is also great; family caregiving is now viewed as a public health concern (Feinberg et al. 2011).

Older adults who need assistance to live at home also depend on other important components of community infrastructure not typically thought of as LTSS: affordable and accessible housing and transportation services. In Maine, a largely rural state, public transportation is in short supply and the aging housing stock typically is not designed to support aging in place.

Maine's aging network (comprising five area agencies on aging dispersed across the state) also plays an important role by providing a range of other low-level interventions aimed at helping people to maintain their independence at home longer. These services, funded under the Older Americans Act, include transportation services, adult day care, caregiver supports, nutrition services, and other supportive services.

Maine also has a long history of providing an array of institutional, residential, and noninstitutional LTSS funded as part of the Medicaid State Plan or as an HCBS waiver benefit. The Medicaid state plan services include nursing facility, personal care, private-duty nursing, and adult day services. Personal care and nursing services are provided to individuals who live in a variety of settings, ranging from in-home to residential care and adult family care homes. Individuals who require a nursing facility level of care may also receive LTSS through Maine's HCBS elder/adult waiver program. An HCBS waiver program typically provides a wider array of services to individuals living in the community than those that can be provided under the Medicaid state plan. Maine's elder/adult waiver program provides home health services, personal care services, or self-directed personal attendant services, in addition to adult day health services, assistive technology, environmental modification, respite, service coordination and other services. Maine also spends over \$10 million per year on state-funded home care and homemaker services. Other state-funded services include adult day services, respite, and independent housing with services.

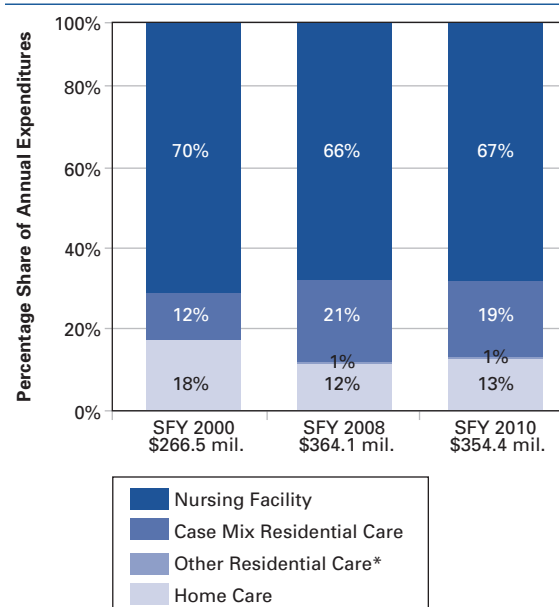
In 2010, annual MaineCare expenditures for LTSS services was approximately \$354.4 million; an increase

of 33 percent over the 10 years between 2000 and 2010. Figure 6 shows the share of LTSS expenditures for each major sector. In 2010 nursing facility expenditures constituted 67 percent of MaineCare LTSS expenditures compared to about 20 percent for residential care and approximately 13 percent for home care services (Figure 6).

Not surprisingly, the difference in expenditures is largely driven by differences in the average costs of these services. Since nursing facility care includes room and board as well as nursing services, the average Medicaid cost for a person for a month in a nursing home is higher than in the other settings. In 2010, the average monthly Medicaid cost for a nursing home stay was \$4,150; care for personal care and other services in residential care facilities was \$1,811; and care for people on the elder/adult waiver (for people who have needs similar to those in nursing facilities), was \$1,940 a month.

The distribution of people using nursing facility, residential care, and home care services looks different from the distribution of expenditures. In 2010, 39 percent of all long-term service users were in nursing

FIGURE 6: Annual MaineCare LTSS Expenditures* by Setting, SFY 2000, 2008, and 2010



*Includes MaineCare LTSS expenditures for older and younger adults.

Source: Fralich et al. (2012).

facilities; 27 percent were in some form of residential care; and 35 percent were receiving MaineCare-funded services at home (Figure 7). This represents a shift over the 10 years from 2000 to 2010.

In addition to services funded by MaineCare, Maine also uses state funds to provide home-based care and homemaker services for people whose income is too high to be eligible for MaineCare, but who have limited resources.

Underpinning Maine's formal or paid LTSS system is the direct service worker. Needed in all LTSS settings, the direct service worker in Maine's elder/adult programs provides assistance with activities of daily living or instrumental activities of daily living. Direct services workers typically are paid at an hourly rate and often do not have access to benefits such as health insurance or vacation and sick time through their employer. In a 2012 survey of Maine provider agencies employing direct service workers (across older adults and adult disability programs), the average hourly wage for a direct service worker was \$10.88. Among the provider agencies surveyed, 76 percent reported finding qualified workers as a significant workforce challenge; workforce turnover (58 percent) and employee motivation and worker

competence (both at 38 percent) were other top challenges identified (Westcott, Griffin, and Fralich 2012).

FEDERAL AND STATE POLICY

Because Medicaid is the primary funder of LTSS, to a large degree state Medicaid agencies, in collaboration with the state agencies responsible for administering programs for older adults and adults with disabilities, have a major role in establishing LTSS policy at the state level. State-level LTSS policy, however, is often responding to federal policy drivers, whether in the form of a regulatory requirement or financial incentives. I present here some of the federal and state initiatives underway in Maine and nationally to increase the use of home care services and improve the coordination of those services between the medical and long-term service sectors. I also discuss some of the other policy initiatives that are likely to shape the structure of LTSS in Maine and nationally.

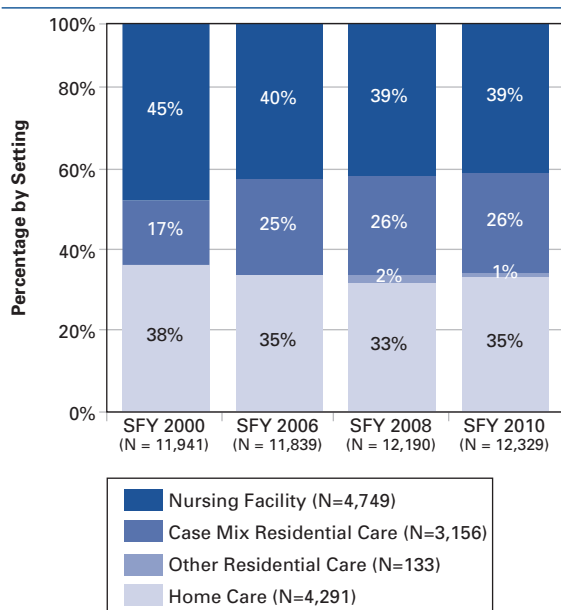
The Affordable Care Act

The Affordable Care Act included a number of provisions aimed at improving the availability of Medicaid-funded LTSS. These included demonstrations, enhanced Medicaid matching payments, and new Medicaid state plan options. Generally, states can decide whether and to what extent to participate in these demonstration opportunities and whether to adopt some of the new Medicaid policy options. A number of these initiatives have prerequisites for participation and/or have other requirements that must be weighed by states considering such policy changes. They include the following:

Balancing Incentive Payment (BIP) Program

The Balancing Incentive Payment (BIP) program provides enhanced federal matching funds to states that “make structural reforms to increase nursing home diversions and access to non-institutional LTSS. Enhanced matching payments are tied to the percentage of a state’s home and community based spending, with lower Federal Medical Assistance Percentage [FMAP] increases going to states that need to make fewer reforms” (<http://medicaid.gov/>). To participate in the BIP, a state must have spent less than 50 percent of total Medicaid expenditures on noninstitutionally based LTSS in FY 2009. Currently 21 states are approved to participate in the program, including Maine.

FIGURE 7: Average Monthly MaineCare LTC Users by Setting, SFY 2000 to SFY 2010



Source: Fralich et al. (2012).

To participate in the BIP, state agencies must agree to certain structural changes including a no-wrong-door single-entry-point system; conflict-free case management; and a core standardized assessment instrument (CMS 2011). According to the Maine Department of Health and Human Services (MDHHS) website, Maine submitted a BIP application in May 2012, and its application was awarded July 2012. Under the BIP program, Maine is developing a no-wrong-door website and a toll-free number where individuals can receive information about LTSS options in the state and schedule appointments with local agencies for assessments of need. Because the adult mental health system operates differently from the older adult system, the state is working to develop a common understanding of the flow of people using the no-wrong-door framework for all people using LTSS in Maine. The state is also working to establish protocols for removing conflicts of interest by care managers, to develop data for quality reporting, and to standardize the process to determine eligibility.

Money Follows the Person

The Money Follows the Person demonstration is designed to help eligible individuals to move from institutional to community settings. In Maine, the program is called Homeward Bound, and it provides assistance with transition from a nursing home to home for people who have been in a nursing home or hospital for at least three months and are receiving Medicaid benefits. A transition coordinator works with interested people to understand their needs, develop a plan, and provide help during the transition process. Certain services are available for people moving home including independent living assistance, household start-up, enhanced care coordination, technology services, and peer support. As of December 31, 2014, Maine had transitioned 40 people from nursing homes, 10 of whom were older adults and 19 were individuals with physical disabilities.

Health Homes

The Affordable Care Act also provided opportunities for states to develop a health home model of service delivery that would enhance the integration and coordination of primary, acute, behavioral health, and LTSS services. Medicaid-eligible individuals must have two or more chronic conditions, have one condition and be at risk of developing another, or have at least one serious and persistent mental health condition. Health home

services must include comprehensive care management, care coordination, health promotion, transitional care from inpatient to other settings, individual and family support, and referral to community and social support services (CMS 2010). Maine has implemented health homes for people with chronic conditions and people with mental health conditions.

Other Options through Coordinated Care

For many years, states have recognized the need to better manage the services provided to older adults and adults with disabilities and to improve quality and outcomes of care through better coordination and integration of Medicare and Medicaid services. Historically, states have relied on HCBS waivers to expand services and provide care management for people with higher levels of need (e.g., those who are eligible for nursing facility [NF] level of care). Maine has had a number of such waivers that provide an expanded set of services for older adults, adults with physical disabilities, and most recently adults with brain injury. People who meet the NF-level-of-care criteria are eligible for these services. These waivers are limited, however, in the people served and the services for which a care coordinator is responsible. Under a number of different federal authorities, states have increasingly moved to the implementation of managed LTSS programs for Medicaid-only services, and more recently to cover the integration of both Medicare and Medicaid services. In addition to providing a vehicle for enhanced care coordination, states are also using managed care to increase access to LTSS services, to expand financial eligibility for services, and to provide quality incentives to providers. Under a managed care program, the state contracts with a managed care organization using a capitated payment to provide a full array of LTSS, including care coordination services, to those needing LTSS. Managed LTSS may include institutionally based services and community-based services (Musumeci 2014). As of June 2015, 26 states had some form of a managed LTSS system and 12 states had signed memoranda of understanding (MOUs) to implement managed LTSS programs for people dually eligible for Medicaid and Medicare.

Other Changes in Policy

States have also been active in responding to several significant federal policy directives affecting home- and community-based services. Unlike some of the initiatives described earlier in this article, these are regulatory

mandates that are required for states to be in compliance with federal law. These will require changes to some aspects of the service delivery systems that states currently have in place.

New HCBS Requirements

Effective March 17, 2014, the Centers for Medicare & Medicaid Services (CMS) issued new rules that apply to certain Medicaid HCBS programs, including waiver programs.¹ These rules set standards for person-centered planning, conflict-free case management, and the nature of the settings in which HCBS may be provided.² The underlying intent of the rules is to ensure that home- and community-based services are not provided in settings that have institutional qualities or that isolate service recipients from the larger community. The standards address a range of issues including access to community activities, individual rights and autonomy, and choice of providers. To comply with the new HCBS standards, states were required to file a transition plan with CMS on or before March 17, 2015, with a proposed work plan and timeframes for coming into compliance with the new rules. With CMS approval, states have up to five years from the effective date of the rules to make any necessary changes. Maine's transition plan may be viewed on the MDHHS website of the Office of Aging and Disability Services.

New Department of Labor (DOL) Requirements

The U.S. Department of Labor (DOL) recently finalized rules making changes to wage and hour provisions that have significant implications for Medicaid personal care and delivery of other LTSS. Under federal law, many workers providing personal care services were exempt from minimum wage and overtime requirements because those services fell within what was considered *companionship* services. The new DOL rules significantly limit what can be considered companionship services and also limit who can claim such an exemption if it exists. These rules are expected to affect shared living and participant-directed programs because states may be considered joint employers for purposes of the minimum wage and overtime payment. These changes will also affect workers employed by home care agencies except for states such as Maine, where these workers are already covered by state labor laws.

These rules went into effect January 1, 2015, with a phased-in period for enforcement, but litigation in

federal court has delayed implementation. However, the U.S. Court of Appeals (D.C. Circuit) issued a unanimous opinion affirming the validity of the DOL rule; it will become effective 52 days after the August 21, 2015, opinion was issued. DOL had advised states that it will not grant additional time for coming into compliance once the litigation was resolved and that states are responsible for actively continuing planning activities, including securing additional funding, to come into compliance with these new requirements.

Nationally, the DOL estimates these new regulations will affect millions of homecare workers in the United States. They are also expected to significantly affect home care agency providers and shared living and participant-directed programs. Now that these rules have been affirmed, these changes are potentially of great significance to states in terms of cost and systems implementation.

As Maine's demographics and state and federal policy converge, Maine's LTSS system faces an extraordinary amount of pressure.

IMPLICATIONS

As Maine's demographics and state and federal policy converge, Maine's LTSS system faces an extraordinary amount of pressure. How can Maine meet these challenges?

Family and Community Supports

As the primary source of LTSS, strengthening and supporting the role of the family caregiver will be critical to supporting older adults at home. Recognizing and addressing the needs of the family caregiver as part of planning for care of older adults can help sustain the caregiver's ability to provide and prevent or delay nursing facility care. Access to respite services, including adult day health services, can help a caregiver balance caregiving with other family commitments and work.

Strengthening the community supports surrounding the individual is also critical. The AARP's Livable Communities initiative provides a template for creating communities that support livability at all ages, by

addressing walkability, transportation, housing, promotion of social engagement, and other strategies. Maine's AARP is bringing this concept to Maine through its network of age-friendly communities.

Maine's aging network and the community-based supports it provides serve as another important strategy for policymakers to consider. The services provided by the local area agencies play a role in preventing or delaying use of nursing facilities. Research has shown, for example, that increased spending on home-delivered meals (e.g., Meals on Wheels) is associated with fewer residents in nursing facilities who have low care needs (Thomas and Mor 2013).

Technology

Advances in technology hold both promise and challenges for the aging population. While technological advances are fast emerging, developing mainstream products that meet consumer preferences is still a challenge. A mix of technological, individual, and social factors come into play with the adoption of new technologies. Adoption depends not only on a technology's potential usefulness, but also its usability, affordability, and accessibility, and the level of confidence, reliability, and trust it earns. Involving the end user in the testing and development of technological innovations is critical for its success. Technology is being used to inform the use of space in urban design and living arrangements; to monitor physical activity and movement for people with dementia; to remotely monitor medication compliance and other health status; and to develop driver assisted technologies (Hudson 2014). (See sidebar for examples and Kim et. al [2015], for further discussion on research and development of technological innovations in Maine.)

Home- and Community-Based Services

There is no question that states will continue to expand access to and financing of home- and community based services as alternatives to institutional services. For some, it is a question of costs. Although studies of cost effectiveness of HCBS have been conducted with mixed and somewhat inconclusive results (Konetzka 2014), many argue that services at home are less expensive than services in a nursing facility. For others, the benefit of expanding home care services and the desire for such services by the consumer is enough to warrant expansion of access to such services and investment in the infrastructure, workforce, and pay scales necessary to support these services. Regardless, the mandate of

Examples of Technological Innovations

Existing and on the Horizon

eHealth—online access to personal health records, online health self-management tools, health websites.

mHealth—mobile devices for collecting health data to send to clinicians or caregivers.

Remote Monitoring—for monitoring safety (e.g., detecting falls), movement (e.g., sleep behaviors or medication adherence), or vital signs and other health indicators.

Smart Homes Systems—integrates appliances, lighting, and security systems with other technologies to control conditions within a home, or monitor environmental conditions and daily activity.

Cognitive Coaching and Robotics—virtual coaches to help people with memory loss by detecting when assistance is needed and providing that assistance (e.g., providing instructions on how to use a medical device or comply with a complicated medical regime). Robots may also be used to help with chores, or augment a user's capacity.

Source: Czaja (2015)

Olmstead has clearly put states on the path of supporting people in the least restrictive, most integrated settings possible. With the demand for HCBS likely to grow with Maine's aging baby boom generation, it seems that the question should not be whether such services should be available, but how to make such services available in a way that assures appropriate oversight and monitoring of quality, differentiation in services for people with varying needs, and support for an adequately trained and compensated workforce.

To be successful, Maine needs to continue to build on the efforts described in this article, including timely and appropriate access to HCBS, systems that support transitions from institutional to community settings, promotion of workforce initiatives, and the development of a greater and deeper array of community options. An increase in services provided at home will also need to be accompanied by improved coordination of medical and long-term services, improvements in

technology, and strong oversight of quality. These issues are complex and the challenges are daunting. For this reason, Maine must focus on providing strong leadership to ensure an efficient and effective management infrastructure that supports the development of policy, programs, partnerships, collaborations, and innovations that are critical to the success of its LTSS system.

The LTSS Infrastructure

Technology is not going to eliminate the need for a high-quality direct service workforce. Policymakers will need to address the shortage of qualified direct care workers needed to meet the increasingly complex needs of people now residing in community settings. People with dementia or cognitive issues, frail older adults who live alone or have no support system, and aging people with developmental disabilities will need low-cost options for a combination of housing with supervision and services. Although the institutional and skilled rehabilitative services will remain an important component of the LTSS system, converting some of the older bricks and mortar of aging institutions into more modern facilities will be challenging.

CONCLUSION

While federal policy will play an important role in shaping the future of Maine's LTSS system, efforts at the state and local level will define the extent to which Maine will be able to successfully support older adults living at home. The constraints of the state budget are likely to limit Maine's options. However, investing in low-cost interventions that can reduce or delay the use of high-cost institutional services may be an important short-term strategy for policymakers, as they come to terms with the larger questions about how to finance the institutional- and home-based services that will be needed in the future. 

ENDNOTES

1. These rules apply to Medicaid-funded HCBS authorized under §1915(c), §1915(i) and §1915(k) of the Social Security Act.
2. Final Rule — CMS 2249-F – 1915(i) State Plan Home and Community-Based Services, 5-Year Period for Waivers, Provider Payment Reassignment, Setting Requirements for Community First Choice, and CMS 2296-F 1915(c) Home and Community-Based Services Waivers.

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