Long-Term Care Financing Collaborative
*A project of Convergence
Center for Policy Resolution*

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A Consensus Framework for Long-Term Care Financing Reform

In 2012, a uniquely diverse group of policy experts and senior-level decision makers representing a wide range of interests and ideological views created The Long-Term Care Financing Collaborative. Our goal was to develop pragmatic, consensus-driven recommendations for a sustainable and affordable, public and private insurance-based financing system that better enables people of all incomes to receive high quality long-term services and supports. Our approach aims to enhance the independence and choice of those receiving care and support the family members and communities that assist them. This is the Collaborative's final report.

EXECUTIVE SUMMARY

The Long-Term Care Financing Collaborative is recommending a series of reforms aimed at expanding access to long-term services and supports (LTSS) for people of all incomes. We believe the current system of financing LTSS is inadequate, especially for those with high levels of need. It puts an enormous burden on family members and friends, often results in poor care, and frequently causes preventable harm that endangers recipients of care and their caregivers, and increases medical costs.

Today, more than 6 million older adults need this high level of care, a number expected to increase to nearly 16 million within a half-century. Millions of middle-income Americans drain their financial resources, place enormous burdens on family caregivers, and eventually turn to Medicaid for assistance. We believe the United States can do far better.

In July 2015, we released our principles for financing LTSS. Our goal was to create a system that would allow older Americans and younger people with disabilities to live as independently as possible, and with maximum autonomy and choice in the services they receive and the setting in which they receive them.[1]

The Collaborative seeks to improve financing to better support family caregivers, integrate health care with person- and family-centered services and supports, and increase access

to insurance while improving safety net programs. We believe these solutions must be fiscally sustainable. We aim to improve mechanisms for people with sufficient assets and income to save for and insure against LTSS needs and risks, and we recognize the importance of increasing public awareness about the need to prepare for LTSS costs.

In July 2015, we recommended ways to better support the families and communities that provide LTSS.[2] We proposed better integration of LTSS and medical care, greater support for paid caregivers and families, and enhanced support for communities and employers of caregivers.

In our final report, we make the following additional recommendations:

- A universal catastrophic insurance program aimed at providing financial support to those with high levels of care needs over a long period of time.
- A series of private sector initiatives and public policies aimed at revitalizing the long-term care insurance market to help address non-catastrophic LTSS risk. We also support efforts to encourage retirement savings and develop more efficient and innovative use of home equity to assist middle-and upper-income families finance LTSS needs for those risks that are not covered by catastrophic insurance benefits.
- A modernized Medicaid LTSS safety net for those with limited lifetime incomes who are not able to save for these care needs, as well as for those who deplete their assets paying for medical and long-term care costs. This includes more flexible public programs that can deliver care in the setting most appropriate to the needs of individuals.
- Stronger support for families and communities that are the bedrock for people receiving care at home and better integration of medical treatment and personal assistance. We described these two recommendations in our July 2015 report, Vision of a Better Future for People Needing Long-Term Services and Supports.

There is no single solution to the challenges we face. We believe that this package of reforms best fits those of all ages who need supports and services. It also best targets public resources to those who most need assistance—people with chronic conditions who face very long and costly periods of LTSS need.

Our proposals are primarily focused on assisting older adults with LTSS needs. However, we believe that any reform must also serve the needs of younger people with disabilities. We also believe transitions between insurance and safety-net programs must be seamless and must not leave middle-income people without access to either.

Recent research shows that about half of all seniors will need a high level of personal assistance before they die. They typically will need this care for two years at an average cost of nearly $140,000. However, behind the averages is wide variation: One in five older adults will need this high level of personal assistance for less than one year while 14 percent will need it for more than five years. For about 10 percent of older adults, the total cost of paid care will be less than $25,000, but for 15 percent the cost of care will exceed $250,000.

This pattern of risk is ideally addressed through insurance. Few Americans can save for catastrophic LTSS costs, nor should they. Yet, the current private insurance market has been unable to create a product that is priced to attract a meaningful number of middle-income consumers.

After careful consideration, we concluded that no voluntary insurance program is broadly affordable. Thus we recommend a universal catastrophic insurance program. One benefit of such a program is that it is likely to significantly reduce Medicaid's LTSS expenditures for older adults.

We recognize that such a catastrophic program has limitations. It does not finance care in the first years of need, which can be costly. Nor would the limited daily benefit we contemplate cover all lifetime costs for those with very high care needs. However, we expect that middle- and upper-income families will supplement this insurance with private savings, better use of home equity, and private long-term care insurance, which could be sold to supplement catastrophic coverage. Lower-income people will have access to improved Medicaid.

The Collaborative also acknowledges that there are many unanswered questions when it comes to LTSS financing. As a result, it recommends further research to better support stakeholder agreement and informed policy making.

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* Jonathan Westin, Stuart Butler, and Howard Gleckman founded the Collaborative in 2012. Collaborative Steering Committee members include Sheila Burke, Stuart Butler, Marc Cohen, Howard Gleckman, Don Redfoot, and Jonathan Westin.

INTRODUCTION

> *"Long-term care has been America's denial issue for too long. It has long been apparent that a genuine public/private approach is needed. The Collaborative mirrored in its work its belief that it will take consumers, providers, insurers and government working together to design a first time LTSS system that delivers and finances services. The diverse backgrounds and views of the members of the Collaborative provided the right ingredients for our principles to be presented. The Collaborative wanted to be more than just a new voice—it wants to be the catalyst that drives the issue of LTSS to the forefront of the American policy and political agenda where it belongs."*
>
> *-Bob Blancato, National Coordinator, Elder Justice Coalition*

Members of the Long-Term Care Financing Collaborative ("Collaborative") include policy experts, consumer advocates, and representatives from service providers and the insurance industry. We are former senior executive branch officials in both Democratic and Republican administrations, former congressional aides, and former top state health officials. Our goal is to offer an expanded vision of a better future for people who need LTSS and recommend paths toward LTSS financing policies that empower that future.

Convergence Center for Policy Resolution was selected to convene the Collaborative and facilitated our efforts to build trust, identify solutions, and form alliances for action. Convergence offered a neutral place for dialogue and effective, nonpartisan leadership to help us better understand each other's personal and professional interests and values. We reached consensus on a shared vision of a better future for people who need LTSS and principles to guide financing reforms. We coordinated with other LTSS financing initiatives to support new research that begins to answer key questions about LTSS financing. By agreeing to a vision, principles for reform, and shared facts, we have been able to push through long-standing ideological differences and come to consensus on recommendations in this report.

The Collaborative believes we need 21st Century financing for 21st Century lives. We are living longer and our preferences for how we receive services and supports are changing. Yet, our financing options remain stuck in the last century. Many Americans, including those who were solidly middle-income until they faced long-term chronic illness or injury, turn to Medicaid, a public safety net program. State governments, which share responsibility for Medicaid with the Federal government, are scrambling to meet Medicaid's expanding costs and address the policy implications of its huge share of state budgets.

This approach fails to protect middle income families from financial impoverishment. It discourages younger adults with disabilities from working, locking them into a lifetime of poverty. It precludes autonomy and choice of services. Its perverse financial incentives create obstacles to appropriate and coordinated health and LTSS care. Our current policies foreclose, for many, an option large numbers of Americans prefer: living independently in one's home and community as long as possible.

Few Americans are prepared for the risks of LTSS. Without financial resources, the burden of caregiving often falls on spouses or adult children, often daughters. There is an alternative: advance planning and prefunding, either by individuals or society, through some form of insurance or saving.

The Collaborative supports a hybrid public/private insurance approach to protect Americans against the risks of catastrophic LTSS costs. While we recognize there is no single "magic bullet" solution, a well-designed package of financing tools can better protect millions of us from the risk of impoverishment due to costs of meeting high-level LTSS needs.

We believe such a system should prevent gaps between Medicaid and private market insurance for those with middle-incomes. Insurance should mesh seamlessly with a strong safety net for low-income families.

In July 2015, we published *Principles for Improving Financing and Delivery of Long-Term Services and Supports*. We imagined a model that would shift to a financially-sustainable insurance-based system built on a framework of private and public reforms. Middle-income people could provide for their LTSS needs without impoverishment. Working-age people with disabilities could earn income and acquire savings without jeopardizing the services and supports they need.

This new design would support autonomy, choice of services, and the ability to live independently in one's home and community while receiving LTSS. It would make meaningful employment possible for working-age people living with disabilities, and would better integrate medical care with person-centered supports and services.

Our recommendations are based on this shared vision as well as on the best research available on long-term services and supports, including both data on current programs and economic modeling of potential alternatives.

THE PROBLEM

> *"America faces an enormous challenge in figuring out how to address and pay for the long-term needs of aging Baby Boomers and the generations that will follow them. We need to imagine ways to shift from a more welfare-based financing system to a primarily insurance-based system that meets the needs of individuals and their caregivers. We need to have an honest discussion of the obligations we have to each other."*
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> *-Stuart Butler, The Brookings Institution*

More than two-thirds of older adults will need some personal assistance before they die, and nearly half will have a high enough level of need that they would be eligible for private long-term care insurance or Medicaid.[3] More than 6 million older adults need that level of care today, and nearly 16 million will need this assistance in 50 years.

We pay for much of that care "out of pocket" from savings and retirement income and help from families. By mid-century, such spending will more than double as a share of the economy.[4] Yet these costs are far beyond the reach of most Americans and will result in increasing numbers turning to Medicaid for financial assistance.

Out of pocket spending for paid care is high, but it is dwarfed by the economic value of unpaid LTSS provided by families and communities. In 2013 alone, family and friends provided an estimated 37 billion hours of uncompensated LTSS for adults, worth up to $470 billion. This level of uncompensated care was more than three times what Medicaid spent on LTSS in 2013.[5,6]

The majority of unpaid family caregivers report having to reduce work hours or take unpaid leave.[7] A woman in her 50s who leaves a job to care for aging parents loses an average of $300,000 in lifetime income.[8] Unpaid family caregivers lose an estimated $3 trillion in lost lifetime wages and benefits.[9]

Unpaid caregiving costs employers, too. Estimates of lost productivity from absenteeism alone range from $17.1 billion to $33 billion annually.[10] Costs of turnover and schedule adjustments for caregiving workers add an additional $17.7 billion in costs.[11]

Women and LTSS

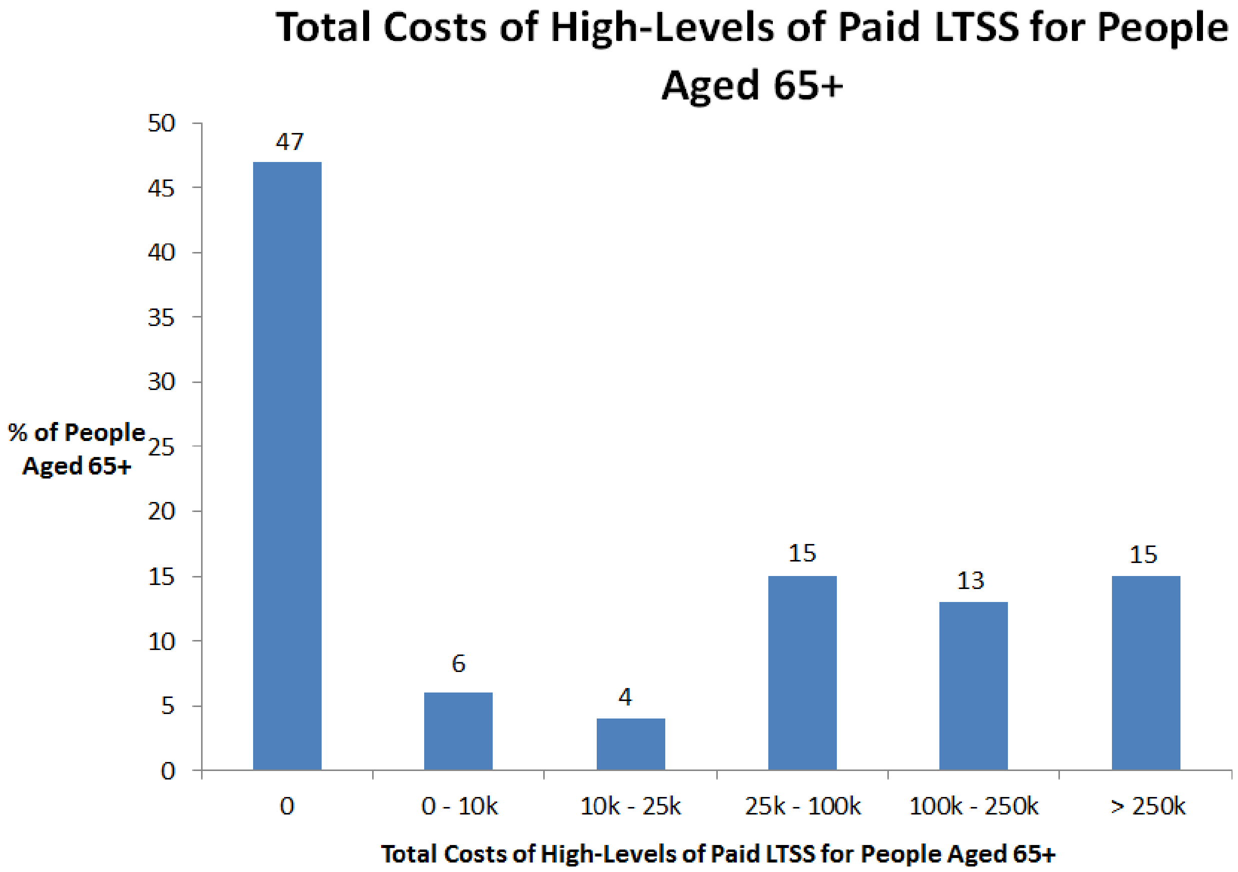
Whether they are receiving care or providing it, women are hardest hit by LTSS need and least likely to have the financial resources to pay for that care.

Nearly 60 percent of those who receive paid care are women.[12] Seventy percent of people receiving any assistance with activities of daily living are female. Two-thirds of long-stay nursing home residents are women, as are more than 60 percent of those receiving LTSS home health.[13]

Women live longer than men, and women's greater longevity means a greater chance of living some portion of life with disability. Overall, older women are likely to need high-levels of care far longer than men (2.5 years versus 1.5 years on average) and they are twice as likely to need it for five years or more (nearly 18 percent versus less than 10 percent).[14] Average total lifetime LTSS spending for older women is also double that for men ($182,000 versus $91,000). Low-income women are most likely to need high levels of care.[15]

At the same time, both unpaid and paid caregivers are likely to be women. Approximately 88 percent of direct care workers are female, with most serving as nursing aides, orderlies, and attendants.[16] While men increasingly provide unpaid LTSS to family members and friends, female caregivers usually perform the most difficult work, such as bathing and dressing, as well as medical and nursing tasks.[17] Women spend more time providing unpaid care and suffer the greatest economic loss, often reducing paid work hours or even quitting their jobs.[18]

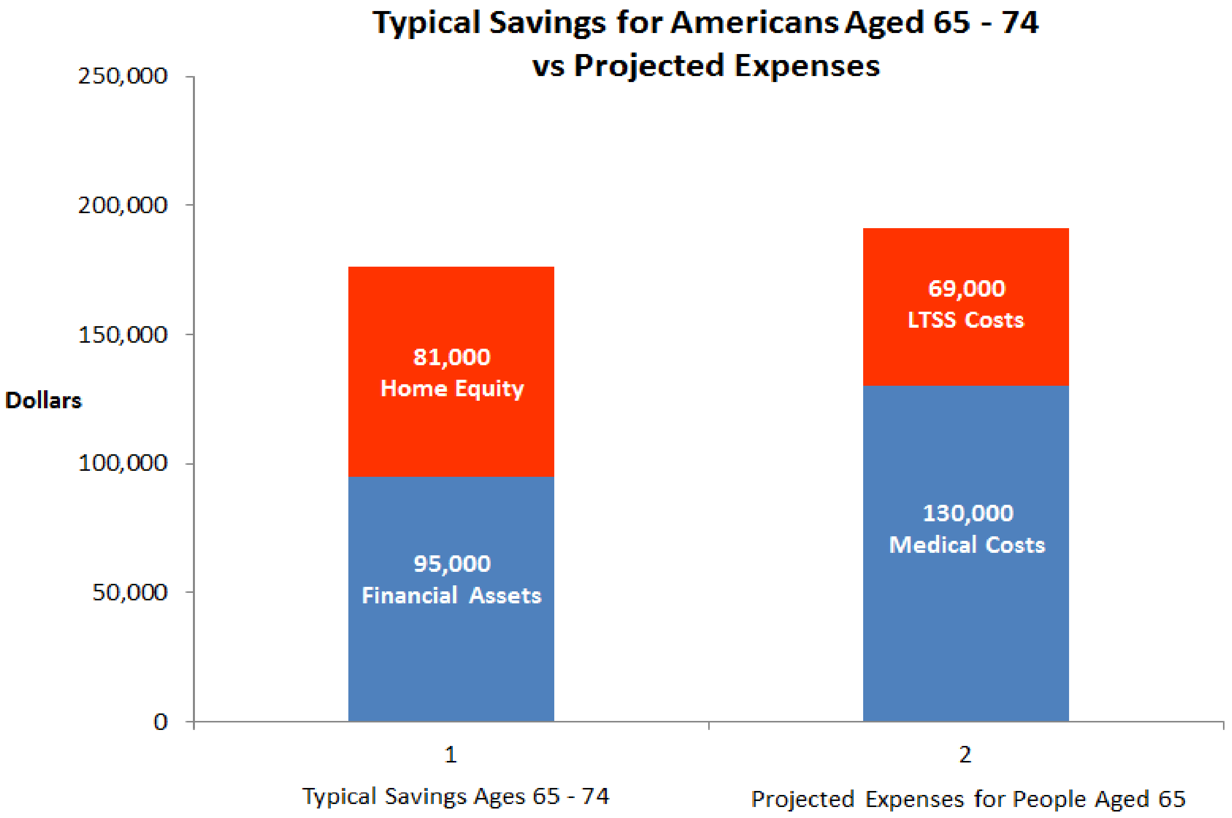
It is very difficult for a given individual to predict LTSS need after age 65, though we know that low-income people are more likely to have long spells of need than those with higher incomes. Half of those aged 65 or older will never have a high level of need for this care. One in five older adults will need this high level of personal assistance for less than one year while 14 percent will need it for more than five years. For about 10 percent of older adults, the total cost of this high-level of paid care will be between $1 and $25,000, but for 15 percent the cost of care will exceed $250,000.[19]



Individuals and Medicaid pay for most spending on high levels of LTSS. Individuals pay about 55 percent of these costs out-of-pocket, while Medicaid pays about 37 percent. Private LTSS insurance pays less than 5 percent. The likelihood of using Medicaid LTSS benefits falls sharply as income rises, as does the average amount of Medicaid benefits.

Private long-term care insurance plays a small role in financing LTSS. Many carriers have exited the market over the past decade and currently fewer than a dozen sell a meaningful number of policies. Sales of individual policies have fallen by 80 percent. Few private carriers will insure against risks of 10 years or more and increasingly are capping their risk at five years.

Similarly, few Americans have saved sufficiently for the costs of retirement. A typical American aged 65-74 has financial assets of $95,000 and home equity of $81,000[20], but retirement savings across all Americans varies widely. Someone turning 65 today would need to have saved about $130,000 to have a 90 percent chance of paying for all lifetime medical expenses (including Medicare premiums and out-of-pocket costs) plus an additional $69,500 for LTSS costs.[21,22] Thus, an average older adult can expect to spend his or her entire nest egg—and then some—to pay for only medical and LTSS expenses.



For those who can afford long term care insurance but do not choose to purchase it – generally Americans in the top three income deciles - savings is currently the primary vehicle for financing LTSS.[23] Yet only the most affluent Americans can afford to self-finance the costs of catastrophic levels of LTSS.[24]

LTSS FINANCING RECOMMENDATIONS

> *"Our families and our nation face a long journey that will test us in many ways. Any long journey requires a good map. That is what the Collaborative has provided. Members from different vantage points, diverse backgrounds, and with strong opinions have contributed their knowledge and mutual commitment to offering solutions to the problem of financing a system of long-term services and supports. These valuable guides should encourage opinion leaders and policymakers across the country to elevate LTSS financing as a priority."*
>
> *-Dennis G. Smith, Dentons US LLP*

The Collaborative has agreed on five key recommendations. They include:

- A universal catastrophic insurance program aimed at providing financial support to those with high levels of LTSS care needs over a long period of time.
- A series of private market initiatives and public policies aimed at revitalizing the long-term care insurance market to help address non-catastrophic LTSS risk. We also support efforts to increase retirement savings and more efficient and innovative use of home equity to assist middle-and upper-income families to finance LTSS needs that are not covered by catastrophic insurance benefits.
- An enhanced Medicaid LTSS safety net for those with limited lifetime incomes who are not able to save for their care needs and for those who impoverish themselves paying for medical and long term care needs. This includes more flexible public programs that can deliver an appropriate suite of services to those receiving care at home, and equal access to care in the setting most appropriate given individual needs, whether at home or in a care facility.
- Stronger support for families and communities that are the bedrock for people receiving care at home and better integration of medical treatment and personal assistance. We described these two recommendations in our July 2015 report we issued in our July 2015 report, Vision of a Better Future for People Needing Long Term Services and Supports.

"The Collaborative's catastrophic insurance concept meets several key policy objectives – most importantly that Americans would have some shelter from a core risk threatening their retirement and overall economic security. Addressing this "back end" risk would also provide needed relief to states by reducing Medicaid expenditures while leaving room for growth in the private insurance market to address front end needs in an affordable way. Clearly, when compared to a number of alternatives considered, the catastrophic insurance design -- which is both affordable and fiscally sustainable – met the greatest number of policy goals on which there was a consensus."

–Marc Cohen, LifePlans, Inc.

Expanding Access to Catastrophic LTSS Insurance

The Collaborative supports a strong government role in expanding protection against catastrophic risk. Such a proposal might require consumers to pay for the first two or three years, after which they'd receive a limited daily benefit for life. While this benefit would not likely cover all LTSS costs for those with very high levels of care needs, it would provide a solid base to help pay these expenses.

We recommend that the definition of "catastrophic risk" should be tied to an individual's lifetime income, and that eligibility thresholds be designed to avoid creating disincentives to saving. In such a model those with lower lifetime incomes would be eligible for catastrophic benefits sooner than those with higher incomes. Research exploring such a phased catastrophic insurance appears promising, though the concept remains at an early stage of development.

The benefit should offer a choice between discounted cash or services.

We reviewed two possible alternatives for financing catastrophic LTSS insurance, including a universal design and a voluntary alternative. Universal catastrophic insurance produces the greatest increase in enrollment, provides new resources to replace or add to out-of-pocket spending, and reduces Medicaid LTSS spending relative to the current baseline obligations.[25] The amount of high-level LTSS need over long durations will continue to grow. We believe LTSS expenditures made within an insurance framework will provide better outcomes for people who need LTSS. A universal catastrophic design is also the design that is most likely to meet the test of fiscal sustainability.

Because universal insurance spreads risk across the entire population, it avoids the challenges of adverse selection, where consumers who are likely to claim benefits also are more likely to purchase coverage, thus driving up premiums. As a result, universal insurance appears to offer broad-based insurance at a comparatively low lifetime cost.

> *America's most expensive option is doing nothing.*
>
> -Gretchen Alkema,
> The SCAN Foundation

Voluntary catastrophic insurance, by contrast, presents major technical challenges. Because of the risk of adverse selection, premiums would remain quite high, thus severely limiting enrollment. It is possible that a strong set of incentives could encourage wider participation, but research to date has not yet identified those incentives, and most agree that it would be difficult to make such a program work.

In our view, the most promising approach is a universal catastrophic program fully financed by a dedicated revenue source.

Such a plan raises several key design issues:

Financing: A program could be financed with a payroll tax, an income tax, a new tax such as a Value-Added Tax, premiums, or some combination. Each has advantages and disadvantages.

A traditional payroll tax is the mechanism the United States uses to fund Social Security and some of Medicare. However, it would apply to many lower-paid individuals for whom Medicaid already provides a form of catastrophic protection. This problem could be addressed if the payroll tax is applied only to incomes *above* a certain level. This would contrast with today's Social Security payroll tax that is applied only to incomes *below* a designated level.

An explicit income tax surcharge or other dedicated tax is another financing option. There are many possible versions of a dedicated tax. One would be a tax imposed on a broader income base (all income rather than just wages), which would be more progressive.

Structure: Another issue is the structure of the program itself. It could be designed as an open-ended entitlement, a "capped" entitlement, or as appropriated funding. Many members of the Collaborative are concerned about the risk to future deficits and debt of an open-ended entitlement. Thus, a more promising approach would be to set a budget for a fixed amount of time, perhaps two or three decades, with appropriate adjustments at designated intervals. In Germany, for instance, universal LTSS insurance is designed as a capped entitlement. Benefits are not increased with inflation, but are reviewed every five years. If the government chooses to boost benefits, it also raises taxes to fund the extra assistance.

As recent research indicates, Medicaid would be a "beneficiary" of a public catastrophic program, with the federal government and the states seeing reductions in their Medicaid expenses for LTSS costs.[26] A significant amount of any savings to states will, however, be offset by increasing Medicaid LTSS eligibility with the intent of closing any gap in access to services for people of different income levels, as recommended later in this report. Nevertheless, we encourage states and the federal government to explore ways to use potential Medicaid savings, if and when they materialize, for "front-end" community-based services.

Catastrophic insurance could be offered through a public/private partnership, such as Medicare Part D, Medicare Advantage, or through a new program. The plan design could be structured many different ways, but the goal should be to create broad access to affordable catastrophic insurance, while encouraging individuals to plan for and protect against uncovered need, either through savings or through purchase of private long-term insurance in the context of a revitalized market.

Paying for Care Before Receiving Catastrophic Insurance Benefits

The Collaborative supports reforms to help cover costs that are not covered by the new daily benefit of a universal catastrophic program. These include stronger supports for family caregivers and communities, increased retirement savings, more efficient and innovative use of home equity, and private long-term care insurance. By combining these resources, more people ought to be able to pay for those first years of care, as well as costs that exceed the daily benefit of a catastrophic plan.

Revitalizing the Private Insurance Market

One resource is private long-term care insurance (LTCi). The insurance industry, employers, and policymakers could expand the market for private insurance by adopting new initiatives aimed at lowering costs and encouraging consumers to purchase coverage. The combination of price reductions and greater consumer confidence in the product's value could lead to a meaningful increase in the purchase of LTCi.

For example, employers could add LTCi to their benefits packages as an opt-out benefit. In this model, employees would be automatically enrolled unless they choose to reject coverage. While such an opt-out design has successfully increased participation in 401(k) plans, little is known about how workers would respond to a similar incentive for long-term care insurance. At the same time, such a model would have to overcome the reluctance of employers to participate. One such challenge is finding mechanisms to defray employers' administrative costs.

We also recommend future research on whether tax incentives or other subsidies could encourage participation in LTCi for uncovered risks, in the presence of a universal program covering the catastrophic risk.

Other cost-saving tools could include improved policy designs, some of which would require regulatory changes. For example, benefits could be more standardized. Policies could be designed so premiums and benefits increase over time, or to allow for small annual premium increases, which would make coverage less costly at younger ages. Carriers could sell through an electronic marketplace (similar to Medicare Supplement or Medicare Part D insurance). They could sell jointly with Medicare Advantage plan offerings, Medigap policies, or traditional fee-for-service Medicare. Regulators could take steps to reduce the costs of getting products approved for sale across the country.

In addition, state and federal policymakers should continue to support efforts by carriers to experiment with hybrid products that combine LTCi with other insurance, such as annuities, life insurance, or disability insurance. In addition to improving public education, policymakers may also want to examine protections for the insurance industry, as a whole, in cases where factors outside of the control of individual companies affect the financial stability of products and the solvency of carriers. These unpredictable shocks may include public policies designed to reduce long-term interest rates or sudden changes in disease morbidity, which are neither manageable nor predictable but affect the entire marketplace. Such a protection might be accomplished through state or multi-state reinsurance arrangements that cap industry losses for those companies that adhere to a common set of industry practice standards.

Finally, to improve consumer perception of the value of LTCi, policymakers should continue to work with the insurance industry to strengthen consumer protections and enhance product information for prospective buyers. For example, consumers need to better understand that premiums are not necessarily fixed throughout the life of the policy, what the practical implications of benefit eligibility standards are, and what they can expect from their insurance company at claim time.

Encourage Increased Savings for Retirement

While we do not believe savings can fully address the risk of extended high-level LTSS needs, increased individual savings would help many consumers pay for their preferred form of care. Additional savings could also help consumers purchase long-term care insurance and reduce the number of middle-income Americans who are driven to Medicaid.

Tools for increasing private savings include employer-based auto-enrollment in retirement plans, expanded use of existing retirement vehicles, new forms of targeted tax subsidies for retirement savings, stronger public outreach and education efforts, and even savers' lotteries.

While the Collaborative does not endorse any specific proposals, we support efforts to increase savings, and urge a stronger public policy emphasis in this area.

Home Equity for LTSS Financing

Home equity comprises a significant portion of personal assets for many Americans, particularly those who may be at risk for needing LTSS care. Housing wealth is particularly important for middle income Americans. More than half of those over 55 without retirement savings are homeowners and rates of home ownership are particularly high among those 65 and older. Many older adults lost their home equity in the recent recession and found themselves without resources just when they needed them. But over the long run, home equity can be a valuable resource for those needing to finance LTSS.

While homeowners say they are reluctant to use home equity for LTSS care, the reality is that many of those who need assistance in old age sell their homes, take out home equity loans, or turn to reverse mortgages. About half of those who reside in a nursing home for six months or longer spend down all of their assets, including their home equity.[27]

As a result, we believe that policymakers should explore more efficient uses of home equity to support LTSS. This resource could also help pay for the early stages of care, especially capital costs associated with home modifications and specialized mobility equipment that are generally not covered by insurance or Medicaid. While the Collaborative does not take a position on any specific approach to tapping home equity, policymakers could consider several options including:

- Deferred payment loans from public agencies, such as those used in England, Ireland, and New Zealand. In this model, those needing LTSS receive services in exchange for an explicit lien against their home equity. When they sell their home or they and their spouse die, this government loan is repaid from the proceeds of the home sale.

- Less expensive reverse mortgages, perhaps through public subsidies, to allow homeowners needing LTSS to tap their assets.

Other Considerations

The Collaborative also considered a limited "front-end" insurance program that would cover the first year or so of LTSS need. Such a model has important advantages. For instance, it would fit easily with Medicare's current post-acute care benefit and eliminate many of the (often artificial) distinctions between that benefit and long-term supports and services. Front-end insurance would also benefit many more individuals than catastrophic coverage.

However, the Collaborative felt that, given limited resources and cost constraints, a universal program should focus on truly catastrophic costs that far exceed the financial resources of nearly all Americans. In addition, we felt that improved private insurance, sold to supplement a catastrophic program, could protect many consumers against a front-end risk. Private catastrophic insurance, in contrast, is not currently a viable product.

The Collaborative also acknowledges that many individuals require lower levels of personal care, often for years, which would not trigger long-term care insurance benefits. Much of this care is provided by family members or is financed privately and, thus, is not well understood. This lower level of care also requires careful financial planning and pre-funding.

> *"I praise [Convergence and the Collaborative] in seeing that this crucial issue of great complexity can be discussed, debated and evolved with the greatest of respect of understandable divergent perspectives and recognition of how important this matter is to the country's national policy direction. It is rarified air in which this civility and intellectual rigor comes together in such skilled guidance and respect."*
>
> -Jennie Chin Hansen, immediate past CEO, American Geriatrics Society

Greater Support for the Families and Communities that Provide Care

The Collaborative recommends that LTSS reform begin with stronger support for family caregivers. Increasingly, Americans prefer to receive LTSS in their homes and communities. However, this will put more caregiving responsibility on families and communities. The Collaborative's July 2015 report, Vision of a Better Future for People Needing Long Term Services and Supports, suggests ways to improve the delivery of services by giving families and communities the tools and support they need and by eliminating legal obstacles that prevent more effective use of community resources.

We believe that LTSS and medical care can be better integrated by redesigning delivery systems and payment models to effectively meet person- and family-centered choices. We support efforts by state governments to break down barriers between Medicaid and non-Medicaid services such as housing, transportation, and information-and-referral. We recommend revising payment and licensing systems to support the growing use of services such as telehealth and monitoring and assistive technologies that promote more affordable and better-coordinated care.

We also recommend stronger support for paid caregivers. This includes changing scope of practice rules and state licensing laws to allow health care professionals and direct care workers to "work to the top of their skills." We support expanding competency-based training and opportunities for promotion for direct care workers, and advanced training for medical and health professionals in geriatrics and the care of patients with functional and cognitive limitations or other complex care needs. Better training and higher pay will result in better care.

We endorse broader supports for family caregivers, including opportunities for better training. We encourage the creation of care teams that include health professionals, direct care workers, and family caregivers, with the permission of those receiving care. Plans of care should acknowledge the central role of family caregivers. Discharge and care plans should assess and address their needs as well as the availability of community supports. With permission, family caregivers should have access to a care recipient's medical records.

We also recognize the importance of cultural competency in planning, training, and delivery of long-term care services to reduce disparities in the quality of care, improve access, and enhance independence and quality of life.

To refocus the delivery of medical care and LTSS, we recommend that government and the private sector develop a national strategy to support family caregivers that is similar in scope to the government's initiative aimed at preventing and treating Alzheimer's disease and other forms of dementia.

We recommend stronger supports for community caregivers, including recognition that friends and neighbors often serve roles once played by relatives. We also endorse modifying local regulations that impede new forms of community, such as zoning laws that limit the number of unrelated people who may share a home, and liability and licensing rules that constrain ride-sharing. With proper support, existing institutions such as faith communities, hospitals, and schools can serve as portals to and providers of care, especially for low-income communities.

We encourage employers to voluntarily create "family-friendly" flexible workplaces that make it possible for family members to remain employed while doing the hard work of caregiving.

Modernize Medicaid Financing and Eligibility to Better Support 21st Century LTSS Needs and Preferences

Retain and Strengthen Medicaid LTSS

While encouraging personal responsibility and reforming the private market are important, they will not be sufficient to protect all Americans from catastrophic LTSS costs. Working age people with lifelong disabilities need known levels of LTSS, triggering high levels of projectable costs. Their needs are not a risk, which insurance is designed to spread, but a certainty, for which a rational LTSS financing system must systematically provide.

People who encounter LTSS needs at older ages have more time to plan by saving and insuring over their working lives. But individuals with modest incomes are not likely to have saved enough to provide for their LTSS needs or to have sufficient disposable income to purchase private insurance.

The majority of Americans who require LTSS, including many individuals with intellectual and developmental disabilities (ID/DD), a majority of people receiving nursing center care, and about a fifth of all assisted living residents, rely on Medicaid to pay for their care each day. There will continue to be a need for Medicaid to provide access to LTSS.[28]

Medicaid and LTSS

Medicaid funds 37 percent of all paid LTSS and is by far the largest single public payer for supports and services.[29] In 2013, Medicaid spent $146 billion—34 percent of its budget—on LTSS for older adults and younger people with disabilities.[30]

Beneficiaries are subject to strict eligibility rules. While these vary from state to state and differ by care setting, they typically limit beneficiaries to $2,000 in financial assets and $723 per month in income (the monthly benefit level for the Supplemental Security Income program). As a result, millions of middle-income families who face catastrophic LTSS costs must impoverish themselves before receiving public support.

The few high-income people who do qualify for Medicaid generally do so after many years of high LTSS need. As a result, a universal catastrophic insurance program could significantly reduce Medicaid LTSS spending, including spending for middle- and upper-income individuals who would otherwise become impoverished over time due to high medical and LTSS expenses.

Older adults with low incomes are more likely to experience a high level of disability, for a longer period of time, and incur greater LTSS costs than those with higher incomes. Because those with lower incomes are also least likely to be able to save or insure, they are at the highest risk of needing Medicaid assistance.

While some wealthy individuals transfer assets to children or other relatives to qualify for Medicaid, the federal government and states have become more aggressive in closing loopholes. More often, wealth transfers go the other way: By paying for the LTSS costs of their parents, children often transfer some of their wealth to their older relatives.

Medicaid's strict eligibility rules also prevent working age disabled individuals from maintaining employment while continuing to receive LTSS benefits. While the Achieving a Better Life Experience (ABLE) Act and other programs are modest steps to address this problem, challenges to maintaining employment and coverage remain.[31]

Medicaid continues to provide unequal access to care settings. Basic program rules entitle beneficiaries only to LTSS in institutional settings. Home and community based care (HCBS) is available through complex waiver programs or state plan amendments. Gradually, Medicaid is shifting to an HCBS benefit. However, in many states, beneficiaries are still likely to receive care in a care facility, though HCBS care can be less costly, and provide greater autonomy, independence, and choice.

New research suggests that broad insurance coverage against catastrophic risks could reduce some of the burden on Medicaid.[32] However, this would only slow the rise in future costs, rather than reducing expenditures in absolute terms. A well-designed insurance-based system for financing LTSS needs for middle income families will still require a significant commitment from the federal government and states to provide LTSS to those whom insurance systems do not reach.

Financing

The Collaborative recommends a federal statutory change that would set all LTSS on an equal basis, whether provided through an institution or in the community. States would be required to provide the LTSS benefit. The new LTSS benefit would consist of all LTSS services currently allowable through institutional and non-institutional settings. The outdated distinction between mandatory and optional services would be eliminated. Eligibility for the LTSS benefit would no longer be based on an institutional level of care, but would be based on a functional assessment and a needs assessment, using tools designed with federal, state and consumer input. This recommendation is made with the objective of promoting access to care in the setting most appropriate given individual needs and preferences (whether in community or institutional settings).

We acknowledge that this recommendation may increase Medicaid expenditures and will have federal and state level policy implications. Although a universal catastrophic LTSS insurance program could provide Medicaid savings, they may be offset by the expected cost of our Medicaid LTSS recommendations. As we recommend later in this report, research regarding the costs of these Medicaid recommendations is needed. The additional costs of increased Medicaid expenditures must be considered in the overall design for LTSS financing.

State Medicaid programs are required to provide reimbursement for certain care provided in institutional settings, such as hospitals, nursing homes, intermediate care facilities for people with intellectual disabilities, and, for people 65 years or older, institutions for mental illnesses. State Medicaid programs may currently elect to provide some LTSS through state plan amendments. They may choose to offer a broader array of LTSS through time-limited HCBS waivers, if approved by the federal government as cost effective.

Since 2013, HCBS has accounted for a majority of Medicaid LTSS expenditures, due to an increase in HCBS expenditures and a decline in spending for LTSS in institutional settings. States and the federal government spent $146 billion—34 percent of all Medicaid spending—on Medicaid LTSS across all care settings and populations.[33] HCBS accounted for 72 percent of spending for people with developmental disabilities, 40 percent of spending for older people or people with physical disabilities, and 36 percent of spending for people with serious mental illness or serious emotional disturbances. While progress has been made toward more person-centered financing, the federal framework of optional and mandatory services is in itself a barrier to state innovation.

In a recent rulemaking, the Centers for Medicare and Medicaid Services (CMS) acknowledged that LTSS is non-medical in nature, even though people with LTSS needs frequently require extensive healthcare and other services as well. We encourage greater authority for states to coordinate, and in some cases, provide health-related, housing-related services and social supports in HCBS settings. The Collaborative recommends additional changes in Medicaid reimbursement that promote community integration for individuals with disabilities and older adults needing LTSS.

Eligibility

Our recommendation to expand Medicaid eligibility does not come easily or lightly. However, as a part of the overall package, we concluded it is necessary to ensure that all Americans have a viable option for protection against financial disaster. It would be fundamentally inequitable to leave lower-income Americans who have worked all their lives, without an affordable means to protect themselves, and in many cases their children, against impoverishment.

HCBS waivers currently require that an individual meet an institutional level of care. The Collaborative seeks to change this antiquated requirement, to allow states to serve people before they reach the very high levels of need that is currently characteristic of people receiving institutional services. Specifically, the Collaborative would:

- Shift LTSS eligibility from the outdated institutional level of care to a functional assessment and a needs assessment, using tools designed with federal, state and consumer input.

- Redesign Medicaid's LTSS component with a sliding scale based on income and assets with income-based cost sharing. This would modestly expand eligibility and eliminate the eligibility cliffs between the safety net and the primary insurance and private market options for LTSS financing.

Traditional Medicaid gives states three basic choices for creating savings or greater efficiencies in the program: cut eligibility, cut benefits, or cut provider payments. To shift away from these current "big three" choices and to improve outcomes, the Collaborative agrees that the federal government needs to provide stronger financial supports and incentives for LTSS delivery innovations. States, which provide approximately 43 percent of Medicaid LTSS expenditures, face enormous fiscal liabilities in the current program. Because financial burdens on individuals and families are also likely to grow, shifting additional costs to consumers is not viable. Providers routinely contend that Medicaid reimbursement rates are below the cost of providing high quality services, so it is not likely that many states can enact further payment reductions.

Expanded eligibility for Medicaid LTSS should be combined with improved delivery systems that do a better job integrating LTSS, healthcare, and social services to both improve lives for the individuals being served and promote fiscal responsibility. States have often been the leaders in promoting innovation in LTSS delivery, but more should be done to support state initiatives. With so much at stake, any transition to a new Medicaid payment and delivery system needs to be gradual and allow for adequate consumer and provider input on the implementation process.

Catastrophic insurance would generate savings to the Medicaid program.[34] In such a context, the Collaborative agrees that Medicaid funding should remain mandatory spending and that expanded Medicaid LTSS eligibility should be accompanied by incentives for states to share in any savings from greater efficiencies and innovations in the delivery of LTSS delivery, especially those savings that might accrue to Medicare from more effective LTSS. We also recognize that expanding eligibility will introduce additional costs beyond the current baseline and must be factored into the overall design and financing of the new LTSS system so that the Medicaid program itself is sustainable.

Savings for Working Age People with Disabilities

The Collaborative recommends that Medicaid LTSS eligibility across the states allow working-aged people who are living with disabilities to work and build assets, while continuing to receive the services and supports they need.

Although the ABLE Act and other modest legislative and regulatory initiatives acknowledged the importance of this goal and raised political awareness of the need for policy to support it, the effect of these programs is expected to be very small.[35]

Another Possibility: Financing Integrated Medical Care and LTSS

Most LTSS financing reform is focused on improving stand-alone long-term care insurance: that is, insurance that provides benefits for only LTSS. However, the Collaborative also recognizes that it may be possible to create an LTSS benefit within a framework of health insurance.

Today, consumers face a bifurcated care system. Care is delivered separately and is rarely coordinated. Health care comes from doctors, hospitals, and other medical providers, while LTSS often is delivered by home care aides and providers of social services such transportation, home-delivered meals, and the like. This disorganized care is driven in large part by a divided payment system. Medicare or private medical insurance pays for health care, the Older Americans Act finances certain social supports, while Medicaid, long-term care insurance, and out-of-pocket spending fund personal assistance and other services.

The consequences of this split delivery system are serious. It increases medical risk for those older adults with both multiple chronic conditions and high levels of need for personal assistance. This population also incurs extremely high medical costs—two times greater than for those with multiple chronic conditions alone.[36]

The Collaborative believes that by better managing and coordinating the health and personal care needs of these older adults, it is possible to both improve their quality of life and reduce the growth in medical spending. Designing a single payment stream could enhance delivery of such integrated care by aligning financial incentives for both medical and LTSS spending. It may reduce hospitalizations and nursing home admissions.[37]

However, fully integrating care delivery is difficult as long as it is financed by two separate payment streams. This is especially challenging because the LTSS costs are borne by the LTSS insurer, while any medical savings are reaped by the health care insurer.

Several care models are attempting to fully integrate medical care with LTSS. The Program of All-Inclusive Care for the Elderly (PACE) program and certain Medicare Special Needs Plans such as the Commonwealth Care Alliance have been delivering such integrated care for many years. In addition, with the encouragement of the U.S. Department of Health and Human Services, two dozen states are experimenting with combined medical and LTSS services through managed care in demonstration programs for older adults and younger people with disabilities who are eligible for both Medicare and Medicaid (known as the "dual eligibles").

This delivery system has great benefits. However, financing models remain undeveloped. The idea of an insurance program that covers both health care and long-term services and supports raises many unresolved design and actuarial issues. While we are unable to put forward a specific integrated financing model at this time, we believe this concept has promise and should be explored by policymakers and insurers. We encourage experiments in integrating medical and long-term care coverage through both traditional fee-for-service Medicare and Medicare Advantage as well as through commercial insurance for working-age people.

> *"In an era characterized by sharp partisan differences in health care, the work of the Long Term Care Financing Collaborative stands out as a notable exception. The Collaborative is taking on the next "big challenge in health care"—designing a sustainable and affordable system of long term care. Resolving financing issues in a way that crosses the political spectrum remains an enormous challenge, but the Collaborative deserves credit for attempting it. Those of us involved fervently hope these efforts will be successful."*
>
> *-Gail Wilensky, Project HOPE*

Increase Public Education Around Catastrophic LTSS Risks and Costs

Any long-term care financing recommendations must acknowledge challenging and conflicting public attitudes about aging, savings, and insurance. Surveys of American perceptions of long-term care show a widespread lack of understanding of the likely need for LTSS and the costs of those services. Similarly, consumers frequently are unaware of their financial needs in retirement, including LTSS, and have not sufficiently prepared for their lives in old age.

Consumers fear loss of independence and becoming a burden on family members. Research indicates conceptual support for insuring against long-term care risks, but a general unwillingness to pay more than nominal premiums for extensive coverage. Consumers are skeptical of mandatory insurance, but have been unwilling to buy voluntary insurance.

Changing perceptions and encouraging planning will require an aggressive education campaign to go along with the proposals the Collaborative is making regarding the sharing of risk. As a result, the Collaborative recommends coordinated public outreach by insurers, government, medical providers, and financial professionals to raise awareness of LTSS risks and the need to prepare for those risks. If a new program is enacted to cover income-related catastrophic risks, then consumers will have to be periodically informed about their estimated responsibility to provide for the remaining upfront costs and how they might do so through insurance and/or savings.

One way to provide such information may be through regular Social Security statements that include not only a record of earnings history and estimated Social Security benefits, but also an estimate of the individual's responsibility for meeting their needs for long-term services and supports. Medical professionals, service providers, and financial professionals should take advantage of "educable moments" in life, such as when family caregivers are supporting aging parents, to provide useful information about preparing for their own future needs.

Public education efforts tied to more specific, individualized estimates of risk, and more timely provision of such information are more likely to be successful in encouraging preparation for future LTSS needs than have past public education efforts tied to general information about the risk and costs associated with LTSS.

RECOMMENDED FUTURE RESEARCH AREAS

> *"Long-term care financing and delivery are critically important to the well-being of older Americans, young people living with disabilities, and those families' members who help care for them. Yet few public policy issues are more complex and controversial. The Long-Term Care Financing Collaborative has tackled these challenges head on and is helping guide the nation toward workable, consensus solutions."*
>
> *-Howard Gleckman, Urban Institute*

We found many unanswered questions concerning LTSS financing and delivery. To further refine policy solutions, the Collaborative recommends future research in the following areas:

- Effects of LTSS financing reform on working age adults.
- Incomes, health status, and employment of working-age people living with disabilities.
- Total lifetime risks and costs of LTSS, including lower levels of needs that are not covered by insurance or Medicaid; the current and projected ability of families to finance these lower-level LTSS needs; and the value and opportunity costs of unpaid caregiving.
- How to better apply lessons from behavioral economics to LTSS delivery and finance.
- Effects of enhanced retirement savings on LTSS financing.
- Costs to employers resulting from caregiving responsibilities of their employees.
- Effects of proposed Medicaid reforms on overall costs and beneficiary's quality of life.
- How to create a seamless transition between Medicaid and LTSS insurance.
- Effects of integrating financing and delivery of healthcare and LTSS.
- Effects of LTSS costs by race and ethnicity.

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Convergence Center for Policy Resolution was founded in 2009 to offer an alternative solution for addressing urgent social and policy issues that were bogged down in disagreement and discord. Drawing from decades of experience solving difficult policy issues, Convergence was formed to use dialogue and collaboration to generate breakthrough solutions to important yet intractable problems. Convergence uses structured, facilitated dialogue and long-term relationship building to build trust and understanding and to create a renewed sense of what is possible through shared goals and long-term cooperation. Convergence does not take positions on issues. The views expressed in this report are those of the members of the Collaborative and should not be attributed to Convergence Center for Policy Resolution, its Board of Trustees, or its funders.

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ISSUE BRIEF
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Models of Care for High-Need, High-Cost Patients: An Evidence Synthesis

Douglas McCarthy, Jamie Ryan, and Sarah Klein

Abstract This brief analyzes experts' reviews of evidence about care models designed to improve outcomes and reduce costs for patients with complex needs. It finds that successful models have several common attributes: targeting patients likely to benefit from the intervention; comprehensively assessing patients' risks and needs; relying on evidence-based care planning and patient monitoring; promoting patient and family engagement in self-care; coordinating care and communication among patients and providers; facilitating transitions from the hospital and referrals to community resources; and providing appropriate care in accordance with patients' preferences. Overall, the evidence of impact is modest and few of these models have been widely adopted in practice because of barriers, such as a lack of supportive financial incentives under fee-for-service reimbursement arrangements. Overcoming these challenges will be essential to achieving a higher-performing health care system for this patient population.

INTRODUCTION

Patients who have complex health needs account for a disproportionate share of health care spending or may be at risk of incurring high spending in the near future.[1] These individuals typically suffer from multiple chronic health conditions and/or functional limitations.[2] Moreover, their health care needs may be exacerbated by unmet social needs.[3] They are often poorly served by current health care delivery and financing arrangements that fail to adequately coordinate care across different service providers and care settings.[4]

This brief describes research about clinical care models or care management programs implemented by health care provider organizations to improve outcomes and reduce costs for high-need, high-cost patients (see About the Study). Based on a review of literature that assesses the evidence on the impact and features of such care models or care management programs, this brief identifies common attributes of effective models and programs, as well as barriers to their uptake, to identify opportunities for improving health system performance. This literature synthesis is the first in a series of publications that will address this topic in more detail.

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FINDINGS

Assessing the Evidence on the Value of Care Models

In a review conducted for the Institute of Medicine, Chad Boult and his colleagues at Johns Hopkins University identified 15 models of comprehensive care for older adults with chronic illness, which fit into six broad categories related to care settings.[5] Exhibit 1 summarizes evidence of positive impact,* which was most frequently observed in quality of care or patient's quality of life. Most models reduced hospital use or length of stay, although the evidence was mixed in some cases. Three models—interdisciplinary primary care for heart failure patients, transitional care from hospital to home, and "hospital-at-home" programs that substitute care in the patient's home in lieu of a hospital stay—showed some evidence of lower cost, although this was not directly measured in all studies.

Exhibit 1. Comprehensive Care Models: Typology and Evidence of Impact

Categories	Models or Examples*	Evidence of Positive Impact**					
		QoC	QoL	FA	Surv	Use	Cost
1. Interdisciplinary primary care	Guided Care, GRACE, IMPACT, PACE	X	X	X	X	X	M
2. Enhancements to primary care	Care and case management	X	X			M	
	Disease management		X			X	
	Preventive home visits			X	X	X	
	Geriatric evaluation and management	X	X	X		M	
	Pharmaceutical care	X				X	
	Chronic disease self-management		X	X		X	
	Proactive rehabilitation		X	X			
	Caregiver education and support		X			X	
3. Transitional care	Hospital to home		X			X	X
4. Acute care in patients' homes	Substitutive hospital-at-home		X			LOS	X
	Early-discharge hospital-at-home					X	
5. Team care in nursing homes	Minnesota Senior Health Options, Evercare	X				M	
6. Comprehensive care in hospitals	Prevention/management of delirium		X			LOS	
	Comprehensive inpatient care		X	X	X		

* Examples: GRACE = Geriatric Resources for Assessment and Care of Elders; IMPACT = Improving Mood: Promoting Access to Collaborative Treatment; PACE = Program of All-Inclusive Care for the Elderly.
** Impact: QoC = quality of care; QoL = quality of life; FA = functional autonomy; Surv = survival; LOS = length of stay; M = mixed evidence.
Source: Adapted from C. Boult et al., *Journal of the American Geriatrics Society,* Dec. 2009 57(12):2328–37.

A review conducted for the Robert Wood Johnson Foundation by Thomas Bodenheimer and Rachel Berry-Millett, at the University of California, San Francisco, analyzed evidence on the effects of care management programs for patients with complex health care needs. They defined care management as "a set of activities designed to assist patients and their support systems in managing medical conditions and related psychosocial problems more effectively, with the aim of improving patients' health status and reducing the need for medical services."[6] The strength of the evidence varied by site or modality of care (Exhibit 2). Studies of hospital-to-home transitions for patients with complex

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* Note: For the purposes of Exhibit 1, we defined evidence of positive impact to mean a majority of identified studies or a meta-analysis of studies reported an improvement in an outcome that was assessed in more than one study of a model. Mixed evidence means there were both positive and negative findings.

conditions exhibited the most consistently positive findings. Several studies offered convincing evidence that care management improved quality in primary care settings, but hospital use was reduced in only a few studies.

Exhibit 2. Summary of Evidence for Complex Care Management by Site and Modality of Care

Site of Care Management	Impact on Quality	Impact on Hospital Use and/or Costs
Primary care	Improved (7 of 9 studies)	Some reduced use (3 of 8 studies)
Via telephone (vendor supported)	Some improvement	Inconclusive evidence
Integrated multispecialty group	Improved (2 of 3 studies)	Some reduced cost (1 of 3 studies)
Hospital-to-home transition	Improved (many studies)	Reduced use and cost (many studies)
Home-based	No clear evidence	No evidence

* Note: Studies of home-based interventions reviewed by Bodenheimer and Berry-Millett differed from those reviewed by Boult and colleagues, who found positive impact for hospital-at-home interventions (Exhibit 1).
Source: Adapted from T. Bodenheimer and R. Berry-Millett, *Care Management of Patients with Complex Health Care Needs*, Research Synthesis Report No. 19 (Princeton, N.J.: Robert Wood Johnson Foundation, Dec. 2009).

A Congressional Budget Office report, authored by Lyle Nelson, reviewed evaluations of 34 disease management and care coordination programs for Medicare fee-for-service beneficiaries and found that only one-third reduced hospital use by 6 percent or more.[7] Although the programs were developed under six different demonstrations (Appendix A), they shared a common feature: the use of nurses as care managers "to educate patients about their chronic illnesses, encourage them to follow self-care regimens, monitor their health, and track whether they received recommended tests and treatments."[8] The programs increased teaching about self-care, but had little effect on patients' adherence to self-care and no systematic effects on care quality. Medicare realized net savings for only two programs: a care management program operated by Massachusetts General Hospital and its affiliated physicians and a telemedicine program operated by the Health Buddy Consortium (Appendix B).

Finally, Randall Brown at Mathematica Policy Research and colleagues[9] at the University of Illinois, Chicago, found the following types of care models had the strongest evidence for reducing hospital use and costs of care for high need, high cost patients: select interdisciplinary primary care models (e.g., Care Management Plus developed at Intermountain Healthcare and Oregon Health and Science University); care coordination programs focused on high-risk patients (e.g., the Medicare Care Coordination Demonstration program implemented at Washington University); chronic disease self-management programs (e.g., the model developed at Stanford University); and transitional care interventions (e.g., Naylor Transitional Care Model developed at the University of Pennsylvania). (For more information on the specific programs cited, see Appendix B; for an example of how the Medicare Care Coordination Demonstration program was implemented at one site, see the box on page 4.)

CASE EXAMPLE: WASHINGTON UNIVERSITY'S CARE COORDINATION PROGRAM

A natural experiment at Washington University, an academic medical center in St. Louis that participated in the Medicare Care Coordination Demonstration, illustrates the importance of program design. An evaluation found that the site had increased costs when relying on remote telephone care management of most of its enrollees during the first four years of participation in the demonstration. The site achieved net savings for Medicare after reconfiguring its program to focus on higher-risk patients through better assessment of health risks and more in-person contacts by local care managers, which in turn supported stronger transitional care. In addition, the supervised use of care manager assistants for patients at lower-risk levels helped nurse care managers focus greater attention on higher-risk patients. The redesign also improved comprehensive medication management and streamlined and standardized care planning, which promoted efficiency.

Source: D. Peikes, G. Peterson, R. S. Brown et al., "How Changes in Washington University's Medicare Coordinated Care Demonstration Pilot Ultimately Achieved Savings," *Health Affairs,* June 2012 31(6):1216–26.

Identifying Common Attributes of Successful Care Models

Interdisciplinary primary care models have demonstrated a range of positive outcomes and are of particular interest because they may have broad potential application in current practice. Chad Boult and Darryl Wieland, at Johns Hopkins University, distilled four features associated with more effective and efficient primary care for older adults with chronic illnesses.[10] They are:

- comprehensive assessment of the patient's health conditions, treatments, behaviors, risks, supports, resources, values, and preferences;
- evidence-based care planning and monitoring to meet the patient's health-related needs and preferences;
- promotion of patients' and family caregivers' active engagement in care; and
- coordination and communication among all the professionals engaged in a patient's care, especially during transitions from the hospital.

Bodenheimer and Berry-Millett identified several characteristics of more successful care management programs:

- selecting patients with complex needs but not those with illness so severe that palliative or hospice care would be more appropriate than care management;
- using specially trained care managers on multidisciplinary teams that include physicians;
- emphasizing person-to-person encounters, including home visits;
- coaching patients and families to engage in self-care and recognize problems early to avoid emergency visits and hospitalizations; and
- relying on informal caregivers in the home to support patients.

Nelson's analysis of program design in the Medicare demonstrations found that the nature of interactions between care managers and patients and physicians was the strongest predictor of success in reducing hospital use. These interactions occurred in a variety of ways, such as by meeting patients in the hospital or occasionally accompanying patients on visits with their physician. In primary care practices affiliated with Massachusetts General Hospital, care managers were embedded in the practices so that they had access to patient information and worked closely with physicians.[11] When care-managed patients of these practices visited the emergency departments or were admitted to the hospitals, care teams received real-time notifications, which allowed them to intervene in a timely way.

An analysis of the Medicare Care Coordination Demonstration (one of the six Medicare demonstrations examined by Nelson) by Randall Brown and colleagues at Mathematica Policy Research found that four different programs were more successful than others in reducing hospital use (by 11% on average) among a subset of enrollees at high risk of near-term hospitalization (Appendix A). As a group, the four programs reduced Medicare spending by 5.7 percent for high-risk enrollees, although they were cost-neutral after accounting for administrative fees.[12] These findings point to the importance of targeting those most likely to benefit, rather than all patients, and keeping intervention costs low to generate savings. The evaluators identified six practices that care coordinators performed in at least three of the four more-successful programs targeting high-risk beneficiaries:

- supplementing telephone calls to patients with frequent in-person meetings;
- occasional in-person meetings with providers;
- acting as a communications hub for providers;
- educating patients;
- helping patients manage medications; and
- providing timely and comprehensive transitional care after hospitalizations.

Although transitional care is receiving attention for its role in reducing hospital readmissions, it is only one of several interventions needed to improve outcomes for high-need, high-cost patients. Successful transitional care consists of several interrelated elements,[13] which might be considered together as one feature in a broader care model.

Implementing Care Models Successfully: Context Matters

Some interventions with seemingly similar features achieve disparate results.[14] Their relative success or failure may be attributed to how an intervention is executed, including social and technical aspects.[15] Organizations that develop care management programs are not necessarily seeking to design broadly applicable models but an approach that works in a specific setting. For example, evaluators found the success of high-cost care management at Massachusetts General Hospital stemmed from an institutional commitment to developing a program tailored and fully integrated into its health care system.[16]

To this point, a recent examination of 18 primary care-integrated complex care management programs by Hong and colleagues[17] identified common managerial and operational approaches:

- customizing the approach to the local context and caseload;
- using a combination of qualitative and quantitative methods to identify patients;
- focusing on building trusting relationships with patients and their primary care providers;
- matching team composition and interventions to patient needs;
- offering specialized training for team members;
- using technology to bolster care management efforts.

Best practices may need to be customized to accommodate different populations' needs and changes in technology. For example, a care manager's role of serving as a "communications hub" may evolve as digital health technologies facilitate new ways of engaging patients and convening a virtual care team.[18] Likewise, electronic teaching aids may help teach self-care to patients with low health literacy, while also lessening care managers' workloads.[19]

Putting the Pieces Together: Content and Execution

Our synthesis of the common attributes of successful care models, identified across multiple reviews, distinguishes between features that describe the general content of an intervention (i.e., what it does) and those related to the execution of that content (i.e., how it's done) (Exhibit 3).

Exhibit 3. Common Attributes of Successful Care Models

Content/Features

- **Targeting** individuals most likely to benefit from intervention
- **Comprehensive assessment** of patients' health-related risks and needs
- Evidence-based **care planning** and routine **patient monitoring**
- Promotion of patients' and family caregivers' **engagement in patient self-care**
- **Coordination** of care and communication among the patient and care team
- **Facilitation of transitions** from hospital to postacute care and referral to **community resources**
- Provision of **appropriate care** in accordance with patients' goals and priorities

Execution/Methods

- Effective **interdisciplinary teamwork** (e.g., defined roles and scope of work, trusting relationships, use of team meetings)
- Specially trained **care manager builds rapport through face-to-face contact** with patients and collaborative relationship with physicians
- Use of **coaching and behavior-change techniques** to teach self-care skills
- Use of **standardized processes** for medication management, advanced care planning
- **Effective use of health IT** to provide timely and reliable information on hospital use, enable care management, remote monitoring, analytics
- **Outcomes measurement** to evaluate and improve performance

Source: Authors' synthesis of key literature reviews (see Appendix A).

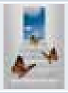
IMPLICATIONS

Overcoming Barriers to Sustainability and Spread

We identified five kinds of barriers or challenges to sustaining and spreading new care models (Exhibit 4), which help to explain why few of these models have been widely adopted in practice.[20]

Simply identifying barriers and enabling factors does not produce change. To advance the field, practitioners can use evidence-based implementation and dissemination frameworks, which have shown promise in helping to guide the adaptive design and spread of programs.[21] Packaging tools, training, and technical assistance together with supportive financial incentives may increase the likelihood that local champions can develop capacity to take up effective programs and practices.[22]

Exhibit 4. Barriers to Sustainability and Spread of Successful Care Models

Barrier		Description
Financial incentives		Lack of incentives to provide care coordination and supportive services under fee-for-service payment; difficulty of prevailing against fee-for-service incentives to generate sufficient cost savings in an acceptable time frame
Capacity to change		Stresses on primary care and limited capacity to implement care management models, despite the logic of doing so in this setting
Culture and workforce		Professional uncertainty and lack of training and skills to take on new roles, adopt a patient-centered paradigm, and change the culture
Infrastructure		Inadequate electronic health records systems and interoperability to support integrated care management and coordination across the care continuum
Evidence		Difficulty scaling up limited evidence from single-site or single-condition studies to multiple contexts and chronic conditions (e.g., determining the relative importance and ideal intensity of each feature in the bundle, etc.)

Source: Authors' synthesis of evidence reviews, case studies, and conference proceedings.

Applying the Evidence to Design Effective Programs for Particular Subpopulations

Care models are typically designed to meet the needs of particular population segments under different payment arrangements and organizational settings (Exhibit 5).[23] For example, frail elderly patients with functional limitations who need long-term services and supports may benefit from a care model

Exhibit 5. Context Matters: What Works by Population and Payment

Population	Examples of models that work in managed care arrangements	Examples of models that work in fee-for-service arrangements
Using long-term services and supports in the community	• PACE (Program of All-Inclusive Care for the Elderly) • Commonwealth Care Alliance (Mass. Senior Care Options)	• GRACE (Geriatric Resources for the Assessment and Care of Elders)
With severe chronic illness, but no long-term services and supports	• CareMore	• Select programs from the Medicare Care Coordination Demonstration, e.g., Health Quality Partners, Washington University • Select programs from the Medicare Care Management for High-Cost Beneficiaries, e.g., Massachusetts General Hospital
With less severe chronic illness		• Accountable care organizations (ACOs)*

* Note: ACOs are shown as a current model that builds on evidence from the Physician Group Practice Demonstration; their potential has not yet been fully demonstrated.
Source: Adapted in part from R. Brown, "Care Coordination Programs for Improving Outcomes for High-Need Beneficiaries: What's the Evidence?" Presentation to the Commission on Long-Term Care, July 17, 2013.

such as the Program of All-Inclusive Care for the Elderly (PACE), which offers a comprehensive set of services to support independent living by pooling funding from the Medicare and Medicaid programs. On the other hand, Medicare beneficiaries with serious chronic illnesses who do not need such long-term services and supports may benefit from a care model such as the Washington University care coordination program, which builds on existing provider relationships and fee-for-service payment.

Assessing and monitoring high-risk patients can determine when their needs change and require an alternative care model. However, transitions between programs must be made seamlessly or will risk interrupting continuity of care. Some managed care organizations, such as the Visiting Nurse Service of New York, have developed a portfolio of programs based on common care management principles tailored to serve different segments of the population; this approach offers the opportunity to realize economies but also requires depth of expertise.[24]

Our synthesis is limited by a relative paucity of high-quality evidence on some care models, such as those that integrate long-term services and social supports into primary care. Much of the evidence reviewed comes from trials in single sites or programs that target patients with specific conditions, which raises questions about broader application. The findings of this brief will need to be augmented by new evidence from other approaches that are currently being tested.[25]

CONCLUSION

Care models for high-need, high-cost patients offer the potential to achieve the “triple aim” by reducing costs while simultaneously improving patients’ health and care experiences. Few of the care models examined in this brief have demonstrated net cost savings, which suggests that our expectations should be modest when adding care management to an already fragmented fee-for-service care system. The incentives created by accountable care and other value-based purchasing initiatives may strengthen the business case for adopting carefully designed and well-executed models.[26] Public and private purchasers must consider the adequacy of payment methods and performance measurements to ensure that savings ultimately accrue to society or consumers while also attracting sufficient participation among providers and improving outcomes for patients.[27]

ABOUT THIS STUDY

We synthesized findings from six expert reviews and secondary analyses of evidence on the impact and features of clinical care models or care management programs that target high-need, high-cost patients—often defined as patients with complex health care needs. (Appendix A describes sources and definitions in detail; Appendix B describes characteristics of select care models.)

- C. Boult and colleagues, "Successful Models of Comprehensive Care for Older Adults with Chronic Conditions: Evidence for the Institute of Medicine's 'Retooling for an Aging America' Report" (article published in the *Journal of the American Geriatrics Society* in 2009).
- T. Bodenheimer and R. Berry-Millett, *Care Management of Patients with Complex Health Care Needs* (report published by the Robert Wood Johnson Foundation in 2009).
- L. Nelson, "Lessons from Medicare's Demonstration Projects on Disease Management and Care Coordination" (working paper published by the Congressional Budget Office in 2012).
- R. S. Brown and colleagues, "Six Features of Medicare Coordinated Care Demonstration Programs that Cut Hospital Admissions of High-Risk Patients" (article published in *Health Affairs* in 2012).
- R. S. Brown and colleagues, "Promising Practices in Acute/Primary Care" (chapter in the book, *Comprehensive Care Coordination for Chronically Ill Adults,* published by Wiley in 2011).
- C. S. Hong and colleagues, *Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program?* (issue brief published by The Commonwealth Fund in 2014).

We also reviewed a best-practice framework for advanced illness care published by the Coalition to Transform Advanced Care. Although there was some overlap in the research studies included in the reviews, no single review encompassed all the evidence.

Exclusions: Our primary focus was on care models sponsored by health care delivery organizations. Therefore, we did not select reviews focused on the effectiveness of capitated managed care plans or state-sponsored programs for Medicaid beneficiaries.[28] (Some care models targeting these populations were included in the general reviews.) While care models often included behavioral health in comprehensive care, we did not include reviews focused specifically on interventions that integrate behavioral health in primary care, which may serve a broader population.[29]

Limitations: Individual research studies included in the reviews may not have been strictly comparable because of differences in intensity and scope of interventions, in populations served, and in duration of study periods. We did not ascertain whether the programs cited in the literature are still in existence. Many studies used reductions in hospitalizations to indicate the potential for reduced health care spending; however, this outcome depends on whether cost savings from reduced utilization exceed the costs of care enhancements and program administration, which was often not measured.

NOTES

[1] J. A. Schoenman, *The Concentration of Health Care Spending,* NIHCM Foundation Data Brief (Washington, D.C.: National Institute for Health Care Management Research and Educational Foundation, July 2012).

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[3] D. Bachrach, H. Pfister, K. Wallis et al., *Addressing Patients' Social Needs: An Emerging Business Case for Provider Investment* (New York: The Commonwealth Fund, May 2014).

[4] C. Schoen, R. Osborn, D. Squires, M. M. Doty, R. Pierson, and S. Applebaum, "New 2011 Survey of Patients with Complex Care Needs in Eleven Countries Finds That Care Is Often Poorly Coordinated," *Health Affairs* Web First, published online Nov. 9, 2011; and S. M. Asch, E. A. Kerr, J. Keesey et al., "Who Is at Greatest Risk for Receiving Poor-Quality Health Care?" *New England Journal of Medicine,* March 16, 2006 354(11):1147–56.

[5] C. Boult, A. F. Green, L. B. Boult et al., "Successful Models of Comprehensive Care for Older Adults with Chronic Conditions: Evidence for the Institute of Medicine's 'Retooling for an Aging America' Report," *Journal of the American Geriatrics Society,* Dec. 2009 57(12):2328–37.

[6] T. Bodenheimer and R. Berry-Millett, *Care Management of Patients with Complex Health Care Needs,* Research Synthesis Report No. 19 (Princeton, N.J.: Robert Wood Johnson Foundation, Dec. 2009).

[7] L. Nelson, *Lessons from Medicare's Demonstration Projects on Disease Management and Care Coordination,* Working Paper 2012-01 (Washington, D.C.: Congressional Budget Office, Jan. 2012).

[8] L. Nelson, *Lessons from Medicare's Demonstration Projects on Disease Management, Care Coordination, and Value-Based Payment,* Issue Brief (Washington, D.C.: Congressional Budget Office, Jan. 2012).

[9] R. S. Brown, A. Ghosh, C. Schraeder et al., "Promising Practices in Acute/Primary Care," In: C. Schraeder and P. Shelton, eds., *Comprehensive Care Coordination for Chronically III Adults* (New York: Wiley, 2011).

[10] C. Boult and G. D. Wieland, "Comprehensive Primary Care for Older Patients with Multiple Chronic Conditions," *Journal of the American Medical Association,* Nov. 3, 2010 304(17):1936–43.

[11] N. McCall, J. Cromwell, and C. Urato, *Evaluation of Medicare Care Management for High Cost Beneficiaries (CMHCB) Demonstration: Massachusetts General Hospital and Massachusetts General Physicians Organization, Final Report* (Washington, D.C.: Centers for Medicare and Medicaid Services, Sept. 2010).

[12] R. S. Brown, D. Peikes, G. Peterson et al., "Six Features of Medicare Coordinated Care Demonstration Programs That Cut Hospital Admissions of High-Risk Patients," *Health Affairs,* June 2012 31(6):1156–66.

[13] K. J. Verhaegh, J. L. MacNeil-Vroomen, S. Eslami et al., "Transitional Care Interventions Prevent Hospital Readmissions for Adults with Chronic Illnesses," *Health Affairs,* Sept. 2014 33(9):1531–39.

[14] For example, among PACE programs, higher self-rated interdisciplinary team performance and other program characteristics were associated with better enrollee functional health outcomes. See: D. B. Mukamel, H. Temkin-Greener, R. Delavan et al., "Team Performance and Risk-Adjusted Health Outcomes in the Program of All-Inclusive Care for the Elderly (PACE)," *Gerontologist,* April 2006 46(2):227–37; and D. B. Mukamel, D. R. Peterson, H. Temkin-Greener et al., "Program Characteristics and Enrollees' Outcomes in the Program of All-Inclusive Care for the Elderly (PACE)," *Milbank Quarterly,* 2007 85(3):499–531.

[15] J. E. Mahoney, "Why Multifactorial Fall-Prevention Interventions May Not Work," *Archives of Internal Medicine,* July 12, 2010 170:(13)1117–19; and F. Davidoff, "Improvement Interventions Are Social Treatments, Not Pills," *Annals of Internal Medicine,* Oct. 7, 2014 161(7):526–27.

[16] McCall, Cromwell, and Urato, *Evaluation of Medicare Care Management,* 2010.

[17] C. S. Hong, A. L. Siegel, and T. G. Ferris, *Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program?* (New York: The Commonwealth Fund, Aug. 2014).

[18] S. Klein, M. Hostetter, and D. McCarthy, *A Vision for Using Digital Health Technologies to Empower Consumers and Transform the U.S. Health Care System* (New York: The Commonwealth Fund, Oct. 2014).

[19] T. W. Bickmore, L. M. Pfeifer, D. Byron et al., "Usability of Conversational Agents by Patients with Inadequate Health Literacy: Evidence from Two Clinical Trials," *Journal of Health Communication,* 2010 15(Suppl. 2):197–210; and B. Jack and T. Bickmore, "Louise: Saving Lives, Cutting Costs in Health Care" (Boston: Boston University School of Medicine).

[20] Several barriers to the adoption of new care models were identified by C. Boult in "Challenges to CaRe-Align," Presentation to the CaRe-Align Collaboration Meeting, Dallas, Texas, April 23, 2014 (CaRe-Align is an initiative of the Patient-Centered Outcomes Research Institute and the John A. Hartford Foundation).

[21] L. J. Damschroder, D. C. Aron, R. E. Keith et al., "Fostering Implementation of Health Services Research Findings into Practice: A Consolidated Framework for Advancing Implementation Science," *Implementation Science,* Aug. 7, 2009 4:50.

[22] A. Wandersman, V. H. Chien, and J. Katz, "Toward an Evidence-Based System for Innovation Support for Implementing Innovations with Quality: Tools, Training, Technical Assistance, and Quality Assurance/Quality Improvement," *American Journal of Community Psychology,* Dec. 2012 50(3–4):445–59.

[23] R. Brown, "Care Coordination Programs for Improving Outcomes for High-Need Beneficiaries: What's the Evidence?" Presentation to the Commission on Long-Term Care, July 17, 2013.

[24] M. Bihrle-Johnson and D. McCarthy, *The Visiting Nurse Service of New York's Choice Health Plans: Continuous Care Management for Dually Eligible Medicare and Medicaid Beneficiaries* (New York: The Commonwealth Fund, Jan. 2013).

[25] For example, see: D. O. Meltzer and G. W. Ruhnke, "Redesigning Care for Patients at Increased Hospitalization Risk: The Comprehensive Care Physician Model," *Health Affairs,* May 2014 33(5):5770–77.

[26] D. McCarthy, S. Klein, and A. Cohen, *The Road to Accountable Care: Building Systems for Population Health Management* (New York: The Commonwealth Fund, Oct. 2014).

[27] For a discussion of capitation rates in Medicare Advantage plans, see: R. Brown and D. R. Mann, *Best Bets for Reducing Medicare Costs for Dual Eligible Beneficiaries: Assessing the Evidence* (Washington, D.C.: Henry J. Kaiser Family Foundation, Oct. 2012).

[28] For example, see: A. Hamblin and S. A. Somers, *Introduction to Medicaid Care Management Best Practices* (Princeton, N.J.: Center for Health Care Strategies, Dec. 2011).

[29] For example, see: AcademyHealth, *Evidence Roadmap: Integration of Physical and Behavioral Health Services for Medicaid Enrollees* (Washington, D.C.: AcademyHealth, May 2015).

Appendix A. Primary Sources

Source	Evidence reviewed	Models studied
C. Boult, A. F. Green, L. B. Boult et al., "Successful Models of Comprehensive Care for Older Adults with Chronic Conditions: Evidence for the Institute of Medicine's 'Retooling for an Aging America' Report," *Journal of the American Geriatrics Society,* Dec. 2009 57(12):2328–37.	123 high-quality studies published between 1987 and 2008 reporting at least one statistically significant positive outcome (quality, health, or efficiency) compared with usual care. Studies were considered high-quality if they had a strong design, adequate sample, valid measures, reliable data collection, and rigorous data analysis.	15 clinical models staffed primarily by health care professionals and intended to "address several health-related needs of older persons, such as care for several chronic conditions, several aspects of one chronic condition, or persons receiving care from several health care providers" (see Supplement Tables A-O of the Boult paper.)
T. Bodenheimer and R. Berry-Millett, *Care Management of Patients with Complex Health Care Needs,* Research Synthesis Report No. 19 (Princeton, N.J.: Robert Wood Johnson Foundation, Dec. 2009).	Controlled and observational studies of care management programs for patients with complex care needs (e.g., multiple chronic conditions, many providers, polypharmacy, frequent hospitalizations, functional limitations) published since 1990, as well as interviews with health care leaders who implemented these programs.	Care management programs defined as "a set of activities designed to assist patients and their support systems in managing medical conditions and related psychosocial problems more effectively, with the aim of improving patients' health status and reducing the need for medical services (see Appendices III and IV of the Bodenheimer paper).
L. Nelson, *Lessons from Medicare's Demonstration Projects on Disease Management and Care Coordination,* Working Paper 2012-01 (Washington, D.C. Congressional Budget Office, Jan. 2012); and L. Nelson, *Lessons from Medicare's Demonstration Projects on Disease Management, Care Coordination, and Value-Based Payment,* Issue Brief (Washington, D.C.: Congressional Budget Office, Jan. 2012).	20 commissioned and peer-reviewed evaluations of programs targeting Medicare fee-for-service beneficiaries, including high-cost beneficiaries with multiple chronic conditions and dually eligible beneficiaries.	34 disease management and care coordination programs from six major Medicare demonstrations "aimed at improving the care of beneficiaries with chronic conditions or high expected health care costs." The demonstrations included the: • Demonstration of Care Management for High-Cost Beneficiaries (6 sites); • Medicare Coordinated Care Demonstration (15 sites); • Medicare Health Support Pilot Program (8 sites); • Demonstration of Disease Management for Dual Eligible Beneficiaries (1 site); • Demonstration of Informatics for Diabetes Education and Telemedicine (1 site); and • Demonstration of Disease Management for Severely Chronically Ill Beneficiaries (3 sites).
R. S. Brown, D. Peikes, G. Peterson et al., "Six Features of Medicare Coordinated Care Demonstration Programs That Cut Hospital Admissions of High-Risk Patients," *Health Affairs,* June 2012 31(6):1156–66	Written reports, telephone interviews, and site visits with programs from the Medicare Coordinated Care Demonstration, covering fee-for-service beneficiaries with at least one chronic condition. The high-risk subgroup associated with significant reductions in hospital use across the four programs was defined as patients with coronary artery disease, chronic heart failure, and/or chronic obstructive pulmonary disease and at least one hospitalization in the prior year; or those with any of 12 conditions and at least two hospitalizations in the prior two years.	11 diverse care coordination programs, of which four demonstrated reduced hospitalizations: • Health Quality Partners (a health care quality improvement service provider in suburban and rural southeastern Pennsylvania), • Hospice of the Valley (a hospice and home health agency in the Phoenix area), • Mercy Medical Center (a hospital within an integrated delivery system in rural Iowa), • Washington University (a safety-net academic medical center in St. Louis).

Source	Evidence reviewed	Models studied
R. S. Brown, A. Ghosh, C. Schraeder et al., "Promising Practices in Acute/Primary Care," in C. Schraeder and P. Shelton, eds., *Comprehensive Care Coordination for Chronically Ill Adults* (Wiley, 2011).	Evidence and lessons from rigorously evaluated primary and acute care coordination programs that reduced hospitalizations and expenditures.	Care coordination defined as "a set of activities that assist patients and their families in self-managing their health conditions and related psychosocial problems more effectively; coordinating their care among multiple health and community providers; bridging gaps in care; and receiving the appropriate levels of care."
C. S. Hong, A. L. Siegel, and T. G. Ferris, *Caring for High-Need, High-Cost Patients: What Makes for a Successful Care Management Program?* (New York: The Commonwealth Fund, Aug. 2014).	Key informant interviews, review of published manuscripts and program materials for each program serving complex patients with multiple chronic conditions or advanced illness.	18 successful primary care-integrated complex care management programs "in which specially trained, multidisciplinary teams coordinate closely with primary care teams to meet the needs of patients with multiple chronic conditions or advanced illness, many of whom face social or economic barriers in accessing services" (see Appendix Table 1 of Hong paper).
Coalition to Transform Advanced Care, *Advanced Care: A Model for Person-Centered, Integrated Care for Late Stage Chronic Illness*, http://advancedcarecoalition.org.	Best practices derived from interdisciplinary care coordination models.	Interdisciplinary care coordination models "tightly linking inpatient, ambulatory and home/ community settings" for those with advanced illness, which "occurs when a person with one or more chronic diseases begins to decline in health status and ability to function."

Appendix B. Example Care Models

The following examples represent a sample of care models and programs described in the text, for which there is relatively stronger evidence of impact. These examples were compiled from published literature and are not exhaustive. Bolded terms correspond to the attributes summarized in Exhibit 3.

Program/Sponsor	Target Population	Key Components	Results
Geriatric Resources for Assessment and Care of Elders (GRACE), Indiana University[1]	Low-income (<200% of the federal poverty level) seniors with multiple diagnoses[2] 25% of seniors enrolled were deemed high-risk for hospitalization; these patients were categorized as a high-risk subgroup for analysis[3]	• Support team consisting of advanced practice nurse and social worker work with elderly **in the home** and community[4] • In-home **assessment** and specific care protocols inform individualized **care plan** • Support team works closely with larger **interdisciplinary care team** • **Patient education** and **self-management** plans include tools for low-literacy seniors	After two intervention years of a three-year controlled research study[5]: • use of emergency department significantly lower in intervention group compared to usual care • hospitalization rate significantly lower in high-risk patients in intervention group compared with high-risk patients receiving usual care • among high-risk patients, the program was cost-neutral in the first two years, and cost-saving in the third year (postintervention)
Guided Care, Johns Hopkins University[6]	Older adults with multiple chronic conditions at high risk of high health expenditures in the next year	• Predictive modeling and 12 months of claims data used to **identify** the 20%–25% of patients most at risk of needing complex care in the near future[7] • RNs trained in complex care management perform **in-home assessments** and develop **care plans** to coordinate care with **multidisciplinary providers**[8] • **Patient education** and **self-management** strategies focus on addressing issues before hospitalization becomes necessary	A 32-month cluster-randomized trial at eight urban and suburban practices in the Baltimore–Washington area, representing over 900 patients and 300 family caregivers, found that Guided Care participants experienced:[9] • 29% decrease in home health episodes • 26% fewer skilled nursing facility days • 13% fewer hospital readmissions • 8% fewer skilled nursing facility admissions These improvements were more pronounced among Guided Care patients receiving primary care from an integrated delivery system.
Naylor Transitional Care Model, University of Pennsylvania[10]	Hospitalized, high-risk older adults with chronic conditions[11]	• **Multidisciplinary** provider team led by advanced practice nurses engages in comprehensive **discharge planning** • Three-month post-discharge follow-up includes **frequent home visits** and are telephone availability • Involve **patients and family members** in **identifying goals** and building **self-management** skills	Randomized controlled trial found the following one year after discharge:[12] • 36% fewer readmissions • 38% reduction in total costs • Short-term improvements in overall quality of life and patient satisfaction
Improving Mood: Promoting Access to Collaborative Treatment (IMPACT), University of Washington[13] (pilot-tested at 18 primary care clinics at 7 sites across the U.S.)[14]	Older adults suffering from depression[15] The model has also been adapted for other populations with depression, including adults of all ages, adolescents, cancer patients, and patients with chronic illnesses, including diabetes. Evaluations indicate that these IMPACT adaptions are also effective.[16]	• **Collaborative care:** Primary care physician works with **depression care manager** (e.g., nurse, social worker, or psychologist supported by medical assistant or other paraprofessional) to develop and implement treatment plan including anti-depressant medication and/or short-term counseling. Team includes **consulting psychiatrist**. • Care manager also **educates patient** about depression and coaches in self-care. • Providers utilize **ongoing measurement and tracking of outcomes** with validated depression screening tool, such as Patient Health Questionnaire-9, and **adapt care** to changing symptoms • Once a patient improves, case manager and patient **jointly develop a plan** to prevent relapse.[17]	A randomized controlled trial of 1801 adults age 60 or older with major depression, dysthymic disorder, or both, found that: • After 12 months, about half of IMPACT patients had a 50% or greater reduction in depressive symptoms from their baseline assessment compared to 19 percent of patients who received usual primary care.[18] • Over a four year period, total health care costs for IMPACT patients were approximately $3,300 lower per patient on average than those of patients receiving usual primary care—even after accounting for the cost of providing the IMPACT intervention.[19]

Program/Sponsor	Target Population	Key Components	Results
Health Quality Partners[20] (participant in the Medicare Coordinated Care Demonstration)	Medicare beneficiaries with chronic conditions	• RN care coordinators focus on changing **patient behavior**[21] • Focus on **frequent in-person** contact with both patients and physicians • Evidence-based **patient education** including condition-specific **self-monitoring** training[22]	Randomized controlled study found that after six years the intervention, among high-risk subgroup[23]: • Reduced hospitalizations by 25% • Reduced emergency department visits by 28% • Reduced average monthly Medicare Part A and B expenditures by 21%
Massachusetts General Physicians Organization Care Management Program[24] (participant in the Medicare Demonstration for High Cost Medicare Beneficiaries)	Medicare beneficiaries who are high cost and/or have complex conditions	• Care managers are integrated into primary care practices[25] • Care managers provide **patient education** and address both **medical and psychosocial needs** • Focus on **preventing exacerbations** that lead to emergency department visits and inpatient admissions • Case managers also support **end-of-life decision-making**	After three years, intervention group exhibited[26]: • 20% reduction in hospital admissions • 13% reduction in emergency department visits • 7% annual savings after accounting for intervention costs
Chronic Disease Self-Management Program (CDSMP), Stanford University[27] (as piloted at Kaiser Permanente, Northern California)	Adults with one or more chronic conditions[28]	• **Patient education** occurs in small group courses in a **community setting**, including family members and caregivers, and teaches strategies and skills to better cope with and manage common problems and symptoms • Course facilitated by two trained **peer leaders**, at least one of whom is a nonmedical professional, who often have chronic conditions themselves • Patients practice strategies and skills and receive highly **interactive feedback** in a supportive environment to enhance their sense of self-efficacy, and their confidence in their **ability to manage their conditions** • Program is of limited duration (2.5 hours per week over 6-week period) and easy to export	A randomized clinical trial of 952 patients age 40 and older with chronic conditions that compared CDSMP patients with wait-list control subjects found that after six months, treatment patients experienced: • fewer physician visits, ER visits, and hospitalizations and shorter lengths of stay • more energy, less fatigue, fewer social limitations, and greater improvement in self-reported health[29] • fewer ER and physician visits, reduced health distress, and improved self-efficacy, compared to baseline, even after two years[30] A national survey of 1,170 CDSMP participants in 17 states at baseline, six months, and one year and found: • significant reductions in ER visits and hospitalizations at six months and a reduction in ER visits at one year • potential net savings in health care costs of $364 per participant, after accounting for cost of program; if 5% of adults with one or more chronic conditions participated in program, national savings in health care costs would be an estimated $3.3 billion.[31]
Care Management Plus, Oregon Health and Science University and the John A. Hartford Foundation[32] (piloted at Intermountain Healthcare)	Originally designed to serve adults 65 years and older, who have multiple comorbidities, diabetes, frailty, dementia, depression and other mental health needs; entry is by referral from the primary care provider. (The model has been adapted to serve non-elderly patients with complex needs.)	• Specially trained care managers (usually RNs or social workers) located in primary care clinics perform **person-centered assessment** and work with families and providers to formulate and implement a **care plan**[33] • Care manager ensures **continuity of care** and regular follow up in office, in the home, or by phone • Continuity of care enhanced by specialized **IT system** • Care manager provides **coaching and self-care** education for **patients and families**	Controlled study comparing patients receiving care management in seven intervention clinics with similar patients in six control practices within Intermountain Healthcare found: • decreased hospitalization rates after two years for intervention patients, although this result was only significant among patients with diabetes[34] • approximately 20% reduction in mortality among all Care Management Plus patients, reduction most pronounced in patients with diabetes[35]

Program/Sponsor	Target Population	Key Components	Results
Program of All-Inclusive Care for the Elderly (PACE), operated by local nonprofit PACE organizations at 114 sites in 32 states under agreements with the Centers for Medicare and Medicaid Services (CMS)[36]	Adults age 55+ with insurance through Medicare and/or Medicaid, with chronic conditions and functional and/or cognitive impairments, and living in the service area of a local PACE organization Patients must be certified by Medicaid as eligible for nursing home level of care, and able to live safely at home with help from PACE	• Each PACE site provides **comprehensive preventive, primary, acute, and long-term care and social services**, including adult day care, meals, and transportation • **Interdisciplinary team** meets regularly to design individualized care plans • Goal is to allow patients to **live independently** in the community • Patients receive all covered Medicare and Medicaid services through the local PACE organization in their home and community and at a local PACE center, thereby enhancing **care coordination**[37] • Clinical staff are employed or contracted by the local PACE organization, which is paid on a per-capita basis and not based on volume of services provided	A recent review of the literature found that PACE enrollees experienced fewer hospitalizations but more nursing home admissions, better quality for certain aspects of care such as pain management, and lower mortality, than comparison groups.[38] Overall, PACE appeared cost-neutral to Medicare and may have increased costs for Medicaid, though more research is needed to reflect current payment arrangements.[39] A subsequent study found that PACE may be more effective than home and community-based waiver programs in reducing long-term nursing home use, especially for those with cognitive impairments.[40] Higher self-rated PACE team performance and other program characteristics were associated with better enrollee functional health outcomes.[41]
CareMore,[42] a subsidiary of Anthem	Medicare Advantage plan members in California, Nevada, Arizona, Virginia, and Ohio, and Medicaid managed care plan members in Tennessee	• Identifies members who are frail and/or chronically ill and in need of or at high risk for hospital admission via **comprehensive initial visit** upon enrollment • Extensivist physicians provide care to hospitalized patients and oversee postdischarge care in skilled nursing facilities and other settings • Frail and/or chronically ill members are also enrolled in **disease-specific management** programs • Customized **electronic health record** and **remote monitoring** let patients monitor vitals in their homes, with results immediately shared with CareMore team • Provides help to members in accessing **social and other nonmedical support services** and provides **transportation** to CareMore Care Centers	As reported in 2011, CareMore's Medicare Advantage plan achieved the following results: • 30-day hospital readmissions rate was lower than for overall Medicare population (13.6% compared to 19.6% for Medicare fee-for-service).[43] • members' per capita health spending was 15% less than the regional average.[44] • hospital length-of-stay was shorter: 3.2 days compared to 5.6 day average in Medicare fee-for-service and 4.5 day average for traditional hospitalist programs in California.[45] Results not yet available for the Medicaid program.
Commonwealth Care Alliance[46]	Dual-eligibles age 65+ enrolled in a Medicare Advantage Special Needs Plan that participates in the Massachusetts Senior Care Options program[47] Dual eligibles age 64 and younger in the Massachusetts One Care program	• Provides enhanced primary care and **care coordination** through **multidisciplinary clinical teams** led by nurse practitioners[48] • After a **comprehensive assessment, individualized care plans** are developed to promote independence and functioning • Integration of **behavioral health** care for those who need it • Care team available 24/7 **in the home**, in the hospital, or at the doctor's office • Patients' records available 24/7 in proprietary **electronic health record** system[49]	Internal Commonwealth Care Alliance data suggests that Senior Care Options enrollees experienced[50]: • 48% fewer hospital days than comparable dual eligible in a fee-for-service environment • 66% fewer nursing home placements Results not yet available for the OneCare program.

Program/Sponsor	Target Population	Key Components	Results
Hospital at Home[51] (developed at Johns Hopkins University and tested in medical centers across the U.S.)	Older patients with a targeted acute illness that requires hospital-level care, who also meet validated medical eligibility criteria and live within designated geographic catchment area (e.g. 25 miles or 30-minute travel time from hospital.)	• Potentially eligible **patients are identified** in the hospital emergency department or ambulatory care site. If they meet the validated criteria and consent to participate, they evaluated by physician and transported home, usually via ambulance • **One-on-one nursing** for initial stage and at least **daily nurse and physician visits** thereafter • Both nurses and physicians on call **around-the-clock** for urgent or emergent visits • Some diagnostic services and treatments performed **in home setting** • Same criteria and guidelines are used to judge patient readiness for transition to skilled nursing facility, or discharge from Hospital at Home as from hospital.	Evaluation of patients in Hospital at Home program and comparison group of similar inpatients in 2009–2010[52]: • Hospital at Home patients showed comparable or better clinical outcomes and higher satisfaction levels • Excluding physician costs, Hospital at Home per-patient average costs were 19% lower than similar inpatient per-patient average costs for the comparison group. Cost savings were due to lower average length-of-stay and few diagnostic and lab tests. Prospective quasi-experiment with patients 65 and older in three Medicare Managed Care plans at two sites, and at a Veterans Administration medical center, found that[53]: • patients treated at Hospital at Home had shorter length of stay and lower average costs than hospital inpatients.

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The Road to Balance:

Two Decades of Progress in Providing Long-Term Services and Supports for Ohio's Older Population

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ACKNOWLEDGEMENTS

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EXECUTIVE SUMMARY

Ohio has 2.5 million people over the age of 60 and more than 1.7 million individuals over the age of 65, which translates into the 7th largest older population in the nation. Projections indicate that in less than 20 years (2032) almost 22% of the state's population will be age 65 and older; this will earn Ohio a proportional ranking of 8th highest nationally. Ohio's population of older adults age 60 and older with physical and cognitive impairments resulting in severe disability and most in need of long-term services totaled 163,000 in 2014. That group is projected to increase by 44% in just 15 years. These demographic changes are unprecedented in the history of our state and nation. While we celebrate the progress and opportunities associated with a long lived society, such accomplishments also present new and growing challenges for the state.

This study, now in its 22nd year, is designed to provide Ohio policy makers, providers and consumers with the information needed to make good decisions in an effort to ensure that Ohio has an efficient and effective long-term services and supports system. It is unusual for a state to be able to look two decades into the future to anticipate and respond to a potential problem. In fact, in their 2013 report on States' Use of Cost-Benefit Analysis: Improving Results for Taxpayers, a Pew Charitable Trust-MacArthur Foundation report used Ohio's work in this area as an example of how a state can use data to make good decisions. In this study we describe Ohio's response to the changing demographics over the past two decades. State policy makers, providers, consumer groups, and researchers have all recognized these trends and dramatic changes have been made in Ohio to respond.

STUDY HIGHLIGHTS

Future Demographics

- Between 2010 and 2030 Ohio's overall population growth is estimated to be 2%.
- In this same time frame the population age 60 and older will increase by 47%; the population age 85 and older will grow by 46%.
- An even greater challenge is that the number of individuals age 85 and older will grow from 260,000 today, to 675,000 (160%) by 2050.

LONG-TERM SYSTEM CHANGES

- Ohio has dramatically changed how it delivers and funds long-term services for older people.
- In 1993, nine in ten older people with severe disability supported by Medicaid received long-term services in a nursing home. Today the institutional/home care ratio is almost 50/50.
- The change in balance has occurred through an expansion of home- and community-based services and a reduction of nursing home use. Ohio serves more than 39,000 older individuals with severe disability each day through home- and community-based waiver programs.
- The 2013 number of Medicaid residents in Ohio nursing homes (48,000) is down by 11% from 1997, when each day Ohio served more than 54,000 residents through the Medicaid program, a drop of 6100 individuals each day.
- During this 1997-2013 time period Ohio increased its population age 85 and older by about 80,000 individuals (55%), but the number of older people in nursing homes dropped by 5400 each day.

CHANGES IN NURSING HOME AND RESIDENTIAL CARE USE

- The number of nursing home beds in Ohio has remained constant at about 93,000.
- The number of admissions to Ohio nursing homes has changed dramatically increasing from 71,000 in 1992 to 219,000 in 2013.
- The number of short-term Medicare admissions has increased substantially, rising from 30,000 in 1992 to 145,000 in 2013.
- Since 1992, Ohio has reduced nursing facility occupancy rates from 92% to 84%.
- The proportion of individuals under age 60 and supported by Medicaid is 16% and almost one-quarter of Medicaid residents are under age 65. This rate has tripled in the last two decades.
- Ohio has seen a large increase in residential care facilities, growing from 265 residences in 1995, to 606 in 2013. We classify 501 facilities as assisted living.
- Occupancy rates for residential care facilities are 88%.
- Today the Assisted Living Waiver Program has increased to serving 4500 Ohioans each day.

COST FINDINGS

- Overall Medicaid long-term services and supports expenditures have increased at a modest rate; growing by 7% in 2013 dollars over the last 16 years, while the age 85 and older population has increased by 55%.
- Medicaid costs for nursing home care dropped from $2.44 billion in 1997 (in 2013 dollars) to $2.16 billion in 2013.
- Medicaid home- and community-based waiver programs for individuals age 60 and older increased from $223 million (in 2013 dollars) to $693 million, reflecting the shift in strategy.
- The Medicaid nursing home reimbursement rate dropped from a high of $213 per day in 2001 (in 2013 dollars) to $175 per day in 2013. Ohio's Medicaid rate changed from the sixth highest in the U.S. in 2001 to 21st highest in 2010.

RECOMMENDATIONS

Ohio continues to make substantial progress in its efforts to provide long-term services and supports to a growing population of older people with severe disability. The changes that have occurred over the last two decades have been considerable. In 1993, nine of ten older people with severe disability receiving long-term services and supports through Medicaid did so in an institutional setting, compared to an almost 50/50 ratio today. The state has improved its balance by both expanding home- and community-based services and by actually reducing the number of older people using nursing home care. Between 1997 and 2013, Ohio reduced the average daily census of older nursing home residents supported by Medicaid by 5400. This during a period when the number of Ohioans age 85 and older increased by more than 80,000 (55%). Despite this progress, the challenges ahead are daunting. In just the next 15 years, the population over age 60 and age 80 will both increase by almost 50%. About 40% of the state's Medicaid budget is allocated to long-term services and adding costs to a program that already accounts for almost one-quarter of the state general revenue budget is a serious concern. In response to these challenges, we offer the following recommendations:

- Given the projected demographic changes, Ohio must turn its attention to how to delay or avoid disability across the entire older population. This is particularly important for moderate and middle income elders who do not turn to Medicaid until they require nursing home care. Today more than half of older people with severe disability use long-term services funded through the Medicaid program. As we increase the older population, the strategic question is: How can we reduce or at least slow the rate of disability for the older population? A plan for prevention and long-term preparation for individuals is critical.

- A related recommendation involves an effort to use technology to assist older people with a disability to remain independent in the community. The demographic changes are unprecedented in the history of our state and nation, and to respond to this challenge Ohio will need to harness technological innovation. Building on the strengths that already exist in the state, this could be an important area that marries economic development and an important societal goal of meeting the needs of an aging population.

- An area of innovation also linked to technological development is environmental adaptability to assist older people to remain independent in the community. Some of these types of changes could be extensive in scope, while others are relatively simple. For instance, the concept of visitability, a residence deliberately built to include universal design, has received considerable attention. While incorporating universal design elements such as a no-step entrance and first floor accessible bathroom into new construction or renovation will not happen overnight, preparing homes for tomorrow is an important planning strategy.

- Despite the importance of technology, it is the case that long-term services will always rely on a caring and well trained workforce. A strategy to recruit, retain and train the direct care workforce needs to be a priority of the state and the long-term services industry.

- The number of individuals below age 60 now using nursing homes in Ohio continues to be an important policy issue. For some of these individuals a short-term rehabilitation stay in a nursing facility represents an appropriate use of the nursing home setting. Given that one-quarter of the under 60 group reports limited levels of disability, and more than one in five stay two years or more, it will be critical to better understand nursing home use for this group.

- In the last two years Ohio has reduced the number of nursing home beds and improved the distribution of beds across counties. With an occupancy rate of 84% and a higher number of beds per population age 65 and older than the majority of states, Ohio still has room to lower its bed supply. Exploring models where beds could be banked for a 10-15 year time period, an approach used in other states, should be examined.

- A unique component of Ohio's long-term services and supports system is the county level senior tax levy. Senior levies in Ohio, which operate in 71 of the state's 88 counties, generate more revenue than the combined total of the other 12 states that use such local levies. These county resources are a tremendous asset to the state in helping older Ohioans to remain in their local communities. Individuals that need more assistance than the levies can provide often end up on the Medicaid home- and community-based waiver programs and in fact many counties mandate that programs transfer those meeting waiver eligibility criteria to those programs. The state has been successful in shifting older people from institutional to community-based settings. However, a shift of individuals from higher cost Medicaid home- and community-based services to lower cost county programs should also be an important system goal.

- The long-term services changes now underway in Ohio are dramatic. Initiatives such as MyCare will alter the delivery system in fundamental ways. Making sure that a comprehensive quality monitoring and improvement system that includes a common assessment and outcome measures is used across the system to compare program effectiveness will be critical as the state continues with its reform efforts.

Ohio has made considerable progress in preparing for a growing older population. Policy makers have used data to reform the long-term services system. The future challenge will be to maintain this momentum as the state enters a period of even more rapid demographic change.

BACKGROUND

As one of the largest states in the nation, Ohio has 2.5 million people over the age of 60 and more than 1.7 million individuals over the age of 65, which translates into the 7th largest older population in the nation. With almost 15% of its citizens age 65 and older, Ohio has a national ranking in its proportion of older people of 14th (Ohio-Population.org; AARP, 2014). Projections indicate that in less than 20 years (2032) almost 22% of the state's population will be age 65 and older; this will earn Ohio a proportional ranking of 8th highest nationally. An even greater challenge is that the number of individuals age 85 and older will grow from 260,000 to 675,000 (160%) by 2050. Ohio's population of older adults with physical and cognitive impairments resulting in severe disability and the group of older adults most in need of long-term services topped 163,000 in 2014. That group alone is projected to increase by 44% by 2030. These demographic changes both short and long-term are unprecedented in the history of our state and nation. While we celebrate the progress and opportunity associated with a long lived society, such accomplishments also present new and growing challenges for the state.

One of the critical issues faced by Ohio and other states is the growing cost of long-term services and supports. With total national long-term services costs approaching $230 billion, these expenditures represent a continuing challenge for both individuals and government. The 2014 Genworth national long-term care cost analysis reported the average private nursing home in Ohio was $85,775 annually; assisted living was $46,680; and a full time homemaker service was $43,564 per year. Because only about 6% of Americans have long-term care insurance, for those paying privately such expenditures represent out of pocket costs. However, because of these very high costs, many Americans, particularly those that require nursing home care, eventually need assistance from the public Medicaid program. Medicaid spent $140 billion nationally on long-term services in 2012 (both states and federal share). Ohio accounted for about $6.3 billion of that total. Medicaid expenditures represent a significant share of Ohio's budget with FY 14 state only Medicaid expenditures accounting for about 24% of total state expenditures. National data reported 41% of Ohio's Medicaid expenditures were allocated to long-term services and supports, compared to 34% for the nation overall (Eiken et al., 2014). When these high expenditures are coupled with state population projections, it is clear why the state has been actively involved in system reform and why this area will continue to present challenges over the next 25 years.

THIS REPORT

In 1993, the Ohio Legislature and the Ohio Department of Aging (ODA) recognized that providing long-term services to an increasing population of older individuals in the state presented current and future financial and delivery system issues. With a desire to have current and future decisions based on empirical data, the state embarked on an extensive data collection effort to track the use of long-term services and supports by older Ohioans with severe disability. This study, now in its 22nd year, is designed to provide Ohio policy makers, providers and consumers with the information needed to make good decisions in an effort to ensure that Ohio has an efficient and effective long-term services system. It is unusual for a state to be able to look two decades into the future to anticipate and respond to a potential problem. In fact, in their 2013 report on States' Use of Cost-Benefit Analysis: Improving Results for Taxpayers, a Pew Charitable Trust-MacArthur Foundation report used Ohio's work in this area as an example of how a state can use data to make good decisions. This report will describe Ohio's response to the changing demographics over the past two decades. State policy makers, providers, consumer groups and researchers have all recognized these trends and dramatic changes have been made in Ohio to respond. Despite this substantial progress, the path ahead will be even more difficult than the trail of change that Ohio has already had to travel.

POPULATION GROWTH AND DISABILITY

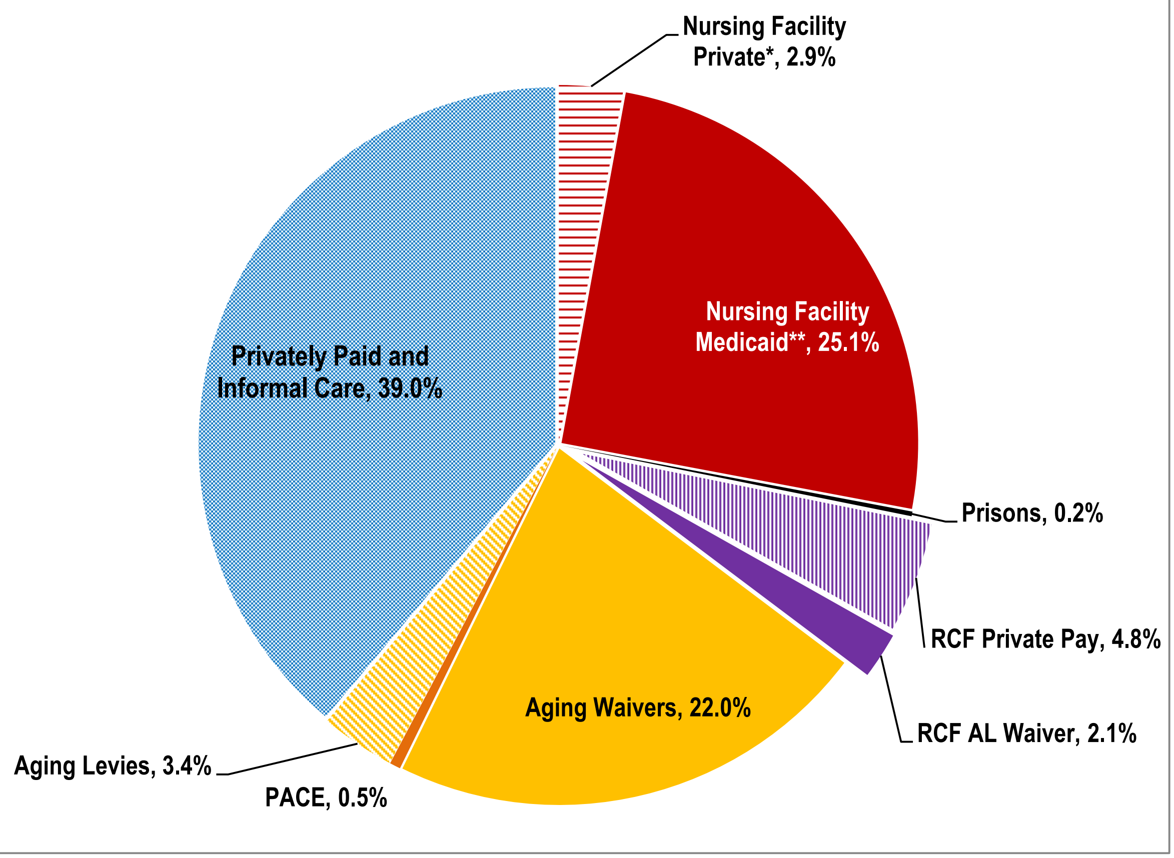
The aging of the boomers has received considerable attention in the past decade. In combination with a low fertility rate, Ohio, as is the nation overall, is aging. This means that overall state population growth is flat, but population aging is substantial. Between 2010 and 2030, Ohio's overall population growth is estimated to be below 2%. However, as a result of population aging over this same time period, the population age 60 and over will grow by more than 47%; the population age 85 and over will grow by 46% and the number of older Ohioans with severe disability will increase by 44%. Ohio continues to have a sizeable number of individuals with developmental disabilities and severe mental illness needing long-term services and estimates indicate that the overall number comprising these categories will decrease slightly between now and 2030. Although this report focuses on older people with severe disability, attention to individuals with severe mental illness has been a growing interest for state policy makers and community advocates and there is recognition that the service delivery system for these individuals needs further enhancement. State policy makers will need to continue to address the challenges associated with long-term service provision across the disability spectrum, but it is the aging of the population that will result in the largest potential increase in demand.

LONG-TERM SETTINGS IN OHIO

For many years receiving long-term services was synonymous with nursing home care. In 2013, the 160,000 older Ohioans (age 60 and over) with severe disability received support in an array of settings. In this report our definition for severe disability is based on the state requirements for a person to meet eligibility for nursing home placement. Requirements include two or more activities of daily living limitation (such as dressing or bathing) dementia or cognitive impairment requiring 24 hour supervision, or one activity limitation, plus a need for medication assistance. As shown in Figure 1, we find that about three in ten older individuals with severe disability do reside in skilled nursing facilities. Additionally, 7% of older individuals with severe disability (11,000) on any given day reside in residential care facilities, most often assisted living residences. An expanded Assisted Living Medicaid Waiver Program served about 3750 individuals daily in 2013 (2.1%) and today the number of Medicaid supported assisted living residents is about 4500. An important development in today's system is that even when we are talking about older people with severe disability, six in ten reside in the community, either in their own homes or with relatives or friends. More than one in five older people with severe disability living in the community (35,000) receive long-term services through Ohio's Medicaid home care waiver programs in addition to the assisted living waiver. An additional 5400 Ohioans with severe disability in the community receive assistance through aging services levies available across the state (3.4%). Finally, many individuals are able to remain at home with the support of family and friends and/or by purchasing services through the private sector (39%). These data reinforce the importance of family in the provision of long-term services to Ohio's older population with severe disability. A new program, termed MyCare, designed to integrate long-term services with acute care for individuals eligible for both Medicare and Medicaid began in May 2014. A number of major system changes as a result of that program, such as shifting individuals from PASSPORT to MyCare, are not included in the data presented in this report.

Figure 1

Proportion of Ohio's Population Age 60 and Older with Severe Disability by Care Setting, 2013 (N=160,000)[*1]



[*1] Figure includes older individuals who experience a severe disability for 100 days or longer.

* Nursing facility residents paying privately or by their health care provider staying 100 or more days are considered needing long-term services and support and are included here.

** Nursing facility residents with Medicaid as payer are included only if they stayed 100 or more days; Nursing facility residents with Medicare as payer are considered short stay and are not included.

Source: Mehdizadeh, S., Kunkel, S., & Nelson, I. (2014). Projections of Ohio's population with disability by county, 2010-2030. Scripps Gerontology Center, Miami University, Oxford, OH. www.ohio-population.org
Biennial Survey of Long-Term Care Facilities, 2013.
MDS 3.0, calendar year 2013.
PASSPORT Information Management System (PIMS), 2013-2014.
Ohio's two PACE sites initial and annual level-of-care assessments.
Payne, M., Applebaum, R., & Straker, J. (2012). *Locally funded services for older population: A description of senior services property tax levies in Ohio.* Oxford, OH: Scripps Gerontology Center, Miami University.
Unpublished data, Ohio Department of Rehabilitation and Correction.

OHIO'S COMMUNITY SERVICE SYSTEM

As noted, six in ten older people with severe disability reside in the community. As we have reported in the past, families and privately purchased services provide assistance to four in ten older Ohioans with severe disability. These findings are consistent with national estimates indicating that a tremendous amount of long-term services and supports provided to older people are delivered by family and friends, with an estimated value of $450 billion. Informal care provided to older people in Ohio was estimated to be valued at $17.5 billion annually in 2011 (Feinberg, 2011). For those Ohioans needing assistance from the public sector there are two major sources of support for in-home services; county property tax levies and Medicaid waiver programs.

COUNTY LEVY PROGRAMS

In the mid 1970's a local advocate in Clermont County named Lois Brown expressed concern that the growing older population in the community did not have the necessary services available. After meeting with county officials, she approached the Ohio Legislature with an idea to use property tax levies to support senior services. Following a legislative law change, she returned to Clermont County and championed a successful levy campaign. Today 71 of Ohio's 88 counties have such levies and last year generated about $165 million. The revenue for Ohio is larger than the total levy funds generated by all of the other 12 other states that have such programs. The county levies vary in size and scope with some generating more than $25 million annually and others generating $50,000 or less (Payne, 2012). The levy programs typically target older people with moderate disability, but we estimate that more than 5400 elders with severe disability are served by these programs. There is an assumption that by serving older people with moderate disability these levy programs may be helping Ohio in its efforts to assist older individuals with disability to remain in the community for a longer period of time.

WAIVER PROGRAMS

Ohio currently has three waiver programs that serve older people with severe disability (PASSPORT, Assisted Living, and Transition Aging Carve-Out). PASSPORT and the Assisted Living Waiver Program are jointly administered at the state level by the Department of Medicaid (ODM), the single state Medicaid agency, and the Department of Aging, which is responsible for program operations. The Transitions waiver will be folded into the PASSPORT waiver on July 1, 2015. The Choices program, the self-direction waiver for older people that we have profiled in previous reports, was combined with PASSPORT in June of 2014. Our focus in this section will be primarily on PASSPORT and the Assisted Living Waiver Program. These waivers are operated on a regional level by Ohio's 12 area agencies on aging and one private, non-profit human service organization. These administrative agencies use care managers to link an array of in-home services to the more than 39,000 older people participating in these programs every day. Each of the regional administrative agencies determine participant functional eligibility, work with consumers to assess need, develop and arrange for the needed services, and monitor the services delivered.

The PASSPORT program serves individuals residing in the community and uses care managers to coordinate a package of community-based services. The Assisted Living Waiver Program serves residents in an approved residential care facility and the personal care and meal services are provided within the residence. Between May and July 2014 about 60% of Ohio's waiver participants became part of the MyCare program. MyCare is designed to integrate long-term services and supports with acute care and these individuals while continuing to receive home- and community-based services are no longer in the traditional waiver programs.

Ohio also participates in the Program of All Inclusive-Care for the Elderly (PACE). This program is responsible for both acute and long-term services and receives funding through both Medicaid and Medicare. PACE operates in one site in Ohio (Cleveland) and is directly managed by the Ohio Department of Aging.

A profile of state Medicaid waiver program utilization (pre-MyCare) is provided in Table 1. We present data for the state as a whole and broken down by the 12 administrative regions of the state. In eleven of the regions the PASSPORT administrative agency is the area agency on aging, except for the Dayton region, where this responsibility is shared between the area agency on aging and Catholic Social Services. In 2014, estimates indicate that Ohio had more than 163,000 older people with severe disability and just over half of these individuals (84,900) had incomes below 300% of poverty. On any given day Ohio waiver programs for older people served more than 39,300 individuals, or about 46% of low income elders with severe disability. In general the urban areas of the state (Cleveland, Dayton, Columbus, Akron and Cincinnati) report the largest number of program participants. The one exception to this pattern is the Rio Grande region serving more than 4000 participants. Rio Grande has about 4% of the older population with severe disability and incomes below 300% of poverty, but accounts for more than 10% of the states total caseload. This translates into a penetration rate of 100% for Rio Grande, compared to 29% for Youngstown and Lima and a state average of 46%.

A number of factors can explain the regional variation. First, it should be noted that our disability estimates are based on statewide rates, and other research indicates there are actual differences across regions (Ge, 2000). Second, the community economic profile, particularly the presence or absence of county levy programs, could have a substantial impact on utilization rates. For example, the five counties in the Cincinnati region generate more than $46 million in levy revenue, while the ten counties in the Rio Grande region generate about $2 million. Outreach strategies, organizational and management approaches, and program innovation do vary by site as well. Overall the waiver programs serve almost half of the older people with severe disability and low income in the state, indicating that the aging waiver programs have a large presence in the state.

Table 1
Profile of Ohio's Older Population: Disability and Utilization Rates by Region, 2014

Area Agency on Aging (AAA)	Location	Estimated Total 60+ Population[1]	Estimated Population 60+[2] with Severe Physical and/or Cognitive Disability	Estimated Population 60+[2] with Severe Physical and/or Cognitive Disability with Incomes at or Below 300% of Poverty	Number of HCBS Consumers[3]	Proportion of Total HCBS Consumers Statewide	Proportion of HCBS Consumers Served with Income at or Below 300% of Poverty
1	Cincinnati	324,269	20,198	9555	3677	9.3	38.5
2	Dayton [4]	268,916	17,468	8904	5330	13.5	59.9
3	Lima	81,858	5464	2875	827	2.1	28.8
4	Toledo	201,292	12,864	6780	2594	6.6	38.3
5	Mansfield	122,992	8043	4505	2067	5.3	45.9
6	Columbus	328,990	19,449	8683	4807	12.2	55.4
7	Rio Grande	102,468	6192	3810	4055	10.3	100.0
8	Marietta	61,713	3660	2267	858	2.2	37.9
9	Cambridge	119,677	7775	4812	2084	5.3	43.3
10A	Cleveland	480,434	32,590	16,812	6664	16.9	39.6
10B	Akron	276,797	18,121	9319	4512	11.5	48.4
11	Youngstown	168,358	11,426	6520	1894	4.8	29.0
	Total	**2,537,764**	**163,250**	**84,842**	**39,368** ♦	**100**	**46.4**

♦ Average monthly number of individuals enrolled in PASSPORT, Assisted Living Waiver Program, PACE Program, and Aging Carve-Out Waiver in 2014.

Source: [1] Ritchey, P. N., Mehdizadeh, S., & Yamashita, T. (2012). Projections of Ohio's population 2010-2030. Scripps Gerontology Center, Miami University, Oxford, OH.

[2] Mehdizadeh, S., Nelson, I., & Kunkel, S. (2014). Projections of Ohio's population with disability by county, 2010-2030. Scripps Gerontology Center, Miami University, Oxford, OH. <www.ohio-population.org>

[3] Medicaid Eligibility File, Unpublished data, Ohio Department of Medicaid, 2014.

[4] Catholic Social Services is also a PASSPORT provider in the Dayton region.

NURSING HOME AND RESIDENTIAL CARE FACILITIES

For about 35% of older Ohioans with severe disability, skilled nursing facilities or residential care facilities (which encompass assisted living residences) are their long-term residential setting. In this section we provide an explanation of these two sectors of the long-term care delivery system.

NURSING HOMES

In 2013, there were 962 skilled nursing facilities in the state containing 93,350 beds (92,787 beds in service-see Table 2). This represents a decrease of 1923 licensed beds since 2011 (shown in Table 4). In 2009, Ohio changed their Certificate of Need (CON) policies and some of these reductions could be the result of this legislation. National data in 2013 (but based on 2010) reported Ohio ranking 14th in nursing home bed supply per 1000 older people, but the drop in beds indicates that Ohio's ranking will change when the next round of comparison data are released. More than 95% of Ohio's nursing home beds are either free standing or part of a continuing care retirement community. Twenty five skilled nursing facilities (2.6%) are located in hospitals, continuing a trend in the drop in hospital-based units. For example, we reported a drop from 59 to 50 hospital-based skilled nursing home units from 2000 to 2005. Eighteen skilled facilities (1.9%) are county homes, down from 30 in 2000. Ohio nursing homes average 96 beds per facility and three in four are located in urban areas of the state. Twenty percent of Ohio nursing homes are not-for-profit.

Table 2
Ohio's Nursing Facility Characteristics, 2013

	All Nursing Facilities	County Homes	Hospital Based Long-Term Care Unit
Number of Facilities	**962**	**18**	**25**
Licensed/certified nursing facility beds 12/31/13	93,350	1881	1157
Average number of beds available daily	92,787	1877	1135
Total Beds	96	104	45
Location (percent)			
Urban	76.2	55.6	84
Rural	23.8	44.4	16
Ownership (percent)			
Proprietary	79.0	—	28.0
Not-for-profit	18.7	—	64.0
Government	2.3	100.0	8.0

Source: Biennial Survey of Long-Term Care Facilities, 2013.

RESIDENTIAL CARE/ASSISTED LIVING FACILITIES

Residential care facilities provide personal care to 17 or more individuals and generally have a limit of 120 days of skilled nursing care per person in a year. In 2013, there were 606 residences containing 46,250 beds; up from 19,400 beds in 1997. The increase in the number of residential care facility beds is driven by growth in the number of assisted living facilities. Because Ohio does not have a general definition of assisted living, we have applied the criteria that a facility must meet to participate in the Assisted Living Medicaid Waiver Program to systematically identify assisted living facilities. Requirements include such elements as a private bedroom and bathroom, locking door, 24-hour staffing, and the availability of a registered nurse. Based on our statewide survey, we estimate that 501 facilities (83%) appear to meet the state definition of assisted living. Currently, 335 facilities of the 501 who met the definition (67%) have been approved to participate in the Ohio Assisted Living Waiver Program, with an average daily census of almost 4500 individuals (includes those who have transitioned to MyCare).

Residential care facilities report an average of 76 beds and 55 units per residence (See Table 3). About three-quarters of facilities are located in urban areas, and three in ten are part of a continuing care retirement community. A variety of room configurations operate under the residential care licensure category, ranging from double occupancy with no private bathroom, to two-bedroom units with kitchen and sitting areas. As a result, the average monthly charge varies considerably, ranging from $694 to $14,000, depending on the type of unit. The overall average statewide rate for a private unit was $3,942 per month for a non-memory care unit.

Table 3
Ohio's Residential Care Facility Characteristics, 2013

	All RCFs	RCF Only	Assisted Living*
Number of Facilities	606	105	501
Total licensed RCF beds	46,250	5283	40,967
Total number of units	33,182	3843	29,339
Average number of beds	76	50	82
Average number of units	55	37	59
Average Monthly Rate (Private Non Memory)	$3,942	$4,072	$3,924
Location (percent)			
Urban	77.4	81.9	76.4
Rural	22.6	18.1	23.6
Ownership (percent)			
Proprietary	72.5	73.8	72.3
Not for profit	27.5	26.2	27.7

*Defined as meeting the criteria required to participate in Ohio's Assisted Living Program.

Source: Biennial Survey of Residential Care Facilities, 2013.

TRENDS IN LONG-TERM SERVICES USE IN OHIO

In this section we present data tracking long-term service use in Ohio from 1992 to 2013. Because long-term services are provided in a range of settings through a wide variety of funders, our examination of service use relies on a number of different sources. Information describing the nursing home and residential care industries come from the Biennial Survey of Long-Term Care Facilities conducted by Scripps in 2014 and covering calendar year 2013. Response rates were high with 96% of skilled nursing facilities and 92% of residential care facilities completing the on-line survey. The survey includes basic information about facilities and residents; such as actual beds in service, number of admissions, and rate structure; information from administrators such as industry challenges and a review of quality indicators, and special modules that focus on industry issues, such as emergency preparedness and employee safety. We supplement nursing home survey data with the Medicaid Cost Report, which is completed by each Medicaid certified facility and compiled and provided to us by the Ohio Department of Medicaid. A federal nursing home tracking system-Certification and Survey Provider Enhanced Reports-(CASPER) compiled by the Centers for Medicare and Medicaid Services (CMS) also provides industry level data. To track characteristics of nursing facility residents the study relies on the Nursing Home Minimum Data Set (MDS 3.0) completed by facilities upon resident admission and at least quarterly during a resident's stay. Resident characteristics come from the second quarter of 2014 (April through June). Data on PASSPORT and assisted living participants come from the PASSPORT Information Management System (PIMS) operated by the Ohio Department of Aging for 2014. Information on the Transitions Aging Carve Out waiver came from the Ohio Department of Medicaid.

NURSING FACILITY USE

The changes experienced in the nursing home industry in Ohio and the nation as a whole over the last two decades are truly dramatic. The supply of beds available has remained relatively stable, going from 91,531 in 1992, to 92,787 in 2013, but all other aspects of the industry are different (See Table 4). For example, in 1992, Ohio nursing homes recorded 71,000 admissions, but by 2013 that number had tripled to 219,000. The increase has been largely driven by changes in Medicare admissions. In 1992, 30,000 of those entering a nursing home were Medicare admissions; by 1999, that number had grown to 79,000, and in 2013 that number stands at 145,000. For many individuals the nursing home has become a place for short-term rehabilitation care after an acute hospital event, rather than the last home for the aged, which had been the common belief and was even the title of one of the first major books in the field of gerontology. Driven by the Medicare prospective payment shift, which incentivized hospitals to reduce the average length of stay for individuals, the manner in which nursing homes are used is now very different for many.

Table 4
Ohio Nursing Facility Bed Supply, Admissions and Occupancy Rates, 1992–2013

	1992	1999	2001	2005	2007	2009	2011	2013
Adjusted Nursing Facility Beds[a]								
Total beds	91,531	95,701	94,231	91,274	92,443	93,209	94,710	92,787
Medicaid certified[b]	80,211	93,077	87,634	87,090	90,559	90,876	90,724	89,063
Medicare certified[c]	37,389	47,534	62,088	86,701	91,659	91,928	91,650	90,730
Number of Admissions								
Total	70,879	149,838	149,905	190,150	200,954	197,233	207,148	218,992
Medicaid resident	17,968	28,150	24,442	34,432	25,182	27,040	31,212	34,859
Medicare resident	30,359	78,856	90,693	116,810	126,528	109,315	148,426	144,959
Occupancy Rate (Percent)								
Total	91.9	83.5	83.2	86.4	87.7	84.7	83.2	83.9

[a] Total beds include private, Medicaid, and Medicare certified beds. Because some beds are dually certified for Medicaid and Medicare, the individual categories cannot be summed. The total beds, Medicaid, and Medicare certified beds are adjusted to account for facilities that did not respond to the survey in each year.

[b] Medicaid certified beds occupied by residents with Medicaid as source of payment.

[c] Medicare certified beds occupied by residents with Medicare as source of payment.

Source: Annual Survey of Long-Term Care Facilities. Ohio Department of Health 1992-1997, Annual and Biennial Survey of Long-Term Care Facilities, Ohio. Department of Aging and Scripps Gerontology Center, 1999-2013.

The skilled nursing facility of today has become a mixed use provider, delivering both acute and long-term services. There are four major implications of this shift. First, it means that many residents will leave the facility after a brief rehabilitation visit to return to the community. Ensuring that the needed planning occurs so that an individual is able to continue recovery at home requires coordination between the nursing home, the in-home services network and the family or other informal supports. Many residents express their desire to go home and a review of the MDS Section Q item which asks residents at admission about returning to the community found about six in ten respondents indicated a desire to return home. It is essential that a good system be established so that a short term resident, who could go home, does not become a long-term resident. This creates considerable communication challenges between nursing home, hospital and community, and requires a new skill set for all parties in the network.

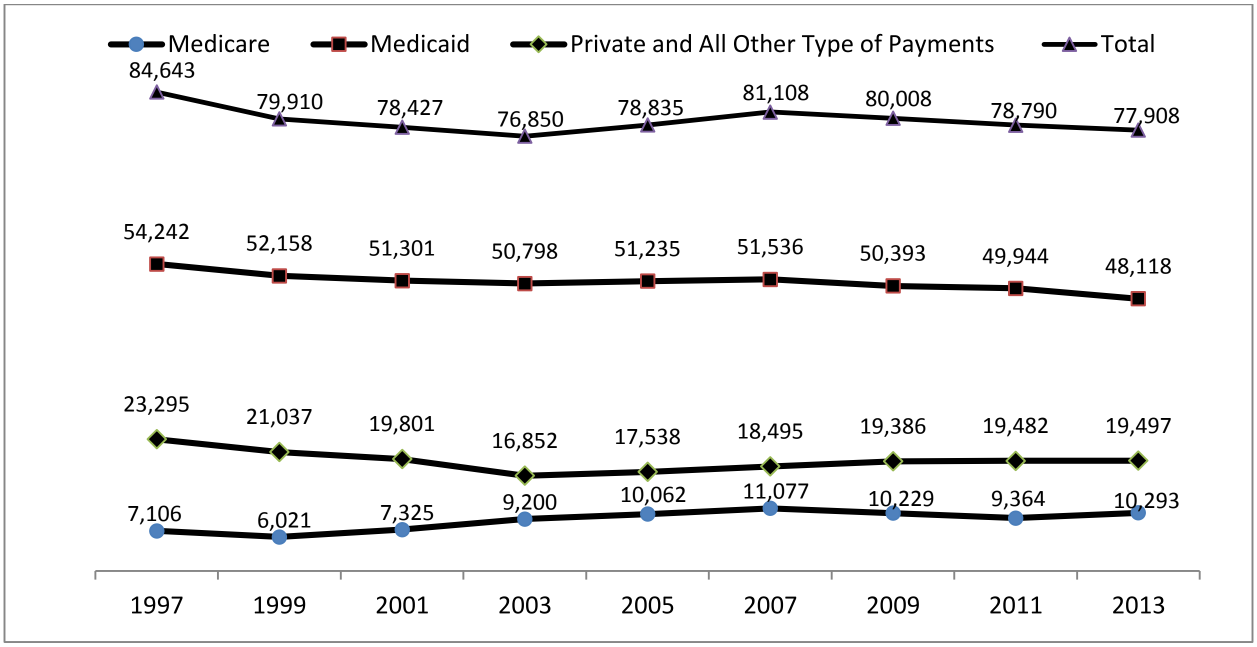
A second prominent challenge resulting from this shift is the focus on the transition from hospital to nursing home. A major concern now being voiced is that Medicare patients transitioning from hospital to nursing home or community have a very high rate of hospital re-admissions—more than 30%. CMS reimbursement changes are attempting to penalize hospitals for high readmissions and there is now considerable attention being paid to this issue.

Third, changes in the delivery system means that today’s nursing home also needs to strive to help residents avoid hospitalization, where appropriate. In many instances a resident can receive the necessary treatment in the facility resulting in a cost savings and improved resident outcomes.

Finally, this high volume of short term residents means that regulatory and quality strategies may need to be altered. For example, the measures used to assess quality, whether it be resident satisfaction or clinical outcomes, may need to be modified. The overall survey approach may also need to be re-considered. A one-time annual survey with a four to five person team may no longer be the most efficient strategy to monitor quality in this rapidly shifting system.

One of the critical questions facing both policy makers and the industry is how these and other changes have impacted occupancy rates. In 2013, occupancy rates were just below 84%. This rate is comparable to the rate we have seen since 2009, but is a considerable drop from the 92% rate that we reported in 1992, the first year of our study. It is useful to look at nursing home utilization and the source of funding for resident stays. In Figure 2, we show the average daily census for Ohio nursing homes from 1997 to 2013. Consistent with the occupancy rate declines the number of individuals residing in Ohio nursing homes each day has dropped from 84,700 in 1997, to 77,900 in 2013 (8% decline).

Figure 2
Average Daily Nursing Facility Census, 1997-2013



Source: Biennial Survey of Long-Term Care Facilities, 2013.

A review of utilization rates by funding source provides even greater insight into system changes. Individuals paying privately or supported by private insurance account for 25% of those residing in Ohio nursing homes on any given day. This number represents a decrease of 16%, from 23,300 in 1997, to 19,500 in 2013. While a detailed breakdown is not available, we believe that the number of individuals paying out of pocket has declined and the number of individuals supported by private health or long-term care insurance has increased. Reflecting the increase in admissions described earlier, the number of individuals supported by Medicare each day has grown to about 13% of residents. This represents an increase of 45%, from 7100 in 1997 to 10,300 in 2013. As previously noted, the Medicaid program is the largest funder of nursing home care in Ohio and the nation. Of the almost 78,000 Ohio nursing home residents each day, just over 48,000 (62%) are supported by the Medicaid program. The 2013 number of Medicaid residents is down by 11% from 1997, when each day Ohio served more than 54,000 residents through the Medicaid program. This lower number of individuals and the corresponding lower occupancy rate is particularly interesting because during this time period Ohio increased its population age 85 and older by about 80,000 individuals (55%).

NURSING FACILITY RESIDENT CHARACTERISTICS

Understanding who uses Ohio's nursing homes and how much the care costs is important for both individuals and state policy makers. About half of the residents are age 80 and above, the population most often thought of as using nursing homes in the United States (see Table 5). Despite the concentration of individuals age 80 and older, nursing homes today have a growing proportion of individuals under age 65 and 60. In the final quarter of 2014, almost 13% of residents were below age 60; almost one in five were under age 65, and 27% were under age 70. The Medicaid population has even a higher proportion of individuals in the younger age groups. Almost 16% of Medicaid residents are under age 60; almost one-quarter under age 65 and more than three in ten are under age 70. We have documented this growing trend in residents under age 65 over our study time period. As shown in Table 6 in 1994, 4% of residents were under age 60 compared to today's 12.7% and the under 65 group has increased from 6.8% to 19.1% during the same time period. The trend appears to have leveled off as there were minimal differences between 2012 and 2014. The shift in resident ages is associated with other changes in resident characteristics. The proportion of female nursing home residents is now below two-thirds, down from almost three in four in 1994. While the majority of residents are not married, the proportion of married residents has increased from 15% in 1994 to 24% in 2014.

Table 5
Comparison of the Demographic Characteristics of All Ohio Certified Nursing Facility Residents by Source of Payment, April-June 2014

	All (Percentage)	Medicaid (Percentage)	Medicare (Percentage)
Age			
45 and under	2.3	2.7	1.5
46-59	10.4	13.0	8.1
60-64	6.6	7.8	5.0
65-69	8.3	8.0	10.9
70-74	9.7	9.1	12.8
75-79	12.1	11.1	14.9
80-84	15.3	13.9	16.7
85-89	17.6	16.2	17.3
90-94	12.7	12.4	10.1
95+	5.3	5.7	2.9
Average Age	77.5	76.3	77.2
Gender			
Female	65.1	67.4	61.7
Race			
White	85.5	81.9	88.1
Black	13.5	16.9	11.0
Other	1.0	1.2	0.9
Marital Status			
Never Married	16.7	22.0	11.1
Widowed/Divorced/Separated	59.9	62.6	55.4
Married	23.4	15.4	33.5
Resident Population Size[*]	101,279	53,574	25,550

*Data presented here reflect the characteristics of all residents, and those with Medicare and Medicaid (April – June 2014) as source of payment.

Source: MDS 3.0 April – June 2014.

Table 6
Comparison of the Demographic Characteristics of Ohio's Certified Nursing Facility Residents Over Time, 1994, 2004–2014

	1994 (Percentage)	2004 (Percentage)	2010 (Percentage)	2012 (Percentage)	2014 (Percentage)
Age					
45 and under	0.2	2.5	2.2	2.3	2.3
46–59	3.8	7.6	9.4	10.4	10.4
60–64	2.8	4.0	5.6	6.4	6.6
65–69	5.1	5.2	7.0	7.9	8.3
70–74	9.0	7.8	8.9	9.5	9.7
75–79	14.0	13.5	12.1	12.0	12.1
80–84	19.4	19.8	17.4	16.4	15.3
85–89	21.6	19.9	19.5	18.2	17.6
90+	24.1	19.7	17.9	16.9	18.0
Average Age	83.1	79.4	78.2	77.3	77.5
Gender					
Female	73.8	70.9	66.9	65.5	65.1
Race					
White	88.5	86.4	86.1	86.0	85.5
Marital Status					
Never married	14.3	15.7	15.5	16.1	16.7
Widowed/divorced/ Separated	70.6	66.1	61.3	58.7	59.9
Married	15.1	18.2	23.2	25.2	23.4
Population	81,414♦	73,900♦	105,039*	107,737*	101,279*

♦Residents present at the end of the quarter specified below.

*Data presented here reflect the characteristics of all residents that spent some time in a nursing facility during the quarter specified below.

Source: MDS Plus October–December 1994. MDS 2.0 April–June 2004, 2010. MDS 3.0 April–June 2012, 2014.

The primary approach used to measure disability rates for nursing home residents is through an assessment of functional ability based on a measure of activities of daily living (ADL). These tasks of daily living include such areas as the ability of the resident to bathe, dress, and transfer from bed to chair. In general, to be eligible to receive nursing home care as reimbursed by Medicaid an individual needs to have limitations in at least two activities of daily living or cognitive impairment such that they are unable to make day-to-day decisions. This is referred to as meeting nursing home level of care. Dementia limitations are factored into the assessment and this could impact the eligibility assessment. On average, today's nursing home residents are quite impaired, averaging between four and five activities of daily living limitations (See Tables 7 and 8). This level of disability has been consistent over the past decade. However, we have seen an increase in the very disabled population with individuals with four or more impairments going from three in four to over 83% during this time period. We have also seen an increase in resident incontinence, going from six in ten to 68% in the ten years. Finally, we do see one in ten residents who record none or one activity limitation and although the proportion is trending down slightly (12.3% in 1994) for Medicaid residents the proportion is 12.5%.

Because of the continuing increase in the Medicaid residents under age 60 we examine this group in comparison to the older Medicaid resident population. It should be noted that the majority of the under 60 group (82%) are between the ages of 45 and 59. However, the demographic profile of the under 60 group looks markedly different than the over 60 group of residents (see Table 9). For example, less than half of the younger group (45%) is female, compared to 72% for the over 60 group. One quarter of the under 60 group is black compared to 16% for the older group. Finally, more than half of the under 60 group (53%) have never been married, compared to 16% for the older group.

The disability rates for the residents under age 60 are also quite different, averaging one less activity impairment than the older group (see Table 10). More importantly, one-quarter of the under 60 group record zero or one activity impairment, compared to 10% for the over 60 group. Many residents in the under 60 group are very impaired, with six in ten individuals having four or more activity limitations, but the high proportion of a lower impaired group warrants further study. Given the strict level of care requirements on admission it appears that the lower levels of reported disability indicate resident improvement over time. Ohio does not reassess nursing home residents for eligibility after the initial level of care review. In an effort to learn more about the under 60 group we examined length of stay for these residents. As shown in Table 11, more than one-quarter of the under 60 group, (27.5%) have stays of 30 days or less. An additional 9.5% are residents for less than three months. This 37% proportion is almost double the 20.5% of over 60 Medicaid residents staying three months or less. That almost four of ten Medicaid residents are staying three months or less indicates that the same short-term rehabilitation trends that we have seen for Medicare are also now occurring in the Medicaid program. At the same time, more than one in five Medicaid residents under age 60 (21.4%) stay two years or longer, compared to 32% for the older age group. This suggests that the under 60 group is quite diverse and policy makers will need to look carefully at the needs of this group of residents.

Table 7
Comparison of the Functional Characteristics of All Ohio Certified Nursing Facility Residents by Source of Payment, April-June 2014

	All (Percentage)	Medicaid (Percentage)	Medicare (Percentage)
Needs Assistance in Activities of Daily Living (ADL)[1]			
Bathing	87.2	87.7	83.0
Dressing	87.1	84.8	87.6
Mobility	85.1	80.4	90.4
Toileting	84.9	81.2	87.5
Eating	26.8	30.5	18.5
Grooming	84.0	83.7	81.1
Number of ADL Impairments[2]			
0	5.6	7.4	4.7
1	4.0	5.1	3.5
2	3.2	3.5	3.6
3	4.0	4.1	4.4
4 or more	83.2	79.9	83.8
Average Number of ADL Impairments	4.6	4.5	4.5
Incontinence[3]	68.3	74.5	53.2
Cognitive Impairment[4]	42.1	53.0	20.5
Resident Population Size*	101,279	53,574	25,550

*Data presented here reflect the characteristics of all residents, and those with Medicare and Medicaid (April – June 2014).

[1] "Needs assistance" includes limited assistance, extensive assistance, total dependence, activity occurred only once or twice, and activity did not occur.

[2] From list above.

[3] "Occasionally", "frequently", or "always."

[4] "Moderately" or "severely" impaired.

Source: MDS 3.0 April – June 2014.

Table 8
Comparison of the Functional Characteristics of Ohio's Certified Nursing Facility Residents Over Time, 1994, 2004–2014

	1994 (Percentage)	2004 (Percentage)	2010 (Percentage)	2012 (Percentage)	2014 (Percentage)
Needs Assistance in Activities of Daily Living[1]					
Bathing	94.0	93.6	75.4	86.2	87.2
Dressing	83.6	85.3	88.8	86.7	87.1
Mobility/Transfer♠	68.7	74.6	85.8	85.8	85.1
Toileting	75.1	80.1	86.4	85.4	84.9
Eating	38.5	32.5	36.5	26.8	26.8
Grooming	83.4	84.2	86.4	82.6	84.0
Number of ADL Impairments[2]					
0	5.1	5.4	5.5	5.7	5.6
1	7.2	6.1	3.7	4.0	4.0
2	4.9	3.9	2.9	3.6	3.2
3	7.7	5.4	3.9	4.1	4.0
4	75.1	79.2	84.0	82.6	83.2
Average Number of ADL Impairments	4.2	4.5	4.6	4.5	4.6
Incontinence[3]	59.4	60.9	60.6	64.1	68.3
Population	81,414♦	73,900♦	105,039*	107,737*	101,279*

♦Residents present at the end of the quarter specified below.

*Data presented here reflect the characteristics of all residents that spent some time in a nursing facility during the quarter specified below.

♠In 1994 and 2004 the ADL transferring, was one of the components of mobility is reported.

[1] "Needs assistance" includes limited assistance, extensive assistance, total dependence, and activity did not occur.
[2] From list above.
[3] "Occasionally", "frequently", or "always."

Source: MDS Plus October–December 1994. MDS 2.0 April–June 2004, 2010.
MDS 3.0 April–June 2012, 2014.

Table 9
Comparison of the Demographic Characteristics of Medicaid Residents in Ohio's Certified Nursing Facility Residents by Age Group,
April–June 2014

	Under 60 Years (Percentage)	60 Years and Older (Percentage)
Age		
Less than 45	17.3	—
45–59	82.7	—
60–64	—	9.3
65–69	—	9.5
70–74	—	10.8
75–79	—	13.2
80–84	—	16.5
85–89	—	19.2
90–94	—	14.7
95+		6.8
Average Age	51.3	80.9
Gender		
Female	44.7	71.7
Race		
White	73.5	83.4
Black	24.9	15.5
Other	1.6	1.1
Marital Status		
Never married	53.2	16.2
Widowed/divorced/separated	35.5	67.7
Married	11.3	16.1
Total Residents[*]	8427	45,147
Percent of Residents	15.7	84.3

[*] The data present the characteristics of the Medicaid residents that spent some time in a nursing facility between April and June 2014.

Source: MDS 3.0 April–June 2014.

Table 10
Comparison of the Functional Characteristics of Medicaid Residents in Ohio's Certified Nursing Facilities by Age Group, April–June 2014

	Under 60 Years (Percentage)	60 Years and Older (Percentage)
Needs Assistance in Activities of Daily Living (ADL)[1]		
Bathing	73.2	90.4
Dressing	70.6	87.4
Mobility	65.7	83.1
Toileting	66.3	84.0
Eating	25.7	31.4
Grooming	70.5	86.2
Number of ADL Impairments[2]		
0	18.2	5.4
1	6.8	4.5
2	5.2	3.1
3	5.6	3.8
4 or more	64.2	83.2
Average Number of ADL Impairments	3.7	4.6
Incontinence[3]	54.8	78.0
Cognitive Impairment[4]	26.8	57.8
Residents* (Number)	8427	45,147

*The data present the characteristics of all residents that spent some time in a nursing facility between April and June 2014 by age.

[1] "Needs assistance" includes limited assistance, extensive assistance, total dependence, and activity did not occur.

[2] From list above.

[3] "Occasionally", "frequently", or "always."

[4] "Moderately" or "severely" impaired.

Source: MDS 3.0 April–June 2014.

Table 11
Length of Stay for Medicaid Residents by Age in Ohio's Certified Nursing Facilities, April-June 2012, 2014

	Under Age 60		Age 60 and Older	
	2012 (Percentage)	2014 (Percentage)	2012 (Percentage)	2014 (Percentage)
Up to a Month	23.8	27.5	11.0	12.9
One Month up to Two Months	3.9	5.1	3.4	4.1
Two Months up to Three Months	4.5	4.4	3.5	3.5
Three Months up to Six Months	12.7	12.7	10.7	11.0
Six Months up to One Year	14.0	14.7	15.8	16.2
One year to Two Years	14.7	14.2	20.3	20.5
Two Years to Three Years	7.5	7.3	11.6	11.7
More than 3 Years	18.9	14.1	23.8	20.1
Total Resident Population	8448	8427	45,162	45,147

Source: MDS 3.0 April-June 2012, 2014.

NURSING FACILITY COSTS

In this section we present information about the costs of nursing home care in Ohio. As shown in Table 12 there are an array of payment sources for nursing home care. Medicaid is the largest source of funding and the average daily reimbursement rate in 2013 was $175. Medicare reimbursement varies depending on whether the resident is in the fee-for-service system or in a Medicare Advantage managed care plan. In 2013, the Medicare fee-for-service rate was $436 and the Medicare managed care rate was $371. The Medicare rate includes the cost of medications and therapies, neither of which are included in the Medicaid or private pay rate. The average single occupancy private pay rate was $241 and the shared room rate was $216. The private insurance rate of $313 per day includes both health insurance rehabilitation coverage and private long-term care insurance. Finally, the Veterans daily rate was reported to be $283 per day.

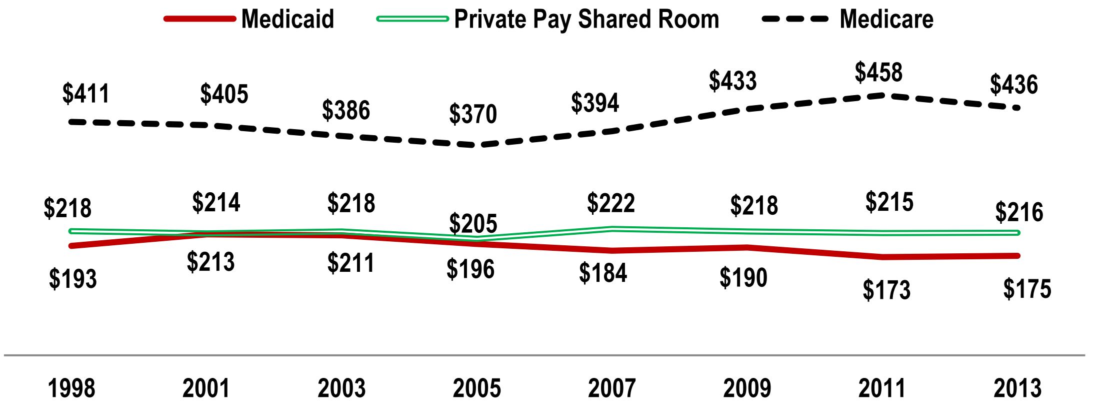
In Figure 3, we present the nursing home reimbursement rates and private pay costs for the time period 1998 to 2013. All of the yearly rates are presented in 2013 dollars. Results show that over the fifteen year time period nursing home reimbursement rates have fluctuated by funding source. The private pay charge was $218 per day in 1998 (in 2013 dollars) and was $216 in 2013. The Medicare rate has shown a moderate increase above inflation, going from $411 in 1998 to $436 in 2013. The Medicaid program has actually seen a reduction in reimbursement rate when holding inflation constant. In 1998 the daily rate was $193 (in 2013 dollars) and in 2003 the adjusted rate was $211. The 2013 Medicaid daily rate was $175. Ohio's Medicaid reimbursement rate relative to other states has changed. In 2003, Ohio's rate was the sixth highest in the nation and by 2010 the rate had a ranking of 21. We anticipate the shift to a fully implemented price reimbursement system in 2014 will result in lowering Ohio's rate in comparison to other states.

Table 12
Ohio's Nursing Facility Daily Rates, 2013

	All Nursing Facilities	County Homes	Hospital Based Long-Term Care Unit
Number of Facilities	962	18	25
Average Daily Charge			
Medicaid	$175	$161	$175
Medicare	$436	$416	$414
Medicare Advantage & EverCare	$371	$355	$406
NF private pay (private room)	$241	$203	$344
NF private pay (shared room)	$216	$187	$257
Private insurance	$313	$352	$386
Veterans	$283	$264	$400

Source: Biennial Survey of Long-Term Care Facilities, 2013.

Figure 3
Average Nursing Facility Per Diem by Source of Payment in 2013 Dollars, 1998-2013



Source: Annual Survey of Long-Term Care Facilities. Ohio Department of Health 1998, Annual and Biennial Survey of Long-Term Care Facilities, Ohio Department of Aging and Scripps Gerontology Center, 1999-2013.

RESIDENTIAL CARE FACILITY USE

Ohio has 606 residential care facilities that include about 33,200 units, with more than 46,250 licensed beds. The growth in licensed residential care facilities has been dramatic, more than doubling the number of facilities from 265, and more than quadrupling the number of beds (10,700 beds) in 1995. Much of the growth has occurred as a result of the development of the assisted living industry. As noted earlier, we estimate that 501 facilities would meet the Medicaid waiver definition of an assisted living residence. As of May 2015, 335 of these facilities were participating in the Assisted Living Medicaid Waiver Program. A review of residential care facility use patterns finds an overall unit occupancy rate of 87.8%, up slightly from 2011 (see Table 13.) Occupancy rates in residential care facilities appear to have been bolstered as a result of the expansion of the Assisted Living Waiver Program, which now has grown to about 4500 residents per day. For example, the assisted living unit occupancy rate in 2009 was 81.0%. The residential care facilities not meeting the waiver definition also saw an increase in occupancy rates, with a 2013 unit occupancy rate of 84.2% compared to 80% in 2009. Data from the Ohio resident satisfaction survey found that the average resident lived in their facility for about two and one-half years. The average length of stay in residential care facilities dropped from 2009 to 2013, suggesting that the level of disability of residents is increasing.

Table 13
Comparison of Occupancy and Length of Stay in Ohio's Residential Care Facilities, 2009–2013

	Overall (Percentages)			RCF Only (Percentages)			Assisted Living (Percentages)		
	2009	**2011**	**2013**	**2009**	**2011**	**2013**	**2009**	**2011**	**2013**
Unit Occupancy	81.7	87.0	87.8	80.0	81.9	84.2	81.0	87.9	88.5
Bed Occupancy	66.1	66.7	67.3	65.9	71.4	70.8	62.8	62.8	66.5
Average Length of Stay (days)	952	858	867	990	—	877	936	—	865

Source: Biennial Survey of Residential Care Facilities, 2009–2013.
Resident Satisfaction Survey (Vital Research), 2013.

Information on the characteristics of individuals who use residential care facilities is presented in Table 14. Unlike our nursing home data, which are based on individual records, these findings represent summary estimates provided by the facilities. To generate these numbers, facilities were asked to report on the number of their residents with a functional impairment in areas such as bathing, dressing, and cognitive functioning. These findings indicate that more than four in ten residents had two or more ADL limitations. Nearly 30% receive skilled nursing care, and three in ten are reported to have a cognitive impairment, an increase from 12% in the 2007 survey.

More detailed data are available for participants in the Assisted Living Medicaid Waiver Program (See Table 15). The profile of waiver participants has been relatively constant over the course of the program. The average age (80) and gender balance (80% female) has remained quite stable since 2008. Waiver participants continue to average between two and three activity of daily limitations (2.6) and over one-quarter require partial supervision. These rates have not changed over the course of the program. There is a slight increase in married and in non-white participants. Finally, there is an increase in participants needing 24 hour supervision between 2008 (11.5%) and 2014 (18.1%) but the 2014 percentage is actually down from 2012 (20.3%).

Table 14
Comparison of the Functional Characteristics of Ohio's Residential Care Facility Residents, 2013

	Overall (Percentage)* 2013	RCF Only (Percentage)* 2013	Assisted Living (Percentage)* 2013
Number of Facilities	606	105	501
Average Age	85.1	83.0	85.6
Needs Assistance in Activities of Daily Living (ADL)			
Bathing	71.1	83.8	68.7
Dressing	55.4	65.6	53.4
Transferring	27.6	34.8	26.2
Toileting	36.3	51.3	33.5
Eating	9.3	17.5	7.8
Medication	80.3	89.9	78.5
Walking	23.9	30.1	22.7
With two or more activities	42.6	54.9	40.3
Received Skilled Nursing Care	28.8	26.1	29.3
Behavior Problems	8.6	15.5	7.3
Cognitive Impairment	30.1	50.0	26.3

*Percentages are averaged for all facilities that provided a response to each question.

Source: Biennial Survey of Residential Care Facilities, 2013.

Table 15
Demographic and Functional Characteristics of Enrollees in the Assisted Living Waiver Program, FY 2008 –2014

Characteristics (Percentage)	2008	2010	2012	2014
Age				
≤45	1.2	0.8	0.8	0.9
46-59	7.4	6.5	6.4	7.4
60-64	5.7	5.1	6.1	6.7
65-69	5.3	5.4	6.5	7.8
70-74	8.2	7.7	7.6	8.9
75-79	12.1	11.4	11.4	11.7
80-84	17.7	17.0	16.4	15.6
85-89	23.0	22.4	20.5	20.1
90-94	12.5	16.3	16.8	13.3
95+	6.9	7.4	7.5	7.6
Average Age	79.5	80.6	81.7	79.4
Gender				
Female	79.1	80.1	80.4	78.4
Male	20.9	19.9	19.6	21.6
Race				
White	88.0	88.6	89.1	84.2
Black	9.8	9.0	9.6	12.1
Other	2.2	2.4	1.3	3.7
Marital Status				
Non-Married	93.1	92.4	91.9	90.8
Married	6.9	7.6	8.1	9.1
ADL Impairment				
Bathing	91.8	87.5	88.8	88.0
Dressing	48.5	49.8	51.6	50.3
Mobility	72.4	72.6	73.3	74.6
Toileting	25.2	20.2	23.2	21.9
Eating	3.9	4.9	4.6	4.0
Grooming	22.7	20.6	20.8	18.7
Average Number of ADL Impairments	2.6	2.6	2.6	2.6
IADL Impairment				
Community Access	96.4	96.0	97.9	97.7
Environmental Management	99.7	98.2	99.8	99.9
Shopping	97.9	97.4	97.1	97.2
Meal Preparation	98.3	97.1	98.1	97.5
Laundry	94.3	95.3	98.1	95.2
Medication Administration	83.2	80.8	95.7	88.1
Needs Supervision				
24-hour	11.5	13.9	20.3	18.1
Partial time	27.8	23.4	27.3	26.2
Consumers Served	413	1943	4102	5788

Source: PASSPORT Information Management System (PIMS), 2008-2014.

PASSPORT USE AND COSTS

As noted earlier, the detailed PASSPORT information presented in this section goes through April 2014. On May 1, 2014 the MyCare initiative began in the major urban areas of the state. Currently about 60% of PASSPORT participants are technically no longer in that waiver program, but have transitioned into MyCare. This report focuses on program characteristics of enrollees prior to the MyCare shift. This approach allows us to present data on PASSPORT over the twenty-year time period of the study. During this time period, the program has expanded dramatically, increasing from serving 4200 individuals each day in 1992, to 15,000 in 1995 to about 35,000 in 2014. In the most recent rankings, Ohio's home- and community-based waiver per capita expenditures for older people and adults with disabilities ranked 13th in the nation, a large change from the 26th ranking in 2005 (Eiken et al., 2014). It will be important to track these changes as the state shifts to the MyCare initiative.

PASSPORT care managers work with program participants and family caregivers to develop a service plan. Services supported under the Medicaid waiver include such areas as personal care, adult day care, home delivered meals, medical transportation, respite care and medical equipment. As shown in Table 16, about 70% of program service dollars are allocated to personal care and an additional 6% to homemaker services. This is typical for home- and community-based waiver programs, since individuals must have severe functional impairments meeting the nursing home level of care criteria, to qualify. Regardless of setting, individuals with severe disability rely on support for the tasks of daily living such as bathing, dressing and meal preparation. About 12% of funds are allocated to home delivered meals, another core component of the home care system. We did see a drop in emergency response expenditures between 2012 and 2014, which we believe is attributable to a change in contracting procedures that lowered program expenditures in this area.

Although the PASSPORT program continues to serve a high proportion of women (75%) and a high proportion of individuals who are not married (80%), the profile of participants has changed over the last two decades (see Table 17). Today the program serves more individuals under age 70 (31.4%) than ten years ago (27%), with the average age dropping by more than two years since 1994. The racial profile has changed as well from three quarters white, to two thirds. The proportion of participants reporting to be never married has increased from 5% in 1994 to 12% today. Even the gender profile has shifted going from 80% women to 75% over the two decades.

The disability profile of PASSPORT has remained relatively constant; with participants reporting on average three activities of daily living impairments (See Table 18). Six in ten individuals have three or more ADL impairments. There has been some shifting within the specific ADL items, but we believe this to be the result of changes in assessment guidelines rather than actual shifts in disability rates. More than nine in ten participants report four or more instrumental activity limitations in such areas as shopping and meal preparation. One in five participants has a need for supervision. While the demographic profile has shifted slightly, the functional characteristics have remained constant over the past two decades.

Table 16
PASSPORT Expenditures by Type of Service, 2004–2014

Type of Services	FY 2004 (Percentage)	FY 2008 (Percentage)	FY 2010 (Percentage)	FY 2012 (Percentage)	FY 2014 (Percentage)
Personal care	65.0	75.6	71.3	67.6	69.0
Home delivered meals	13.1	11.2	14.8	15.8	12.0
Adult day services	5.9	3.5	2.6	2.5	3.7
Transportation	3.4	3.8	3.5	4.4	4.4
Home medical equipment and supplies	5.2	2.0	2.4	2.8	2.3
Homemaker services	3.4	1.0	1.3	2.5	5.6
Emergency response	2.3	1.9	3.4	3.3	1.8
Home modification	0.8	0.7	0.6	0.8	0.9
Other	0.9	0.3	0.1	0.3	0.3

Source: PASSPORT Information Management System (PIMS), 2004-2014.

Table 17
Demographic Characteristics of PASSPORT Consumers, FY 1994, 2004–2014

	FY 1994 (Percentage)[a]	FY 2004 (Percentage)[a]	FY 2010 (Percentage)[a]	FY 2012 (Percentage)[a]	FY 2014 (Percentage)[a]
Age					
60-64	NA	10.8	12.9	12.2	12.2
65-69	NA	16.2	17.3	18.2	19.2
70-74	NA	17.8	18.0	18.2	19.2
75-79	NA	20.3	16.8	17.0	17.4
80-84	NA	17.3	16.1	15.5	14.5
85-89	NA	10.8	11.9	11.6	11.0
90-94	NA	5.4	5.2	5.4	4.8
95+	NA	1.4	1.8	1.9	1.7
Average Age	77.7	76.4	75.6	75.6	75.3
Gender					
Female	80.3	79.8	76.7	75.9	75.4
Race					
White	73.3	76.6	68.4	70.4	65.9
Black	NA	21.9	25.8	25.6	26.7
Other	NA	1.5	5.8	4.0	7.2
Marital Status					
Never Married	4.9	6.3	8.9	10.2	11.6
Widowed		51.4	44.3	41.0	37.6
Divorced/Separated	73.7●	23.0	27.5	29.2	29.7
Married	21.4	19.3	19.3	19.5	19.8
Usual Living Arrangement					
Own home/apartment	79.4	83.8	84.2	83.9	84.3
Relative or friend	18.0	15.7	15.0	15.3	14.8
Congregate housing or RCF	1.4	0.3	0.2	0.2	0.2
Nursing facility	0.0	--	0.4	0.3	0.7
Other	1.2	0.2	0.2	0.3	0.1
Number of Consumers Served	9293	22,560	33,598	34,173	42,868

[a] Percentages are adjusted to reflect only those consumers for whom information was available on each variable.

●This is the total for both widowed and divorced and separated.

Source: PASSPORT Information Management System (PIMS), 1994-2014.

Table 18
Functional Characteristics of PASSPORT Consumers, FY 1994, 2004–2014

	FY 1994 (Percentage)[a]	FY 2004 (Percentage)[a]	FY 2010 (Percentage)[a]	FY 2012 (Percentage)[a]	FY 2014 (Percentage)[a]
Percentages with Impairment/Needing Hands-On Assistance in Activities of Daily Living (ADL)[c]					
Bathing	96.8	95.5	94.9	95.6	94.7
Dressing	69.9	61.7	60.0	62.8	62.6
Mobility[d]	NA	78.4	81.9	83.9	83.6
Toileting	34.0	20.4	20.4	21.8	21.3
Eating	11.2	10.6	5.5	5.5	4.3
Grooming	73.8	32.8	28.7	29.1	26.5
Number of ADL impairments*					
0	1.2	0.8	1.3	1.1	1.4
1	3.4	3.8	4.0	3.4	4.1
2	32.1	34.8	35.6	34.2	34.8
3	28.8	34.1	33.5	33.9	33.4
4 or more	34.5	26.5	25.6	27.4	26.2
Average Number of ADL Impairments	3.2	3.0	2.9	3.0	2.9
Percentage with Impairment in Instrumental Activities of Daily Living (IADL)					
Community access[e]	NA	89.5	86.1	85.9	83.4
Environment management[f]	NA	99.7	99.5	99.8	99.9
Shopping	97.9	97.6	96.6	96.6	96.2
Meal preparation	75.5	88.9	87.5	88.3	87.9
Laundry	NA	96.2	95.2	96.0	95.6
Medication Administration	40.9	32.2	40.1	42.1	41.3
Number of IADL Impairments**					
0	0.0	0.1	0.0	0.1	0.0
1	0.5	0.1	0.2	0.2	0.3
2	3.0	0.3	0.8	0.8	0.8
3	10.0	3.7	4.9	4.5	5.0
4 or more	86.5	95.8	94.1	94.5	93.9
Average Number of IADL Impairments**	6.2	5.0	5.1	5.1	5.1
Supervision Needed					
24-hour	NA	8.1	8.6	9.6	9.1
Partial time	NA	11.1	10.9	11.2	11.9
Number of Consumers Served	9293	22,560	33,598	34,173	42,868

*From list above. **From list above (including Medication Administration).

[a] Percentages are adjusted to reflect only those consumers for whom information was available on each variable.

[c] Impairment includes all who could not perform the activity by themselves or could with mechanical aid only.

[d] Needing hands-on assistance with at least one of the following three activities: *bed mobility*, *transfer* or *"locomotion."*

[e] Needing hands-on assistance with using a *telephone*, using *transportation*, or handling *legal or financial matters* constitutes impairment in community access.

[f] Needing hands on assistance with *house cleaning*, *yard work*, or *heavy chores* constitutes impairment in environmental management.

Source: PASSPORT Information Management System (PIMS), 1994-2014.

PASSPORT AND ASSISTED LIVING WAIVER USE BY REGION

PASSPORT and the Assisted Living Waiver Program are statewide and are implemented at the regional level by 13 administrative agencies; 12 area agencies on aging and one private non-profit. Tables 19-21 provide a breakdown of participant characteristics by region. Although the overall structure, eligibility criteria and services are statewide, we do find some difference in participants across the state. Since regions vary in geographic size and population covered, the range of participants across the region range from 971 in Lima to 7405 in Cleveland. Although there is a common eligibility age of 60, there is variation in age structure of participants. The proportion of younger enrollees (60-64 age group) varies from 16% in Dayton to 8% in Cleveland. The racial breakdown of participants reflects the regional differences in the demographics of the state. Cleveland, Cincinnati, Dayton and Columbus serve a high proportion of blacks (43%, 34%, 33% and 32%).

There is also geographic variation in the level of functional impairment. While most of the regions are close to the state average of 2.9 ADL impairments, the Cleveland region ranges from a high of 3.1 to a low of 2.2 at the Sydney site. These differences are highlighted in looking at the proportion of participants with four or more ADL limitations. Cleveland has 31% of participants with four or more impairments, compared to 12% for Sydney and 15% for Lima. There was also considerable variation on the need for medication assistance, ranging from 17.2% in Rio Grande, to 63% in Sydney, 62% in Cincinnati and 61% in Columbus. The large range on this variable seems unlikely to be the result of real differences in participants and is much more likely to be the result of different clinical practice and assessment processes across the regions. Almost one in four participants reported the need for supervision with a range from 46% in Marietta to 16% in Sydney.

Two additional measures are examined across the regions because of their importance as a quality indicator. To better understand the growing interest in hospital admissions, we examine regional differences in the proportion of participants recording one or more hospitalizations in the past year. Across the state, about one in five participants had at least one hospital admission in the past 12 months. This proportion varies from lows in Mansfield (5%) and Cincinnati (8%) to highs of 30% to 32% in Lima, Cambridge and Youngstown. Statewide, the proportion of hospital admissions dropped substantially from 24% in 2012 to 19% in 2014. A final comparative indicator was the proportion admitted to a nursing home one or more times in the last 12 months. The 2014 statewide proportion was 8%, dropping from 10% in 2012. Again there was regional variation, ranging from 2% in Mansfield and 4% in Cincinnati, to 15% in Cambridge and 16% in Youngstown. These data can be used as part of a quality improvement strategy to be able to better understand the reasons for differences across regions with an eye toward developing best practice models where appropriate.

Table 19
Demographic Characteristics by Region for HCBS Waiver Participants (Age 60 and Over)

Area Agency on Aging (AAA)	Location	Participants◆	Age (60-64) (Percentage)	Mean Age (Percentage)	White (Percentage)	Black (Percentage)	Other (Percentage)
1	Cincinnati	4023	12.3	75.8	57.3	34.2	8.5
2	Dayton	5054	15.9	74.3	57.9	32.5	10.5
3	Lima	971	11.3	76.1	87.1	7.4	5.5
4	Toledo	3036	11.6	75.7	66.6	28.9	4.5
5	Mansfield	2417	9.7	75.4	87.8	9.3	2.9
6	Columbus	5020	10.3	75.8	57.1	32.2	10.7
7	Rio Grande	4280	12.4	74.8	89.8	6.5	3.7
8	Marietta	1043	10.5	75.9	88.0	4.2	7.8
9	Cambridge	2357	11.4	75.7	91.2	5.7	3.1
10A	Cleveland	7405	8.4	77.1	47.6	42.8	9.6
10B	Akron	5243	11.7	75.7	70.7	22.3	7.0
11	Youngstown	2037	9.9	77.3	73.9	21.3	4.8
CSS	Sidney	1071	12.0	76.1	88.3	5.6	6.1
Statewide		43,957	10.2	75.7	70.0	25.0	5.0

◆Data presented here reflects the characteristics of the individuals that enrolled at least one month in PASSPORT and Assisted Living Waiver Program, in 2014.

Source: PASSPORT Information Management System (PIMS), 2014.

Table 20
Functional Disability Characteristics by Region for HCBS Waiver Participants (Age 60 and Over)

Area Agency on Aging (AAA)	Location	Participants♦	Avg. ADLs (out of 6) (Percentage)	ADL 0-1 (Percentage)	ADL 2-3 (Percentage)	ADL 4+ (Percentage)	Medication Assistance needed (Percentage)
1	Cincinnati	4023	2.7	11.1	65.4	23.5	62.4
2	Dayton	5054	2.8	9.4	67.6	23.0	41.2
3	Lima	971	2.6	4.1	80.6	15.4	49.9
4	Toledo	3036	2.8	5.5	71.9	22.6	51.8
5	Mansfield	2417	2.9	8.7	65.4	25.9	48.6
6	Columbus	5020	3.0	10.1	61.2	28.7	60.8
7	Rio Grande	4280	3.0	0.8	71.4	27.8	17.2
8	Marietta	1043	2.8	11.2	61.2	27.6	55.7
9	Cambridge	2357	2.8	3.7	76.2	20.1	49.7
10A	Cleveland	7405	3.1	3.5	65.2	31.3	41.2
10B	Akron	5243	3.0	5.2	66.3	28.5	49.1
11	Youngstown	2037	3.0	5.6	66.6	27.9	54.1
CSS	Sidney	1071	2.2	21.6	66.9	11.5	63.2
Statewide		43,957	2.9	7.1	67.0	25.9	47.1

♦Data presented here reflects the characteristics of the individuals that enrolled at least one month in PASSPORT and Assisted Living Waiver Program, in 2014.

Source: PASSPORT Information Management System (PIMS), 2014.

Table 21
Profile by Region for HCBS Waiver Participants (Age 60 and Over)

Area Agency on Aging (AAA)	Location	Participants♦	24 hour Supervision (Percentage)	Partial Supervision (Percentage)	1 or more Hospital admits (prior year) (Percentage)	1 or more NH admits (prior year) (Percentage)
1	Cincinnati	4023	13.2	11.6	7.6	4.0
2	Dayton	5054	11.5	11.8	25.6	11.8
3	Lima	971	5.4	16.6	31.6	14.3
4	Toledo	3036	8.6	13.2	14.7	5.7
5	Mansfield	2417	9.8	17.0	5.1	1.9
6	Columbus	5020	12.8	14.1	13.8	5.7
7	Rio Grande	4280	7.1	13.7	23.5	8.7
8	Marietta	1043	12.9	32.3	18.0	7.2
9	Cambridge	2357	12.6	7.2	31.4	15.3
10A	Cleveland	7405	11.0	16.5	20.6	8.9
10B	Akron	5243	9.7	7.3	14.0	5.7
11	Youngstown	2037	8.4	13.4	29.6	16.0
CSS	Sidney	1071	7.5	8.0	21.4	10.2
Statewide		43,957	10.3	13.7	18.7	8.1

♦Data presented here reflects the characteristics of the individuals that enrolled at least one month in PASSPORT and Assisted Living Waiver Program, in 2014.

Source: PASSPORT Information Management System (PIMS), 2014.

PROGRAM DISENROLLMENT

Given the frailty of PASSPORT waiver participants, it is not surprising that the two major reasons for disenrollment were that the participant died (39%) or was admitted to a skilled nursing home for more than 30 days (30%) (See Table 22). The nursing home rate is down from 2008 when disenrollment to nursing homes was 38% and reflects continued efforts to keep individuals at home as long as possible. The remaining reasons for disenrollment have remained relatively stable, except for the group of individuals who voluntarily withdrew, which increased from 6% to 10% in the past two years.

The review of disenrollment by region does show some variation across the state (see Table 23). One area of difference is the proportion of PASSPORT enrollees who leave the program to enter a nursing home. In Sydney and Mansfield, just over one-quarter of those leaving the program went to a nursing home, compared to 40% in Lima and 36% in Cleveland. Sydney had, on average, participants with lower levels of disability and Cleveland’s participants had higher levels of disability, and these differences could help explain the variation. However, Mansfield with lower rates of nursing home placement had higher levels of disability and Lima with higher rates of nursing home placement had lower levels of disability. Disenrollment because of death also varied, ranging from 31% in Lima to 46% in Rio Grande. In a number of instances regions that had higher mortality rates had lower rates of nursing home placement; which could be interpreted as a good outcome. However in other instances there is no discernable pattern in the relationship between nursing home placement and mortality. Differences existed in other areas of disenrollment such as those voluntarily withdrawing from the program and those no longer financially eligible. For example, Mansfield and Lima report higher rates of voluntary withdrawals (17% and 20%, respectively), compared to 1% in Dayton and 2% in Columbus. Disenrollment as a result in changes in financial status also varied, with Dayton and Akron (13%, 12%) considerably higher than Lima, Toledo, and Mansfield (2%).

One of the critical challenges for the Ohio Department of Aging is to explore which of these results are caused by difference in reporting and record keeping procedures and which are true differences. Some of these disenrollment reasons, such as the voluntary withdrawal category appear to be driven by reporting differences, rather than real differences in outcomes. While others, such as nursing home placement, may be related to real differences in practice. Improving standardization is the first step in quality improvement. This would need to be followed by using the data to develop best practice methods across the state. For example, what are the approaches used by programs that have very low nursing home placements and can these strategies be used across the state?

Table 22
Reasons Consumers Were Disenrolled from PASSPORT, FY 2008–2014

Reasons	2008 (Percentages)[a]	2010 (Percentages)[a]	2012 (Percentages)[a]	2014 (Percentages)[a]
Died	41.7	49.2	45.5	38.6
Admitted to Nursing Facility for 30+ Days	38.3	31.1	34.0	30.4
Admitted to Hospice Care	0.2	0.3	0.2	0.1
Admitted to Hospital for 30+ Days	1.1	0.9	1.0	0.9
Did Not Meet Financial Eligibility	3.7	4.9	3.0	6.5
Could Not Agree on a Plan of Care	1.2	0.9	1.2	1.6
Did Not Meet Level-of-care	1.7	0.7	1.5	1.7
No Longer Resides in Ohio	5.0	3.9	4.6	4.2
Other (including transfer to other waivers)	2.3	2.4	3.0	6.1
Voluntarily Withdrew from Program	4.6	5.7	6.0	9.9

[a] Percentages are adjusted to reflect only those consumers for whom information was available on each variable.

Source: PASSPORT Information Management System (PIMS), 2008-2014.

Table 23
Reason for Disenrollment for PASSPORT by Region

Location	Number Disenrolled	Died (Percentage)	Admitted to NF for 30+ (Percentage)	Voluntary Withdraw (Percentage)	No Longer Residents in Ohio (Percentage)	Admitted to Hospital (Percentage)	Did Not Meet Level of Care (Percentage)	Financial Eligibility (Percentage)	Could Not Agree on Care Plan (Percentage)	Admitted to Hospice Care (Percentage)	Other (Percentage)
Cincinnati	734	37.4	31.3	7.2	3.3	0.4	3.7	4.9	1.2	0.5	10.1
Dayton	683	39.2	30.8	1.3	4.8	0.7	0.6	12.7	5	0.0	4.9
Lima	196	30.7	39.8	19.9	2.0	2.6	0.5	2.0	0.5	0.0	2.0
Toledo	586	34.8	35.8	12.0	3.9	1.2	1.0	1.9	1.5	0.2	7.7
Mansfield	528	38.8	25.7	17.2	3.0	1.3	3.2	4.2	1.1	0.0	5.5
Columbus	779	45.1	30.4	2.4	8.9	0.8	5.8	2.4	1.8	0.0	2.4
Rio Grande	839	46.3	30.4	9.7	4.9	0.7	0.2	3.5	0.8	0.0	3.5
Marietta	234	43.6	30.8	12.0	4.3	0.4	0.9	2.6	0.4	0.4	4.6
Cambridge	514	45.7	36.6	6.2	3.1	0.4	0.2	2.7	0.4	0.0	4.7
Cleveland	933	35.8	36.3	9.2	2.3	1.9	0.8	6.3	0.6	0.2	6.6
Akron	886	41.3	33.2	8.9	3.3	0.6	0.2	5.5	1.0	0.0	6.0
Youngstown	307	34.8	32.3	10.8	2.3	1.6	1.3	11.7	1.0	0.7	3.5
Sidney	227	41.9	26.4	14.5	2.6	0.4	0.9	6.6	0.4	0.0	6.3
Total	7446	39.7	32.3	10.1	3.8	1.0	1.5	5.5	1.2	0.2	5.2

Source: PASSPORT Information Management System (PIMS), 2014.

COMPARISONS ACROSS STATE LONG-TERM SERVICE PROGRAMS

In this report we have described the extensive involvement of the Medicaid program in assisting older Ohioans with severe disability in receiving long-term services and supports. In this section we compare the characteristics of Medicaid enrollees across the array of programs. The profile data include every person that used a particular program over the course of the year and so the sample sizes are larger than our previous tables that showed the number of individuals on a given day (a snap shot of utilization). Although each of the programs require participants to meet the state Medicaid nursing home level of care criteria, there are differences in demographic and functional characteristics across the programs. Some of these differences are explained by program policy, for example the PACE eligibility age is 55, assisted living waiver is 21, PASSPORT is 60 and nursing homes do not have age restrictions. Some of these differences are the result of program focus or design. For example, the Transitions Carve-Out program works with a population with greater health needs.

There are some noteworthy differences in demographic characteristics across the programs (See Tables 24 and 25). Age varies appreciably with the Assisted Living Waiver Program (41%) and nursing homes (34%) serving the highest proportion of individuals age 85 and older. PACE (10%) and nursing facilities (16%) serve the largest proportion of individuals under age 60. A noticeable trend across all of these programs is the high proportion of individuals being served who are under the age of 70. For example, three in ten PASSPORT enrollees, one quarter of assisted living participants, 40% of PACE and one third of nursing home residents are under the age of 70. Gender and race differences are also identified in the comparison. The assisted living waiver (84%) serve a high proportion of women, nursing facility and Transitions Carve out serve comparatively more men (33%, 28%, respectively). The racial profile of participants also varies considerably, with PACE (69%) Transition Care-Out (36%) and PASSPORT (28%) serving the highest proportion of non-whites.

Disability rates also vary across programs. Nursing facility residents have the highest reported levels of impairment, averaging between four and five ADL limitations. A program also serving a very impaired population is Transitions Carve-Out. The Transitions Carve-Out has traditionally served participants with substantial health care needs. PACE and assisted living participants have lower reported activity of daily limitations (between two and three). A high proportion of assisted living participants, (44%) need partial or 24 hour supervision.

Table 24
Demographic Characteristics of Ohio Medicaid Waiver Consumers, PACE Participants and Medicaid Nursing Facility Residents, 2014

	PASSPORT[1] (Percentage)[a]	Assisted Living Waiver[1] (Percentage)[a]	PACE[2] (Percentage)[a]	Transitions Aging Carve-Out[3] (Percentage)[a]	Medicaid Nursing Facility[4] (Percentage)[a]
Age					
<60	—	8.3	10.3	7.0	15.8
60–69	28.7	15.5	31.0	83.5	15.8
70–74	19.9	8.9	13.7	5.5	9.1
75–79	18.1	11.7	14.3	2.0	11.1
80–84	15.0	15.6	12.0	1.1	13.9
85–89	11.5	20.1	11.6	0.4	16.3
90–94	5.0	13.3	4.5	0.4	12.4
95+	1.8	7.6	2.6	0.1	5.7
Average Age	75.3	79.4	74.0	64.3	76.3
Gender					
Female	75.4	78.4	75.1	72.1	67.4
Race					
White	72.0	84.2	30.7	64.4	81.9
Black	26.1	12.1	68.7	34.5	16.9
Other	1.9	3.7	0.6	1.1	1.2
Number of Consumers/Residents	**43,428**	**5941**	**882**	**2798**	**53,574**

[a] Percentages are adjusted to reflect only those consumers for whom information was available on each variable.

Source: [1]PASSPORT Information Management System (PIMS), FY 2014.
[2]Through August 31, 2014 Ohio had two PACE sites and both are included here.
[3]Unpublished data for calendar year FY 2014, Ohio Department of Medicaid, Feb. 2013.
[4]Quarterly nursing facility. MDS 3.0 April–June 2014.

Table 25
Functional Characteristics of Ohio Medicaid Waiver Consumers, PACE Participants and Medicaid Nursing Facility Residents, 2014

	PASSPORT[1]	Assisted Living Waiver[1]	PACE[2]	Transitions Aging Carve-Out[3]	Medicaid Nursing Facility[4]
Percentage with Impairment/Needing Hands-On Assistance in Activities of Daily Living (ADL) (Percentage)[a]					
Bathing	94.7	88.0	82.8	97.5	87.7
Dressing	62.6	50.3	53.4	93.7	84.8
Mobility	83.7	74.6	84.1	85.8	80.4
Toileting	21.4	21.9	27.2	43.9	81.2
Eating	4.4	4.0	2.6	22.3	30.5
Grooming	26.5	18.7	12.4	25.8	83.7
Number of ADL Impairments[*]					
0	1.4	3.7	8.9	0.4	7.4
1	4.1	14.9	5.9	1.4	5.1
2	34.7	34.1	34.6	14.5	3.5
3	33.3	25.2	26.5	35.0	4.1
4 or more	26.3	21.9	24.1	48.7	79.9
Average Number of ADL Impairments[**]	2.9	2.6	2.6	3.7	4.5
Supervision Needed					
24-hour	9.2	18.1	NA	NA	NA
Partial time	11.9	26.2	NA	NA	NA
Cognitive Impairment[c]	NA	NA	NA	6.6	53.0
Per Member, Per Month LTSS Medicaid[5] (Dollars)	$1,312	$1,608	$2,083	$2,696	$4,268
Number of Consumers/Residents	**43,428**	**5941**	**882**	**2798**	**53,574**

[a] Percentages are adjusted to reflect only those consumers for whom information was available on each variable.

[*] From list above.

[**] Total number of impairments in "community access", "environmental management", "shopping", "meal preparation", laundry" or " medication administration."

Source: [1] PASSPORT Information Management System (PIMS), FY 2014.
[2] Through August 31, 2014 Ohio had two PACE sites and both are included here.
[3] Unpublished data for calendar year FY 2012, Ohio Department of Medicaid, Feb. 2013.
[4] Quarterly nursing facility. MDS 3.0 April–June 2014.
[5] Per member, per month totals included the cost of management as reported in Medicaid claims. Ohio Department of Medicaid, 2013-2014.

The final comparison examines Medicaid expenditures for these programs. These costs are the actual expenditures made by Medicaid, after they have received the consumer's contribution. PASSPORT and the assisted living waiver are the two lowest cost programs ($1,312 and $1,608, respectively). One of the reasons that the assisted living waiver is less costly is because most residents start out paying privately and traditionally have higher monthly incomes and thus have higher program contributions. Transitions Carve-Out, which serves a much more impaired population compared to PASSPORT is about $2,700 per month in cost. As noted, that program will be combined with PASSPORT in July, 2015. Nursing homes, who provide an array of services to a very impaired population, receive almost $4,300 per month from Medicaid.

LONG-TERM SERVICES AND SUPPORTS SYSTEM CHANGES

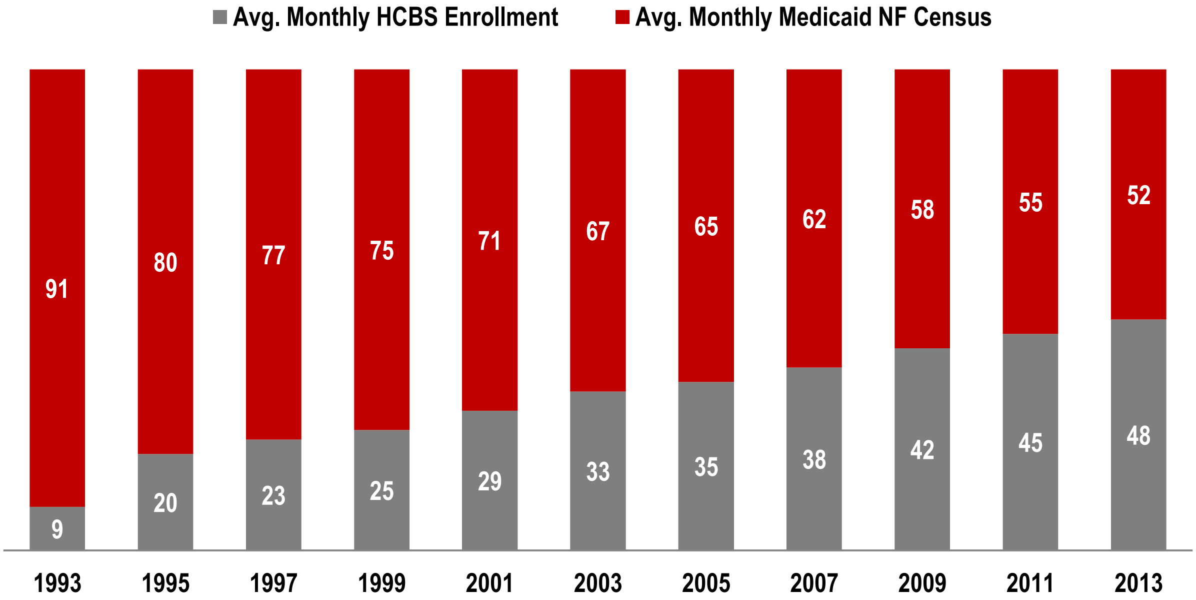
In this report we have presented data tracking the provision of long-term services in Ohio. In this section we address the impact that these changes have had on system balance and costs.

SYSTEM BALANCE

In 1993, the initial year of this study, critics consistently identified Ohio as a state system that emphasized the nursing home care option over home-and community-based services. In fact, a report on system balance in the U.S. on data from 1997, ranked Ohio as the 47th least balanced state in the nation (AARP, 2000). Our report has described a substantial expansion of home-and community-based waiver services and a reduction in nursing home use by older people. In combination, these changes mean that Ohio has dramatically changed its long-term services profile and now ranks 25th on the balancing indicator. As shown in Figure 4, in 1993 more than nine of ten older people receiving long-term services from Medicaid did so in a nursing home setting. In 2013 that ratio had changed to almost half of the individuals receiving long-term services through Medicaid doing so in the community (52 to 48 ratio). It should be noted that these data focus on Medicaid expenditures for Ohioans 60 and older, and thus vary from the Medicaid balancing numbers reported by the Ohio Department of Medicaid for all individuals with disability.

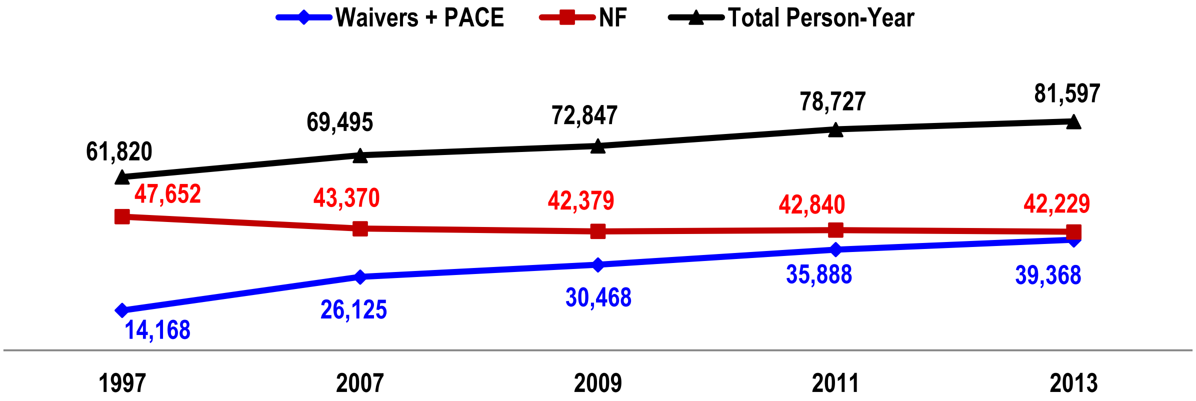
The strategy that the state used to change was one that recognized the rapidly growing older population and the need to provide a better range of home- and community-based options. The hope of policy makers was that the expansion of options would reduce the rate of nursing home use by older people by making help more widely available in the community. Figure 5 illustrates the shift in service settings of Ohio's Medicaid long-term services participants age 60 and older. In 1997, the Medicaid long-term services system served just under 62,000 individuals age 60 and older, with 47,650 (77%) of those persons in the nursing home setting. In 2013, the system served 81,600 older individuals, with 39,370 (48%) in the community. The increase in sheer number occurred as a result of population aging. For example, in 1995, Ohio had 157,200 individuals age 85 and older and by 2015 that number has grown to over 260,000 (65% increase). Yet the 2013 number of older people in Ohio nursing homes has been reduced by 5400 each day from 1997.

Figure 4
Distribution of Ohio's Long-Term Care Services and Supports Use by People Age 60 and Older, 1993-2013



Source: Unpublished Medicaid Claims data, Ohio Department of Medicaid, SFY 2005-2013.
Annual and Biennial Survey of Long-Term Care Facilities, 1992-2005.
PASSPORT Information Management System (PIMS), 1993-2005.

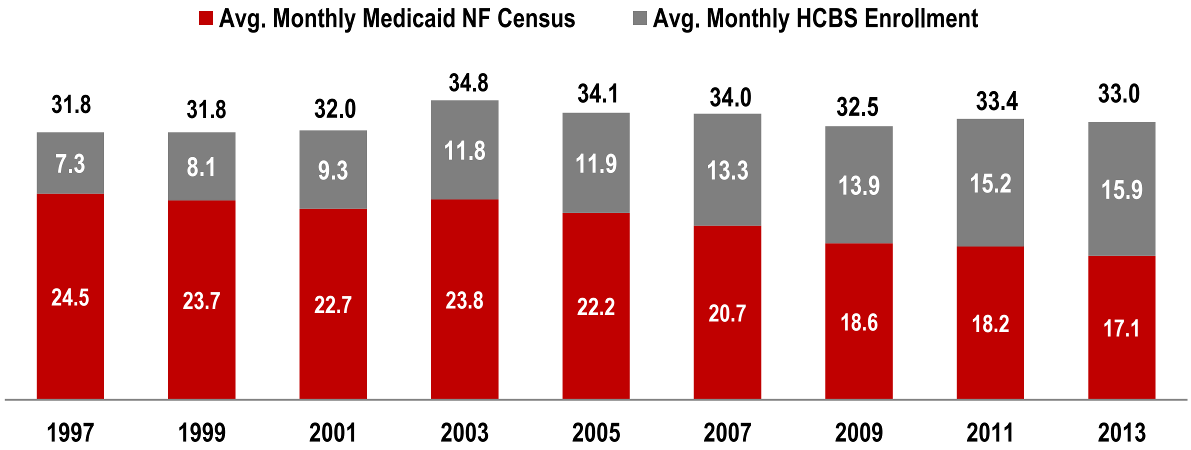
Figure 5
Medicaid Long-Term Services and Supports for Individuals Age 60 and Older, 1997-2013



Source: Unpublished Medicaid Claims data, Ohio Department of Medicaid, SFY 2007-2013.
Annual Survey of Long-Term Care Facilities, 1997.
MDS Plus April-June 1997. MDS 2.0 April–June 2004, 2010.
MDS 3.0 April–June 2012, 2014.

Figure 6 displays the growth in the number of individuals using long-term services and supports in the context of overall population growth. One of the questions that policy makers asked at the outset of home-and community-based services expansion was, will this growth create demand such that the number of Medicaid participants increases at a faster rate than the overall aging population? To address this question, we examined the utilization rates of long-term services as a rate of the number of Ohioans age 60 and older residing in the state. In 1997, the Medicaid long-term services utilization rate was 32 per 1000 people age 60 and older, with 24.5/1000 using nursing homes. In 2013, the rate of 33/1000 was quite comparable to the 1997 number, but the ratio had changed considerably, with the nursing home rate dropping to 17/1000. These data indicate that the state strategy did not increase the use rate above the growth expected as a result of an increased aging population, but it did change the configuration of services.

Figure 6
Number of People Age 60 and Older on Medicaid Residing in Nursing Facility or Enrolled in HCBS per 1000 Persons in Population, 1997-2013



Source: Unpublished Medicaid Claims data, Ohio Department of Medicaid, SFY 2007-2013.
Annual and Biennial Survey of Long-Term Care Facilities, 1997.
PASSPORT Information Management System (PIMS), 1997.
Ritchey, P. N., Mehdizadeh, S., & Yamashita, T. (2012). Projections of Ohio's population 2010-2030. Scripps Gerontology Center, Miami University, Oxford, OH.

A longitudinal presentation of home care and nursing home care for Ohioans under age 60 is also examined in this work (See Figure 7). Long-term services use by individuals with severe disability under the age of 60 has shifted from 64% Medicaid LTSS participants residing in institutional settings in 1997, to 41% in 2013. The data displayed in Figure 8 indicate that more than 8700 individuals receive home-and community-based Medicaid services in 2013, compared to just over 6000 in the institutional setting.

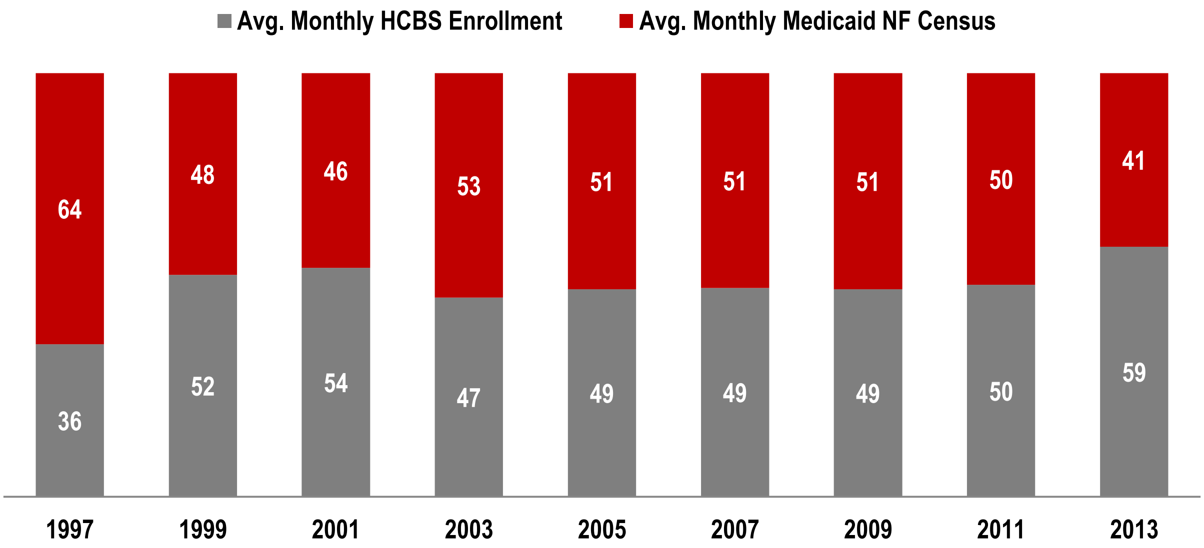
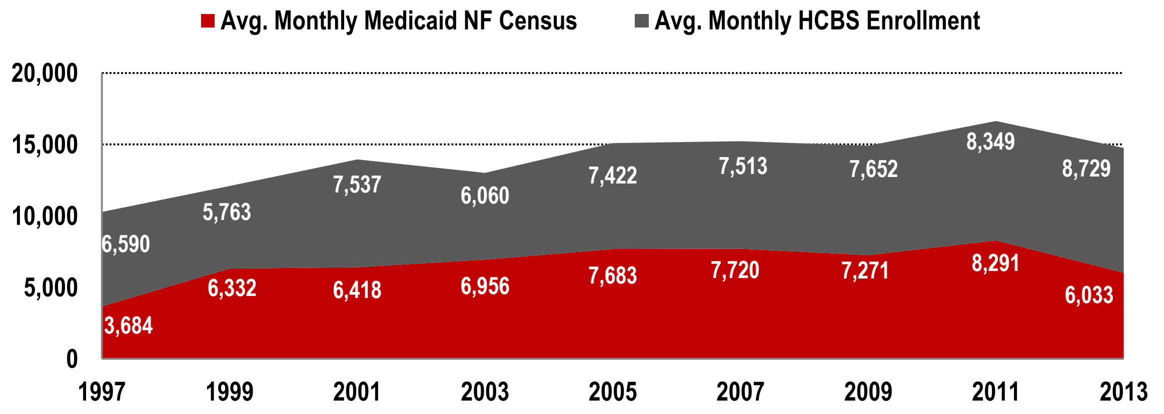


Figure 7
Percent Distribution of Ohio's Long-Term Care Services and Supports Utilization by People Under Age 60, 1997-2013

Source: Unpublished Medicaid Claims data, Ohio Department of Medicaid, SFY 2007-2013.
Unpublished data, Ohio Department of Medicaid, Bureau of Community Services, SFY 1997-2005.

Figure 8
Average Number of People Under Age 60 Receiving Long-Term Services and Supports Monthly, Paid by Medicaid, 1997-2013

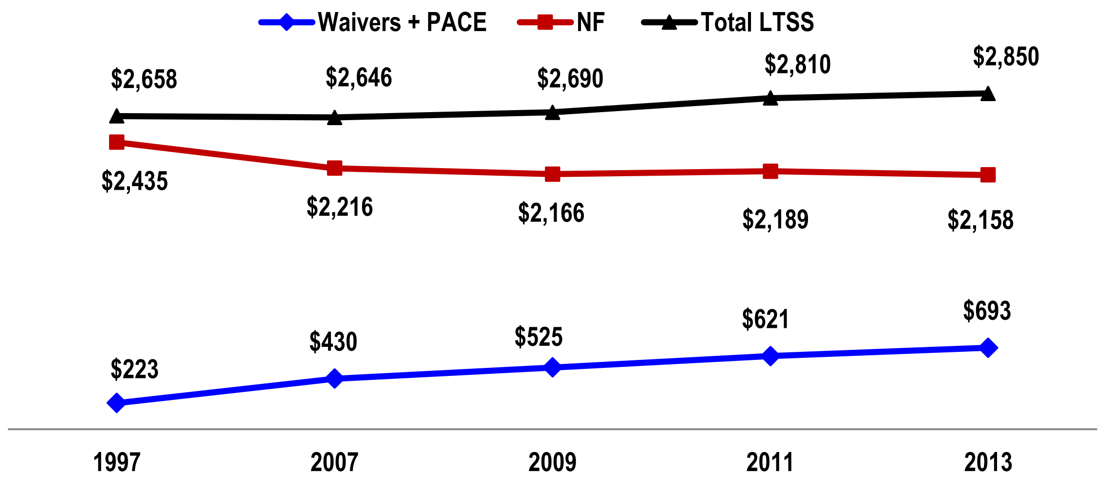


Source: Unpublished Medicaid Claims data, Ohio Department of Medicaid, SFY 2007-2013.
Unpublished data, Ohio Department of Medicaid, Bureau of Community Services, SFY 1997-2005.

SYSTEM COSTS

In Figure 9 we show how these service changes have impacted Medicaid costs. All of the dollars shown here have been converted into 2013 rates. These data show that in 1997 the state, in 2013 dollars, spent $2.66 billion on Medicaid long-term services for individuals age 60 and older. Of this amount $2.44 billion was spent on institutional care and $223 million on all of the home- and community-based waiver services provided to individuals age 60 and older. Medicaid expenditures for 2013 show $2.85 billion in total long-term services, with institutional care dropping to $2.16 billion and the home- and community-based services expenditures increasing to $693 million. These data indicate that despite a 55% increase in the population age 85 and older since 1997, long-term service expenditures in real dollars under Medicaid have increased by 7% over this 16-year time period. Thus, while the state is serving nearly 20,000 additional older people each day with severe disability, they are doing so at a lower cost and thus real expenditure growth has been about $190 million over this 16 year time period.

Figure 9
Comparison of Total Medicaid Long-Term Care Services and Supports for Individuals Age 60 and Older at 2013 PMPM Rates (in Millions of Dollars), 1997-2013



Source: Unpublished Medicaid Claims data, Ohio Department of Medicaid, SFY 2007-2013.
Annual Survey of Long-Term Care Facilities, 1997.
MDS Plus April-June 1997. MDS 2.0 April–June 2004, 2010.
MDS 3.0 April–June 2012, 2014.
PASSPORT Information Management System (PIMS), 1997.

RECOMMENDATIONS

Ohio continues to make substantial progress in its efforts to provide long-term services and supports to a growing population of older people with severe disability. The changes that have occurred over the last two decades have been considerable. In 1993, nine of ten older people with severe disability receiving long-term services through Medicaid did so in an institutional setting, compared to an almost 50/50 ratio today. The state has improved its balance by both expanding home- and community-based services and by actually reducing the number of older people using nursing home care. Between 1997 and 2013, Ohio reduced the average daily census of older nursing home residents supported by Medicaid by 5400. This during a period when the number of Ohioans age 85 and older increased by more than 80,000 (55%). Despite this progress, the challenges ahead are daunting. In just the next 15 years, the population over age 60 and age 80 will both increase by almost 50%. About 40% of the budget is allocated to long-term services and adding costs to a program that already accounts for almost one-quarter of the state general revenue budget is a serious concern. In response to these challenges we offer the following recommendations:

- The Medicaid system of long-term services has been reformed dramatically over the past two decades. Where Ohio needs to continue to evolve is in developing an overall strategy to prepare for the unprecedented increase in the older population. More than nine in ten older people living in the community do not use the Medicaid program, but two-thirds of nursing home residents do rely on the program. The MyCare initiative represents a substantial effort to test how the state can make Medicare and Medicaid more efficient. What the program does not do is address how to delay or avoid disability for those not on the Medicaid program. This is particularly important for moderate and middle income elders who do not turn to Medicaid until they require nursing home care. Today more than half of older people with severe disability use long-term services funded through the Medicaid program. As the older population increases, the strategic question is: How can we reduce or at least slow the rate of disability for the older population? Although the Ohio Department of Aging has begun major initiatives, such as Steady U, and the expansion of evidence based practices including,--A Matter of Balance--, the amount of resources, both private and public, as a nation and a state, that we allocate to preventing disability is a small fraction of the overall system expenditures. An expanded public/private partnership between state and local government, businesses, health insurance, health and social service providers, educational institutions, media, and an array of other actors is needed to change the way that society addresses issues surrounding aging successfully.

- A related recommendation involves an effort to use technology to assist older people with a disability to remain independent in the community. The technological change that we have experienced in the last two decades is truly remarkable. The power and potential of computer processing means that the age of robotics, whether it be assistance with driving a vehicle or in the receipt of personal care, is now possible. Although we are not yet ready to market such devices, the development of such products is indeed on the horizon. Ohio already has established sectors of high technology, this seems like an excellent area of economic and social development that would not only fuel the state economy, but could also assist the state in providing assistance to a growing population. Potential areas of public/private collaborations between Ohio businesses and Ohio colleges and universities would be a good area of partnership.

  A second area of innovation and linked to technological development is environmental adaptability to assist older people to remain independent in the community. Some of these types of changes could be extensive in scope. For instance, the concept of visitability, a residence deliberately built to include universal design, has received considerable attention. While incorporating such universal design elements such as a no-step entrance and first floor accessible bathroom into new construction or renovation will not happen overnight, preparing homes for tomorrow is an important planning strategy. The state should explore both financial incentives and in some areas regulatory controls to spur on development in this area. Some adaptations may include medium level renovations, such as a ramp entrance, rather than stairs. Finally, some are small fixes, such as well-placed grab bars or access to a hospital bed. Often family caregivers report that it is these low tech supports that allow them to continue to provide assistance in the home rather than turning to more formal settings.

- Despite our interest and support for technology it is also clear that long-term services, regardless of setting, will remain a labor intensive and personal set of services. Efforts to better train and support the direct care workforce are critical as Ohio ages. Our survey of nursing homes found an average turnover rate of 33% for state trained nursing assistants and in some facilities turnover rates of over 100%. Yet other facilities have been able to dramatically lower rates of turnover. Solving the challenges associated with having a high quality direct care work force includes many components. Wages and benefits, staffing patterns, organizational structure, market conditions and a host of other factors have been shown to impact workforce quality and rates of turnover. However, our data show that even in similar labor markets, variation in turnover rates are significant. Statewide best practices initiatives, such as the one being explored by the Ohio Department of Aging with the nursing home industry, are the kinds of efforts that need to be expanded across the long-term delivery system. In some instances, some of these innovative training approaches might prove useful for family and other informal caregivers.

- In the past two reports, we have discussed the increasing proportion of individuals under age 60 and 65 using Ohio nursing homes. This has been a particular challenge for the Medicaid program, with almost one-quarter of residents in this age category. Our length of stay analysis showed that more than 40% of the under-60 group stays three months or less and 54% stay six months or less, suggesting that Medicaid has become a short term rehabilitation funding source for younger Medicaid participants. These increases in short-term care appear to be an appropriate use of the Medicaid program. However, more than one-third of the under-60 age group are nursing home residents for one year or more. With lower overall rates of disability recorded for this group, questions about the appropriateness of setting for these individuals have been raised as a concern. As Ohio has expanded home- and community-based service options, there has been considerable effort to make sure individuals of all ages reside in the appropriate settings. We recommend that a careful examination of the under age 60 group who are long stayers in Ohio nursing homes be undertaken. It is important for the state to gain a better understanding of the circumstances of placement for these individuals and to explore the barriers to receiving services in a community setting.

- In the past two years, Ohio has reduced the number of nursing home beds in the state and the number of individuals with severe disability who reside in a nursing home setting. For example, in 2011, 29% of older people with severe disability resided in Ohio nursing homes and in 2013 that proportion had dropped to 27%. However, as a state we still have, a higher supply of beds than most states and a higher proportion of older people that utilize institutional settings per capita. One approach that over-bedded states have taken is to create incentives for facilities to take beds off line. Because of the Certificate of Need policy that exists in Ohio, nursing home beds have market value and facilities are hesitant to eliminate beds. States have explored such options as allowing facilities to bank beds for potential use in the future. Such a program could allow facilities to bank beds for a period of time, (e.g., ten years) with an option to assess need at the end of this time period. This type of approach would help the current system gain better efficiency and right size the industry in today's changing market.

- A unique component of Ohio's long-term services and supports system is the county level senior tax levy. Ohio's counties have a strong tradition of using local resources to respond to community needs. In fact, the senior levies in Ohio, which operate in 71 of the state's 88 counties, generate more revenue than the combined total of the other 12 states that use such local levies. These county resources are a tremendous asset to the state in helping older Ohioans to remain in their local communities. As noted earlier, most older people are not eligible for Medicaid when they reside in the community, but more than six in ten nursing home residents use Medicaid. Thus, the levy programs are critical in efforts to help moderate and middle income older people receive support in the community and such programs could help the state make the long-term services and supports system be more efficient and effective. For example, a common limitation of the levy programs is that there are strict cost limitations, so that most programs spend only $200-$300 per month for supportive services. Individuals that need more assistance often end up on the Medicaid home- and community-based waiver programs and in fact many counties mandate that programs transfer those meeting waiver eligibility criteria to those programs. Although such a shift is beneficial to the county levy programs, this approach results in a more costly intervention. It would be beneficial to the state and local county levies if there was better cooperation between programs. For example, perhaps the state could allocate some revenues to incentivize county levy programs to keep individuals in their local programs rather than encouraging the shift. One of the essential strategies of the health and long-term services and support systems has been to work to ensure that older people maximize independence and receive assistance in the most cost-effective manner. The state has been successful in shifting older people from institutional to community-based settings. A shift of individuals from higher cost Medicaid home- and community-based services to lower cost county programs should also an important system goal.

- As noted, the system of long-term services in Ohio has become considerably fluid in nature. The once held assumption that individuals progressed in linear fashion through the continuum of long-term services—home to assisted living to nursing home—is no longer the typical case. Individuals go from setting to setting in very different orders and under different circumstances. In order to track participant outcomes, it would be useful to have a common core of measures across long-term services settings. In order to ensure that the system is as cost effective as possible, it is critical that common approaches to assessing level of need, use of services, and outcomes of service are developed and implemented. Right now it is difficult to compare the effectiveness of programs because different data are collected to characterize the population and different outcomes are used to assess program performance. Even when common measures are used, they are not collected in a standardized manner, making comparison across and sometimes within programs difficult. The demographic challenges of the future mean that our long-term services system will need to be as efficient and effective as possible. A better system of quality monitoring and measurement will be a key element of Ohio's improvement strategy.

Ohio has made considerable progress in preparing for a growing older population. Policy makers have used data to reform the long-term services system. The future challenge will be to maintain this momentum as the state enters a period of even more rapid demographic change.

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