The Road to Balance:

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

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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.

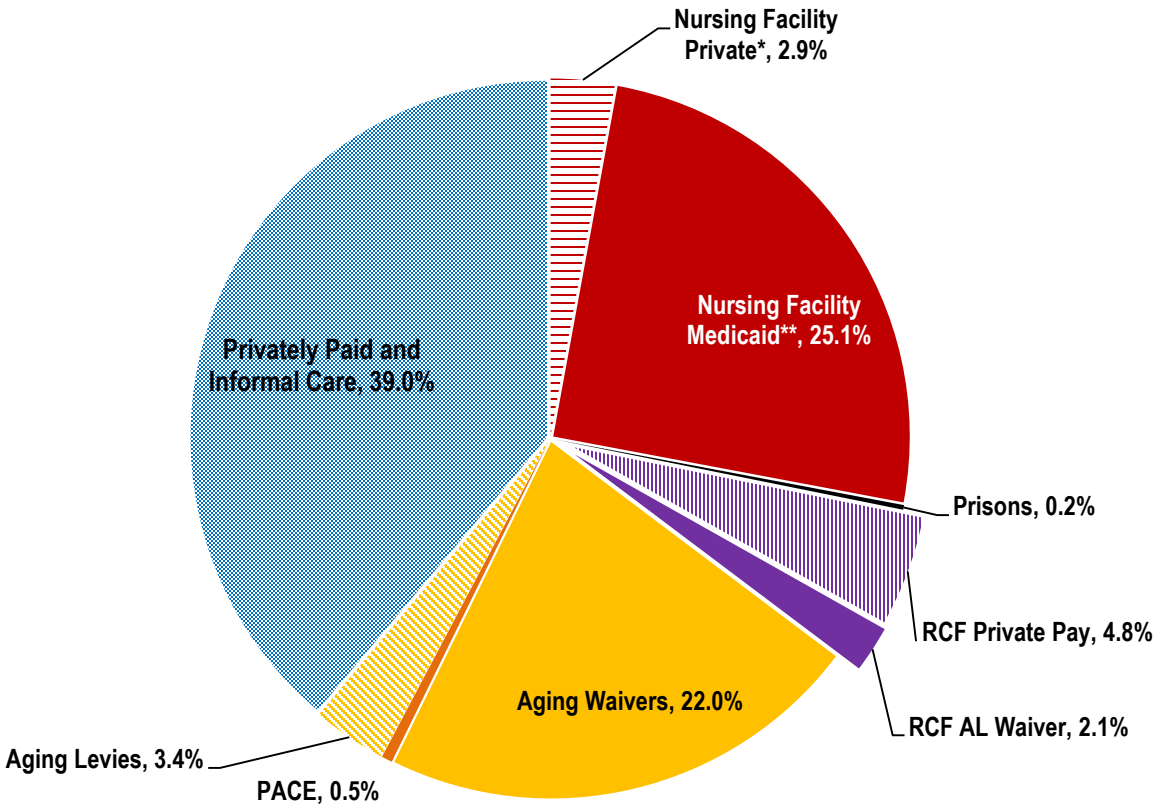
POPULATION GROWTH AND DISABILITY

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.

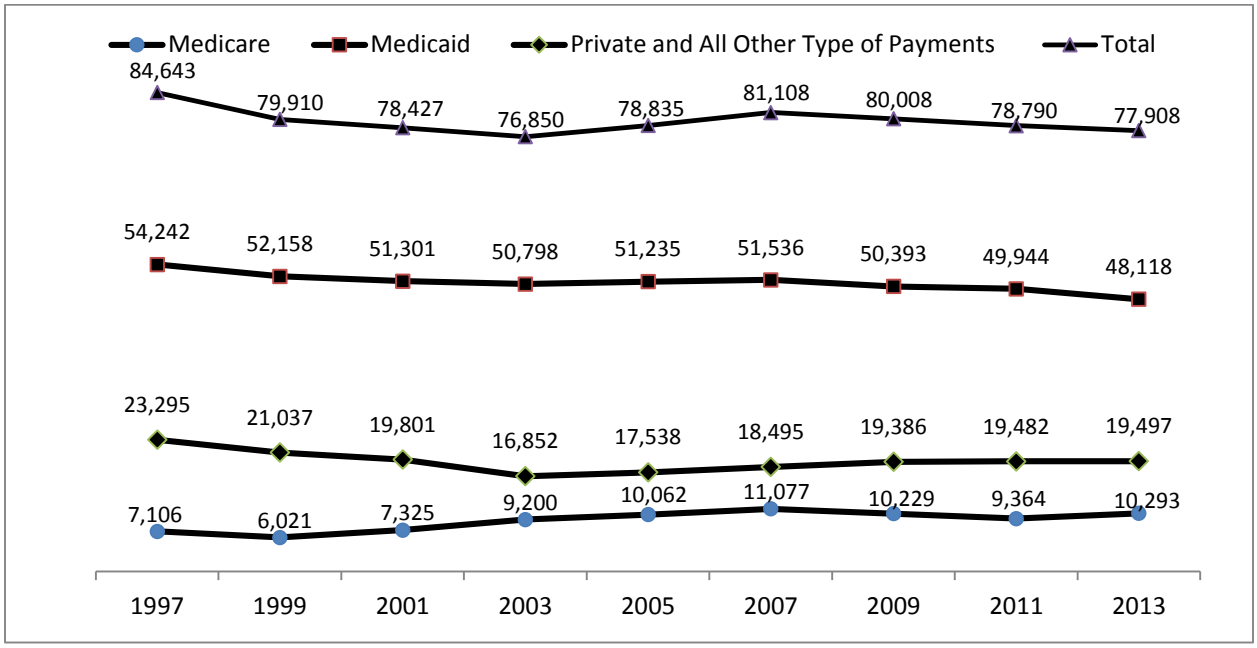
A second prominent challenge resulting from this shift is the focus on the transition from hospital to nursing home. A major concern now being voiced is that Medicare patients transitioning from hospital to nursing home or community have a very high rate of hospital re-admissions—more than 30%. CMS reimbursement 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.

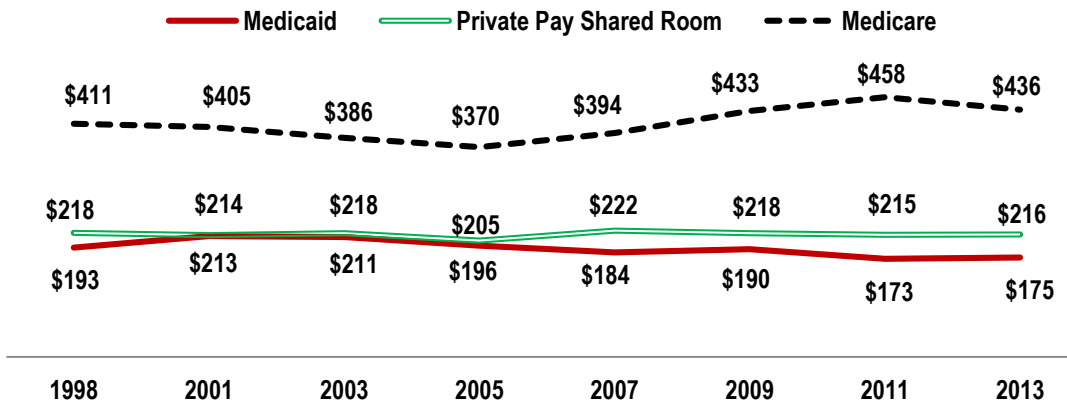
In Figure 3, we present the nursing home reimbursement rates and private pay costs for the time period 1998 to 2013. All of the yearly rates are presented in 2013 dollars. Results show that over the fifteen year time period nursing home reimbursement rates have fluctuated by funding source. The private 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

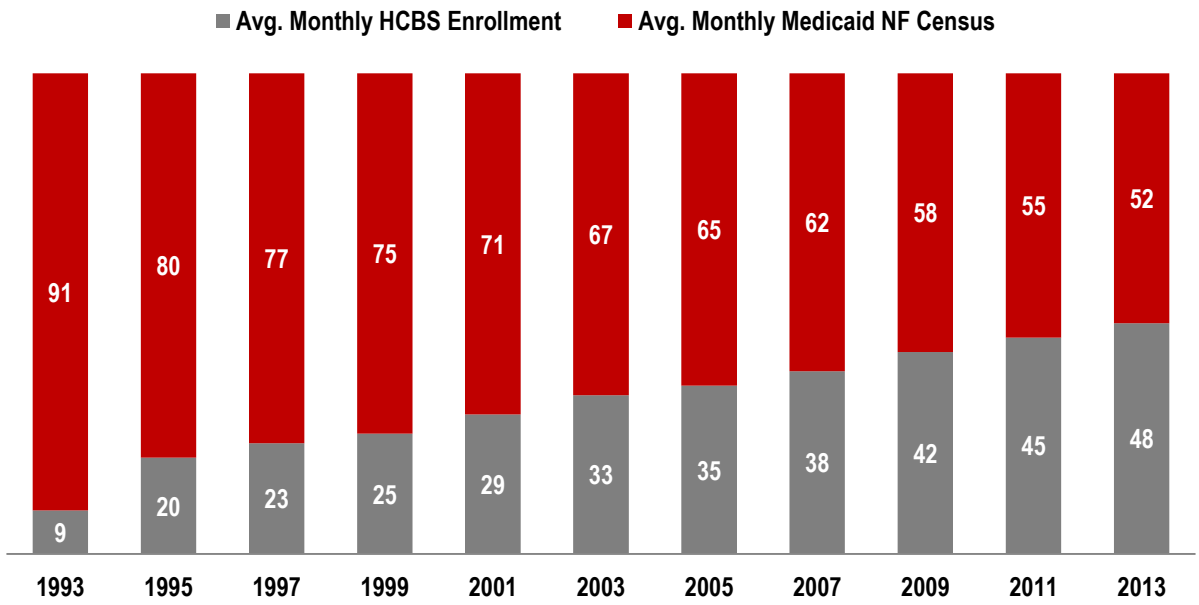
In this report we have presented data tracking the provision of long-term services in Ohio. In this section we address the impact that these changes have had on system balance and costs.

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.

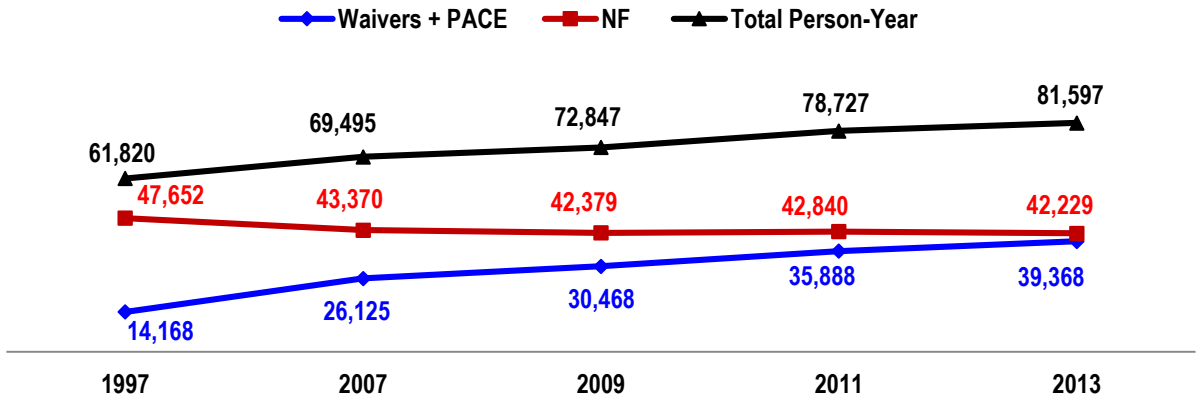
The strategy that the state used to change was one that recognized the rapidly growing older population and the need to provide a better range of home- and community-based options. The hope of policy makers was that the expansion of options would reduce the rate of nursing home use by older people by 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.

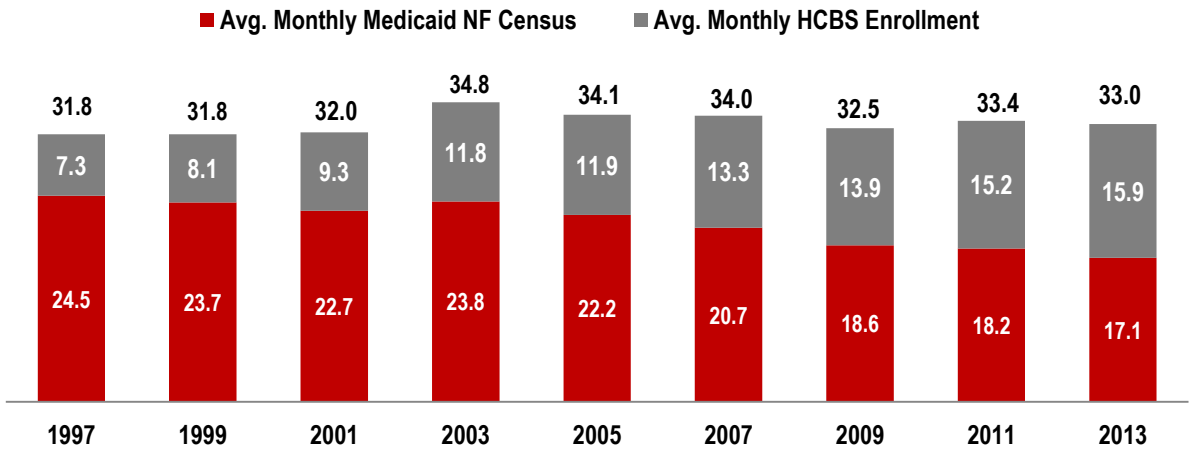
Figure 5
Medicaid Long-Term Services and Supports for Individuals Age 60 and Older, 1997-2013



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.

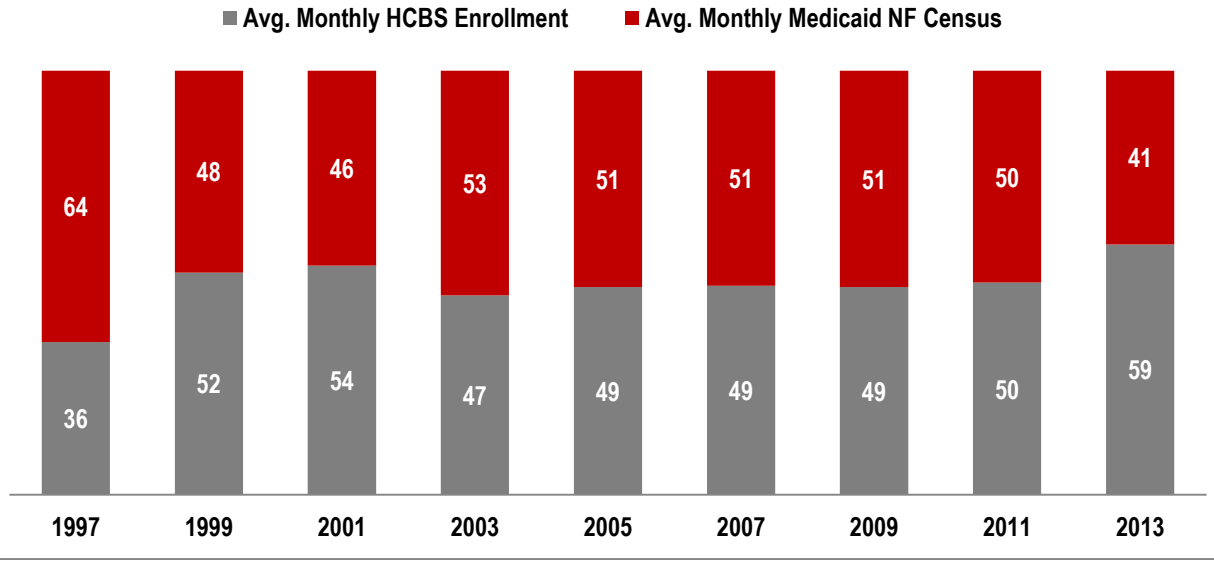
Figure 6
Number of People Age 60 and Older on Medicaid Residing in Nursing Facility or Enrolled in HCBS per 1000 Persons in Population, 1997-2013



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.

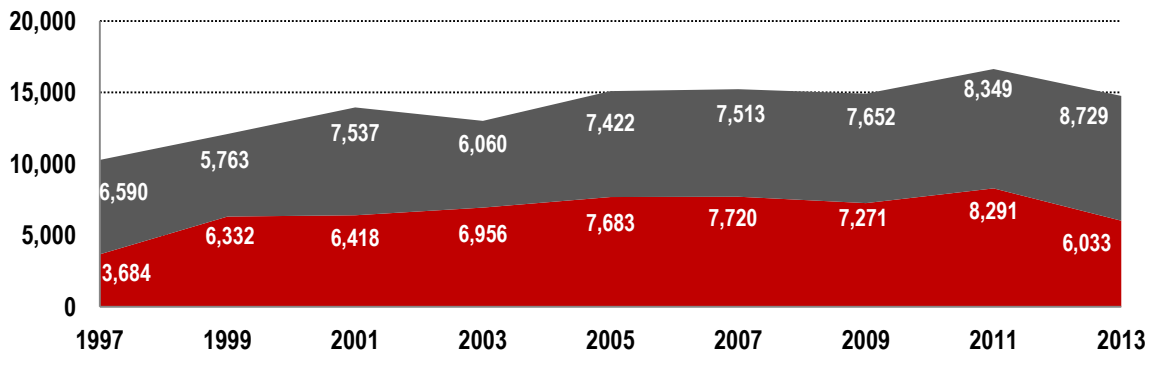
A longitudinal presentation of home care and nursing home care for Ohioans under age 60 is also examined in this work (See Figure 7). Long-term services use by individuals with severe disability under the age of 60 has shifted from 64% Medicaid LTSS participants residing in institutional settings in 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

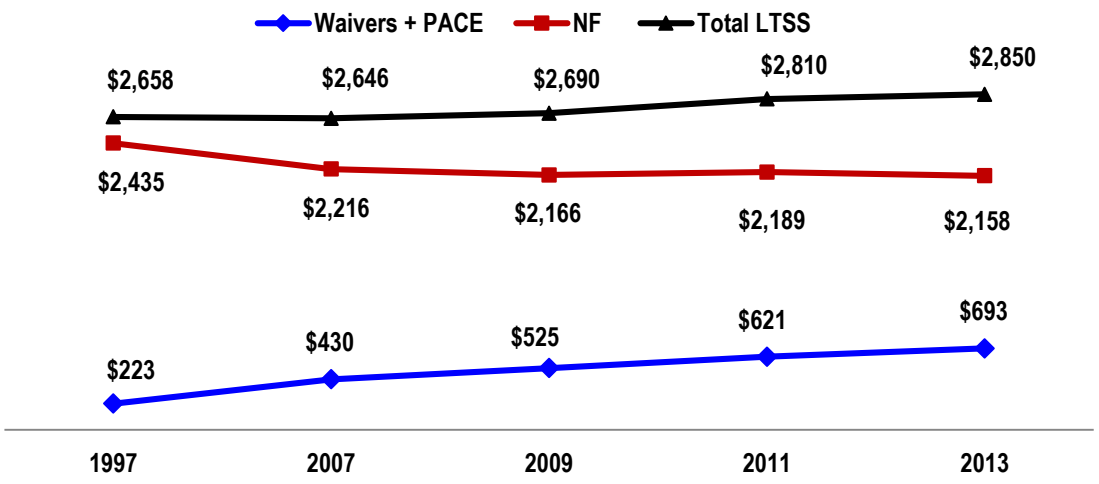


Source: Unpublished Medicaid Claims data, Ohio Department of Medicaid, SFY 2007-2013.
Unpublished data, Ohio Department of Medicaid, Bureau of Community Services, SFY 1997-2005.

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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