Maybe Elephants Can Dance:

Two Decades of Progress in Delivering Long-Term Services and Supports in Ohio

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At Scripps, we are thankful to Karl Chow for his great work on preparing the online survey of facilities and the outstanding report preparation work by Lisa Grant. We hope that this report will assist Ohio in its ongoing efforts to develop an efficient, effective, and compassionate system of long-term services and supports for people of all ages.

PROLOGUE

It was rumored that in the early days of computers when Apple CEO Steve Jobs heard that IBM was planning on developing a personal computer, he remarked, "IBM will develop a PC when elephants can dance." Experts have argued that big states like Ohio experience similar change barriers and that is why the largest states in the nation have had difficulties reforming their long-term services system. The 20-year longitudinal data presented in this report, however, document that Ohio has made considerable progress in creating a more efficient and effective system, suggesting that just maybe elephants *can* learn to dance.

EXECUTIVE SUMMARY

For many years Ohio's system of long-term services and supports was criticized for having an institutional bias. In 1993, more than nine of ten older people (60 and over) with a severe disability who received Medicaid long-term services did so in a nursing home. Ohio's expenditure ratio of institutional to home and community-based services for older people during this era was heavily slanted toward the nursing facility side, and the state had one of the lowest rankings in the nation, consistently listed as 47th. Ohio had one of the highest rates of nursing home use and reimbursement, and consequently Medicaid nursing home expenditures per capita were in the top five in the country. With one of the largest aging populations in the United States and growing and unsustainable Medicaid expenditures, state policy makers charted a course to change Ohio's system. This longitudinal study, initiated by the General Assembly in 1993 and continuously funded by the Ohio Department of Aging, tracks how long-term utilization has changed over the past two decades. Recent data indicate that the ratio of institutional care to home and community-based services for older people with severe disability using Medicaid has now changed to 55/45. The 47th ranking is now 24th. Over the last 15 years, while the age 85 and older population grew by 50%, Ohio decreased nursing home use for older people by 11%. During this same 15-year time period, the state increased the number of older people receiving home and community-based services by 150%, while holding the Medicaid long-term services budget relatively constant (7% increase over 15 years, in 2011 dollars). The data presented in this report describe the substantial progress made in the state in creating a more efficient and effective system of long-term services and supports.

The summary below highlights the major findings of the report:

DEMOGRAPHICS AND COSTS

- Ohio's older population (2.4 million adults age 60 and older in 2012) is the 7th highest in the nation—one in five older Ohioans report a moderate or severe disability requiring long-term care.

- In 2011, 200,000 older Ohioans had severe disability, and that number will increase to 249,000 by 2020, to 317,000 by 2030, and double by 2040.

- In 2011, 302,000 Ohioans of all ages had severe disability, and that group will grow to 342,000 by 2020 and 405,000 by 2030.

- In 2011, Ohio spent $5.71 billion on Medicaid long-term services and supports for all Ohioans with a severe disability: $3.43 billion on institutional care (60%) and $2.28 billion on home and community-based services. The national average for Medicaid long-term care spending for institutional care was 56%.

- In 2011, the spending ratio for adults with severe physical and/or cognitive disability was 72% institutional and 28% on home and community-based services; institutional expenditures accounted for 80% in 2006. As recently as 2004, Ohio's balancing ratio ranked 47th; today the state ranks 24th.

LONG-TERM SERVICES

- Three in ten adults with severe physical and/or cognitive disability receive assistance only from family or privately purchased care.

- Thirty-five percent of Ohioans with severe physical and/or cognitive disability live in nursing homes.

- Twenty-five percent of Ohioans with severe physical and/or cognitive disability receive in-home support through an array of Medicaid waiver programs, including: PASSPORT for older people, the Ohio Home Care programs for physically disabled individuals under age 60, Choices, PACE, and the assisted living waiver for individuals age 21 and older. It is estimated that about 60% of these individuals will become part of the Integrated Care Delivery System (ICDS) Demonstration.

- Ohio's PASSPORT Medicaid waiver program providing in-home services to individuals age 60 and over with severe disability has grown from serving 15,000 each day in 1995 to more than 30,000 in 2011. Ohio ranks 8th in per capita home and community based care expenditures.

- In 2011, Ohio had 967 nursing homes with 95,000 licensed beds. On a typical day more than 81,000 individuals reside in nursing homes. Of this number 61% are paid for by the Medicaid program, 15% are funded by Medicare, and 24% are self-pay or private insurance.

- Between 1995 and 2011, Ohio quadrupled the number of residential care facility beds to 44,000. Ohio has 585 residential care facilities and classifies 480 of these as assisted living residences. As of May 2013, 299 of these facilities were participating in the Assisted Living Waiver Program.

RESEARCH FINDINGS ON LONG-TERM UTILIZATION IN OHIO

- Nursing homes have shifted their focus and now provide a combination of both long and short-term care. In 1992 Ohio nursing homes had 71,000 admissions; in 2011 that number had nearly tripled to 216,000.

- The number of short-term Medicare admissions has been a major reason for the growth in nursing home admissions, going from 30,000 in 1992 to more than 149,000 in 2011. (396% increase).

- Many Ohioans use nursing homes for short stays; more than half spend three months or less, and two-thirds are residents for less than six months.

- Nursing homes are serving a higher proportion of individuals under age 60, increasing from 10% in 2004 to 13% in 2012. In our first report completed in 1994, 4% of residents were under age 60. Almost 17% of Medicaid nursing home residents are under age 60.

- Nursing home occupancy rates increased slightly as a result of a higher number of Medicare residents. Medicaid occupancy rates dropped slightly, and private pay occupancy remained stable.

- Over the past 15 years the Medicaid census in Ohio nursing homes has dropped by 9% from 54,242 in 1997 to 49,563 in 2011. The average daily census for the over 60 Medicaid population has dropped by 11%, but has increased by 26% for those under age 60.

- In 2011, Medicaid nursing home reimbursements were $167 per day, private pay rates (semi-private room) were $208 per day, Medicare fee for service was $442, and Medicare Advantage was $372 per day. Ohio's Medicaid reimbursement rates have dropped over the last decade, with a 2001 inflation-adjusted Medicaid rate of $206. (Actual 2001 rate was $172.)

- In 2011, residential care facility unit occupancy rates were 87%, a substantial increase from the 81% rate in 2009. This was driven largely by the growth of the assisted living waiver, which has an average daily census of 3000 individuals.

- Levels of disability do vary across Ohio's Medicaid long-term care program participants. Nursing home residents average between four and five activity limitations; the Ohio Home Care and Choices waiver participants average between three and four activity limitations; PASSPORT and Aging Carve-Out consumers average three limitations; and

PACE enrollees and the assisted living waiver residents average between two and three activity limitations.

- Medicaid costs, after participant contributions, also vary by programs, ranging from $49 per day for PASSPORT to $145 for nursing homes. PACE receives a $95 daily capitated rate that covers both acute and long-term care costs under Medicaid. In part because of higher rates of resident contribution, the Medicaid cost for the assisted living waiver was $56 per day.

- Ohio has changed its approach to delivering long-term services for older people with severe disability. In 1993, nine of ten older people with severe disability and supported by Medicaid were in nursing homes; by 2011, that proportion using nursing homes had dropped to 55%. The proportions have also changed for the under 60 population, dropping from 64% using nursing homes in 1997 to 50% in 2011. The under 60 ratios, however, have not changed much since 1999.

- Over the last 15 years, although the state has expanded the number of older people receiving in-home services, the Medicaid utilization rate for long-term services and supports has remained relatively constant. In 1997, Medicaid had a utilization rate of 32/1000, and in 2011 the rate was 34/1000.

- Utilization and cost analysis indicates that since 1997, Ohio has increased the total number of older people with severe disability served from 61,820 to 78,480, reflecting the growing number of older people in the state. In 1997, Ohio spent $2.69 billion on long-term care (at 2011 rates); in 2011, expenditures on older people's long-term care were $2.88 billion. This $195 million difference (inflation adjusted) represents a 7% increase in Medicaid expenditures, while the number of older people served increased by 27%.

Despite these substantial improvements, Ohio still faces considerable challenges ahead. Over the next 25 years the older population with severe disability is projected to nearly double in size, a rate that is considerably higher than the major growth experienced in the last 20 years. Accompanying these population increases are data indicating that nursing home use for Ohio's under age 60 citizens has tripled over the last two decades and has been especially large for Medicaid recipients. While Ohio can build on its policy and implementation achievements, the road ahead is likely to be more difficult than the path already traveled. Based on our work over the last two decades, the report offers five major recommendations for consideration:

(1) Ohio's strategy to reform the system of long-term services has been effective, but state policy makers will need to continue these efforts as the older population with

disability grows at an even faster rate than it has in the last 20 years. Even with the substantial progress achieved, Ohio continues to have an oversupply of nursing home beds, resulting in overutilization, particularly by younger individuals with disability. Creative approaches to right-sizing the number of beds can ensure continued progress in developing a balanced system and help to ensure better success of the industry.

(2) Despite the good progress, what is missing from Ohio's overall strategy is a systematic effort to really prepare for the unprecedented increase in the older population. Today fewer than 10% of older Ohioans residing in the community are Medicaid recipients, but six in ten of nursing home residents are supported by Medicaid. What Ohio policy has not addressed is how to help middle and upper income older individuals from relying on Medicaid to finance their long-term services and supports. Today about one-half of physically and/or cognitively impaired Ohioans receive Medicaid long-term services and supports. As the older population increases, it will be critical to think about how Ohio can both reduce the prevalence of disability and assist individuals in adapting to their environment. For example, can we provide better opportunities to prevent or delay severe disability? How can we use technology to help individuals with disability to remain in their own homes independently for as long as they desire? While such efforts will require a partnership between the public and private sectors, state leadership will be critical to help develop and expand these efforts. Given Ohio's emphasis on job development, can the state become a national leader in technology that will support independence for older people with disability?

(3) We again recommend that Ohio look carefully at utilization rates of the under 60 population and formulate a strategy to respond to the needs of these individuals. This report indicates that Ohio has changed how it delivers long-term services and supports to older individuals with severe disability, even lowering nursing home use in the face of an increasing older population. At the same time, Ohio has experienced a 26% increase in the population younger than 60 using Medicaid nursing homes. Evidence indicates that a portion of individuals under age 60 who are using nursing homes have lower levels of disability and in some instances the nursing home may not be the best care setting. We found that 19% of the under age 60 population did not have an ADL impairment, and 26% had zero or one ADL limitation. In a previous study we had found 4.4% of Medicaid nursing home residents did not appear to meet level-of-care, and many of those were individuals under age 60 who experienced chronic mental illness.

(4) Because of the high volume of nursing home admissions (almost 216,000), we recommend that the state develop a pre-admission review and follow-up approach that would allow more careful attention placed on some residents and fewer resources allocated to individuals who will clearly be discharged in less than 20 days as a result of Medicare coverage rules. This is applicable to Medicaid as well, which is now being used for short-term care (90 days or less) for about one-third of those admitted. The tremendous increase in nursing home admissions and discharges and the high number of individuals who spend a short time in nursing homes suggest that the system has changed. This means that Ohio needs to alter its pre-admission approach in response to these changes.

(5) As Ohio moves to a more unified system of long-term services it becomes even more important to be able to make sound comparisons across the system. We recommend that Ohio have at least a core set of measures that are collected in a comparable way across settings. Although cost differentials are anticipated, it would be important for Ohio to have a better understanding of program differences. In some instances programs appear to be serving similar target populations at very different costs. However, without comparable data it is difficult to understand programmatic differences in costs and utilization.

Ohio has a window of opportunity to address these challenges before the baby boomers fully come of age. Through its extensive efforts, Ohio has indeed responded; however, the demographic and financial challenges of the future suggest that the current reforms represent only the first steps of a longer journey. Elephants can dance, but can they learn new steps to meet the needs of a growing and ever changing older population in Ohio.

BACKGROUND

Providing assistance to those individuals who need long-term services and supports does not capture the national headlines the way health care reform does, but it is an issue of critical importance to the citizens of Ohio and state policy makers. Even though Medicaid is a federal/state partnership, it is the states that bear responsibility for overall program design and operations for long-term services. In most of the nation, including Ohio, the initial long-term care strategy involved heavy investment in nursing homes. During the 1960s and 1970s this was seen as a progressive move to ensure that older citizens had access to needed care in a safe environment. As the older population increased in number and issues of cost and quality began to permeate the nursing home industry, additional long-term service options were developed. As a result, a shift to other types of long-term services and supports, such as in-home services, supportive housing, adult family care, and assisted living residences began across the United States.

The tremendous increase in the older population, combined with the development of new options and a growing recognition that individuals with disability could live in a community environment, has changed how individuals use—and how states finance—long-term services and supports. In this report we track Ohio's implementation strategy over the last two decades as it has responded to the growing needs of its citizens. Ohio has made some important changes that have improved its ability to meet the mounting challenges. This study documents Ohio's substantial progress and highlights future areas for policy and programmatic consideration.

DEMOGRAPHICS

With 2.4 million individuals age 60 and over, Ohio ranks 7th in the nation in the sheer size of the population in this age category (ohio-population.org). In less than ten years, by 2020, the number of Ohioans age 60 and older will grow by 30%, and by 2040, the population age 60 and older will increase by 50%. Although the growth in our aging population is a marker of societal advancement, it is accompanied by serious challenges, especially in the area of long-term services and supports. Today just over 200,000 older Ohioans experience a severe disability requiring long-term assistance. Estimates indicate that the older population with severe disability (defined as individuals who meet the state's nursing home level-of-care criteria) will grow to 249,000 by 2020 (25% increase); by 2030 the number is projected to be 317,000 (60% increase); and by 2040 the number will nearly double in size (400,000).

Looking at individuals across all age groups, we find that in 2010 there were about 302,000 Ohioans experiencing severe disability. A more extensive breakdown of the entire population with severe disability is provided in Table 1. Projections indicate that this number will grow to more than 342,000 by 2020 and 405,000 by 2030. These demographic changes indicate that today's difficult issues are tomorrow's considerable challenges.

Table 1
Ohio's Projected Population with Severe Disability by Type

Year	Total Population	Physical and/or Cognitive	Intellectual and/or Developmental	Severe Mental Illness	Total Population with Severe Disability
2010	11,536,494	173,458	36,531	91,731	301,720
2012	11,577,496	178,930	36,566	93,894	309,390
2015	11,638,998	187,139	36,618	97,138	320,895
2020	11,707,724	202,605	36,695	103,181	342,481
2025	11,749,993	223,070	36,952	110,700	370,722
2030	11,763,264	248,307	37,274	119,101	404,682

Source: Based on Population Projections from www.ohio-population.org and the disability rates from Mehdizadeh, S. (2008). *Disability in Ohio: Current and future demands for services*. Oxford, OH: Scripps Gerontology Center, Miami University.

COSTS

With national long-term services expenditures at $225 billion and growing, the cost of care is having a major impact on both individuals and government (Houser et al., 2012; Eiken, Sredl, Burwell, Gold, 2011). For individuals, long-term care is one of the leading causes of catastrophic expenses, with almost 20% of older people incurring more than $25,000 in out-of-pocket long-term care costs (Kemper, Komisar, & Alecxih, 2006). Nationally, estimates indicate that private out-of-pocket long-term care expenditures and private insurance were more than $75 billion in 2011.

The Medicaid program, the single largest funder of long-term services and supports, spent more than $125 billion on long-term care (LTC) in 2010, representing about one-third of total Medicaid program expenditures. Ohio LTC expenditures were about 36% of total Medicaid expenditures (Eiken et al., 2011). A breakdown of national Medicaid expenditures shows that spending on non-institutional long-term services and supports now account for 44% of all Medicaid long-term care expenditures. This is a substantial shift from ten years earlier when nursing home expenditures accounted for 79% of total long-term care expenditures (Burwell, 1999; Burwell et al., 2008; Eiken et al., 2011). The Medicare program covers a growing proportion of long-term care expenditures ($25 billion), accounting for more than 10% of total long-term care payments. This amount represents a large increase from the $11 billion spent in 1998 (AARP, 2000).

Ohio's long-term care expenditure patterns also show a heavy reliance on the Medicaid program, with total long-term care spending in this program at $5.71 billion in 2011. The overall state cost of the Medicaid program is about 24% of the entire state budget. In 2011, Ohio spent $3.43 billion (60%) on institutional long-term care—nursing facilities and intermediate care facilities for individuals with developmental disabilities—and $2.28 billion (40%) on home and community-based services (HCBS) (Mehdizadeh & Applebaum, 2013). Ohio's institutional Medicaid expenditures are now approaching the national average (60% vs. 56%).

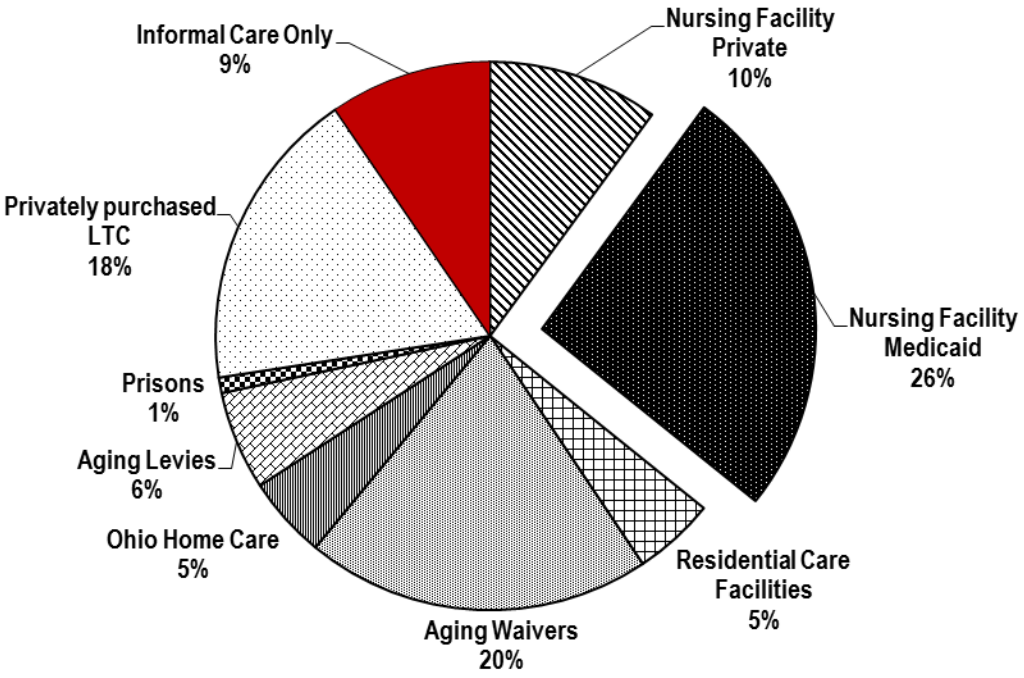
To better understand Ohio's spending patterns, it is important to separate out Medicaid services for those with intellectual disabilities and adults with disability. Institutional expenditures for individuals with intellectual disabilities were $751 million in 2011 (37%) compared to $1.28 billion for community-based services (63%). For adults with physical and/or cognitive disability, Ohio spent $2.66 billion on institutions (72%) compared to $1.01 billion (28%) for community-based services. The 2006 ratio was 80% institutional, 20% HCBS. As recently as 2004, Ohio had been ranked 47th among the states in its ratio of institutional to community-based expenditures and now ranks 24th (Eiken et al., 2011).

These numbers and other data presented throughout this report indicate that Ohio has indeed shifted its long-term services and supports strategy. The state has continued to make programmatic changes in the long-term services delivery system. For example, Ohio's PASSPORT program has become one of the largest Medicaid waiver programs in the United States. PASSPORT has grown from serving about 4200 older people in 1994, to about 19,500 older people with severe disability each day in 2004, to serving more than 30,000 participants each day today. In 2006, Ohio became the 42nd state to operate an Assisted Living Medicaid Waiver Program. In 2011, that program served more than 4100 individuals. Ohio has also received a major Money Follows the Person (MFP) grant from the Centers for Medicare & Medicaid Services (CMS). HOME Choice, operated by the Ohio Department of Medicaid (ODOM), is designed to work with individuals transitioning from facility to community-based settings. Data from the national evaluator indicate that from the program's inception through June 2011, 1139 individuals had participated, including 255 older people (Denny-Brown, Lipson, Kehn, Orshan, Valenzano, 2011). HOME Choice program statistics report transitioning more than 3200 individuals since the program began in 2008 through the spring of 2013 (Ohio.Gov HOMEChoice, 2013).

THE RANGE OF LONG-TERM SERVICE SETTINGS

To gain a better understanding of how long-term services and supports are delivered in the state, we reviewed the range of settings and type of assistance used by individuals with physical and/or cognitive disability in Ohio who experience a severe disability. (Ohioans with developmental disabilities and mental illness are not included.) As shown in Figure 1, of the 176,000 individuals in 2011 with severe disability as a result of physical or cognitive limitations, three in 10 received assistance solely from family or privately purchased services, but did not receive publicly supported assistance.

Figure 1
Proportion of Ohio's Population with Physical/Cognitive Disability Receiving Care in Different Settings, 2011



Source: Reproduced and updated from Mehdizadeh, S. (2008). *Disability in Ohio: Current and future demands for services.* Oxford, OH: Scripps Gerontology Center, Miami University.

Nearly four in 10 of those with severe disability as a result of severe physical and/or cognitive limitations were in nursing homes, with the majority of these individuals (72%) supported by Medicaid. Another 5% were living in residential care facilities and paying privately. A growing number of Ohioans with severe disability as a result of physical and/or cognitive limitations (25%) are relying on Medicaid home and community-based waiver programs, including PASSPORT, Choices, the Ohio Home Care Waiver Program, and PACE. Finally, 6% of Ohioans with severe physical and/or cognitive disability rely on county-funded levy programs for assistance.

These data indicate that about 87,300 severely disabled Ohioans with physical and/or cognitive limitations out of the state total of 176,000 (50%) relied on Medicaid for assistance with long-term services and supports in 2011. In the following sections we provide an overview of the Medicaid programs designed to serve these individuals. The bulk of our analysis focuses on adults age 60 and over, although in some cases we examine programs for individuals with physical or cognitive disabilities across the lifespan. Individuals who experience severe disability

receive assistance in their own homes, the homes of friends and relatives, adult care facilities, congregate housing, continuing care retirement communities, assisted living and other residential care facilities, and nursing homes. In the following sections we provide an overview of the long-term services and supports provided in the community and in residential care settings.

COMMUNITY

About six in ten Ohioans with severe physical and/or cognitive disability live in their own homes or in the home of a family member. Family and friends provide the majority of assistance to individuals living at home. National figures estimate that more than 80% of all long-term services and supports provided to older people are delivered by family and friends at an annual value of $450 billion in 2009. These estimates valued informal care provided for older people in Ohio to be $17.5 billion annually (Feinberg et al., 2011). For those Ohioans needing additional support, two major publicly supported sources of formal in-home services are available: county property tax levies and Medicaid waiver programs.

County Levy Programs

Ohio counties are using a relatively unique approach to funding in-home services. Unlike the majority of states that have developed state-funded home care programs for individuals not eligible for the Medicaid waiver programs, Ohio is one of 13 states that uses locally funded senior tax levies to finance and deliver in-home services. These programs are typically designed for individuals age 60 and over and are deemed important because Medicaid waiver services are limited to people with severe disability and very low income. In Ohio, 73 of 88 counties and 15 municipalities have passed senior levies, generating more than $150 million in 2011 to support services (Payne et al., 2012). The county levies vary in size and scope with some, such as Hamilton and Franklin counties, generating more than $20 million annually, and others generating $50,000 per year or less. These programs typically focus on older people with moderate levels of disability and low-to-moderate incomes. In 2011, county levy programs served more than 100,000 older people in Ohio. We estimate that about 10,000 of these individuals were severely disabled and would meet the state Medicaid nursing home eligibility functional criteria.

Waiver Programs

Ohio has a series of Medicaid waiver programs serving adults with severe disability. The largest waiver program, PASSPORT, serves individuals 60 and older. The PASSPORT program is jointly administered at the state level by the Ohio Department of Medicaid (ODOM), which is the single state Medicaid agency, and the Ohio Department of Aging, which is responsible for program operations. PASSPORT is operated on a regional level by Ohio's 12 area agencies on aging, and one private, non-profit human service organization. The administrative agencies use case managers to link an array of in-home services to the more than 30,000 older people who

receive services through the PASSPORT program each day. The regional agencies determine participant functional eligibility, assess consumer need, and arrange, monitor and fund services through their case management, fiscal, and quality assurance units. All of the direct services provided under PASSPORT are delivered by an array of approved community providers. Under Ohio's Integrated Care Delivery System (ICDS) Demonstration approximately 60% of elders enrolled in current waiver programs are expected to participate in the initiative. The ICDS is set to begin in March 2014.

Table 2 provides an enrollment breakdown throughout 2011 for the 13 regional agencies operating waiver programs that serve older Ohioans with disability. On any given day these waiver programs—including PASSPORT and Assisted Living (statewide), and Choices and PACE (select regions)—serve about 34,000 individuals. Over the course of 2011, the program served almost 40,000 older Ohioans. By and large, the urban areas (Cleveland, Akron, Columbus, Dayton, and Cincinnati) report the largest number of program participants. The major exception to this pattern is the Rio Grande region. Although Rio Grande has about 4% of the state's severely disabled older population with incomes below 300% of the poverty level, it accounts for 10% of the statewide waiver caseload and records more than a 100% annual service penetration rate.

A number of factors can explain the variation in waiver participation rates across the state. First, it should be noted that because our disability estimates are done at the state level, some regions may have higher rates of disability, resulting in an underestimate of the potential population. Second, the community economic profile, particularly the presence or absence of county levy programs, could have a large impact on utilization rates. For example, while Hamilton and Franklin counties have large levies providing more than $20 million annually to fund in-home services, the Vinton county levy in the Rio Grande region generates $10,000 annually. Outreach strategies, organizational and management approaches, and programmatic innovation do vary by site as well. Understanding utilization differences by site and using such information for quality improvement activities can be an important responsibility of the Department of Aging in its oversight role. Overall, on a statewide basis, aging waiver programs annually serve more than half of the older population with severe disability and incomes below 300% of the poverty level, indicating that the program has a good presence in the community.

The Ohio Department of Aging also operates a companion waiver to PASSPORT, called Choices, designed to allow older consumers the opportunity to self-direct their own services. The consumer essentially becomes the employer in this model and can hire, fire, and train his or her direct service workers. A financial management service manages payroll taxes for the consumer. The Choices waiver is also operated by the area agencies on aging, but it is not statewide at this point. Currently, the program is implemented in Columbus, Rio Grande, Marietta, and Toledo and serves about 600 participants.

Table 2
Profile of Ohio's Older Population: Disability and Utilization Rates by Region, 2012

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 Population Served with Income at or Below 300% of Poverty
1	Cincinnati	305,953	17,580	8,318	3,988	10.0	47.9
2	Dayton	183,267	10,971	5,402	4,229	10.6	78.3
3	Lima	77,974	4,764	2,504	835	2.1	33.3
4	Toledo	191,741	11,314	5,963	2,566	6.5	43.0
5	Mansfield	117,050	6,955	3,897	2,245	5.6	57.6
6	Columbus	307,240	16,764	7,489	4,439	11.2	59.3
7	Rio Grande	97,237	5,457	3,361	3,948	9.9	100.2
8	Marietta	58,430	3,236	2,004	1,013	2.5	50.6
9	Cambridge	114,182	6,795	3,345	2,185	5.5	65.3
10A	Cleveland	459,910	28,185	14,551	6,892	17.3	47.4
10B	Akron	263,202	15,791	8,121	4,552	11.5	56.1
11	Youngstown	162,087	10,014	5,714	1,872	4.7	32.8
CSS*	Sidney	74,317	4,272	2,366	991	2.5	41.9
	Total	2,412,589	142,098	73,036	39,755♦	100.0	53.2

* Catholic Social Services serves part of the Dayton region and is the only non-area agency on aging involved with the administration of PASSPORT services.

♦ Number of consumers who received services for at least a month during 2012 fiscal year.
Includes PASSPORT, Assisted Living Waiver Program, Choices and PACE.

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. (2008). *Disability in Ohio: Current and future demands for services*. Oxford, OH: Scripps Gerontology Center, Miami University.
[3]PASSPORT Information Management System (PIMS) FY 2012.

The state's other large community program for individuals with physical and/or cognitive limitations is the Ohio Home Care Waiver. This waiver program, managed at the state level by ODOM, is operated statewide by an independent case management agency, CareStar. In 2011, the program had an average monthly enrollment of 8283. The program targets individuals under age 60, with 58% of enrollees between age 45 and 59. Nine percent of those served are under age 14. When individuals reach age 60 they are transferred to a companion waiver program called the Transitions Aging Carve-Out Waiver, also managed by ODOM (serving 2375 participants).

Ohio also has two sites that are part of a national initiative to integrate acute and long-term care through a managed care model. The Program of All-Inclusive Care for the Elderly (PACE) provides a service package that includes medical, social, and rehabilitative services. Each PACE site has a team of doctors, nurses, social workers, and other health professionals who assess participants' needs, develop an integrated health plan, and deliver or arrange the needed services. To be eligible for PACE, an individual must be at least age 55, meet the Medicaid nursing home level-of-care criteria, and be eligible for Medicaid or Medicare. There are two PACE sites in Ohio: TriHealth Senior Link in Cincinnati, serving Hamilton and parts of Butler, Clermont, and Warren counties; and McGregor PACE Center for Senior Independence in Cleveland, serving Cuyahoga county residents. In 2011, there were 897 individuals served by PACE, with an average daily enrollment of 733. A detailed evaluation of Ohio's PACE initiative was completed in 2012 (Mehdizadeh et al., 2012).

RESIDENTIAL CARE

There are a range of residential care settings available to individuals with moderate and severe levels of disability. Adult foster homes, adult care facilities, and residential care facilities most often serve residents with moderate levels of disability. In 2012 Ohio had 60 certified adult foster homes and 768 adult care facilities (Ohio Department of Mental Health, 2013). Nursing homes and a portion of residential care facilities that are termed assisted living residences serve individuals with severe levels of disability.

Nursing Homes

In 2011 Ohio had 967 nursing homes containing about 95,000 licensed beds (94,573 beds in service in 2011). The number of nursing home beds per 1000 persons age 65 and older is 59, (national average 42) giving Ohio the 14th highest supply of beds per capita in the nation (Houser et al., 2012). The vast majority of nursing homes (916) are either freestanding or part of a continuing care retirement community. Twenty-nine facilities (3.0%) are part of hospital units and 22 (2.2%) are county homes. (See Table 3.) The number of hospital-based units continues to drop, from 57 in 2007 and 42 in 2009. The average nursing home in Ohio has 97 beds; three in four (74%) are located in urban communities and are proprietary (77%). About one in five are part of a continuing care retirement community. A large part of the funding base for nursing homes is the Medicaid program, which funds care for 61% of Ohio's nursing home residents. The average Medicaid rate in 2011 was $167 per day. Medicare supports 15% of residents, with

an average fee-for-service reimbursement rate of $442 per day. About one-quarter of residents are paid for through out-of-pocket costs, private insurance, and Veterans programs. A private pay room was $229 per day for single occupancy and $208 per day for a shared room. The average private insurance reimbursement rate was $330 per day. It is interesting to note that private long-term care insurance is reported as providing about 1% of the total revenue. Nursing homes are licensed and inspected by the Ohio Department of Health (ODH), and the Medicaid payment system is administered by ODOM.

Table 3
Ohio's Nursing Facility Characteristics, 2011

	All Nursing Facilities	County Homes	Hospital Based Long-Term Care Unit
Number of Facilities	967	22	29
Licensed/certified nursing facility beds 12/31/11	94,629	2,618	1,129
Average number of beds available daily	94,573	2,619	1,116
Average number of licensed beds	97	119	39
Location (percent)			
Urban	74.0	40.9	81.5
Rural	26.1	59.1	18.5
Ownership (percent)			
Proprietary	76.5	—	22.0
Not for profit	21.2	—	74.3
Government	2.3	100.0	3.7
Average Daily Charge (dollars)			
Medicaid	$167	$149	$170
Medicare	$442	$406	$416
Medicare Advantage & EverCare	$372	$452	$414
NF private pay (private room)	$229	$196	$412
NF private pay (shared room)	$208	$191	$429
Private insurance	$330	$304	$712

Source: Biennial Survey of Long-Term Care Facilities, 2011.

Residential Care/Assisted Living Facilities

Residential care facilities provide personal care to 17 or more individuals, with generally a limit of 120 days of skilled nursing care in a year. In 2011, there were 585 residences containing 44,200 beds; up from 19,400 beds in 1997. The increase in the number of residential care facility beds is driven by growth in 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 480 facilities appear to meet the state definition of assisted living. Currently, 299 facilities have been approved to participate in the Ohio Assisted Living Waiver Program, with an average daily census of almost 3000 individuals.

Residential care facilities overall report an average of 76 beds and 54 units per residence. (See Table 4.) About three-quarters of facilities are located in urban areas, and one-third 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 units, to two-bedroom units with kitchen and sitting areas. As a result, the average monthly charge varies considerably, ranging from $877 to $8,995, depending on the type of unit. The overall statewide average was $3,200 per month.

Table 4
Ohio's Residential Care Facility Characteristics, 2011

	All RCFs	RCF Only	Assisted Living*
Number of Facilities	585	105	480
Total licensed RCF beds	44,203	4,984	39,219
Total number of units	31,735	3,870	27,865
Average number of beds	76	48	82
Average number of units	54	37	58
Average Monthly Rate	$3,211	$3,696	$3,157
Location (percent)			
Urban	76.6	79.0	76.0
Rural	23.4	21.0	24.0
Ownership (percent)			
Proprietary	71.6	73.1	71.3
Not for profit	28.3	26.9	28.5
Part of CCRC (percent)	31.0	23.2	32.6

*Defined as meeting the criteria required to participate in Ohio's Assisted Living Program.
Source: Biennial Survey of Residential Care Facilities, 2011.

TRACKING LONG-TERM SERVICES AND SUPPORT USE IN OHIO

Since 1994, with initial funding from the General Assembly and subsequent funding from the Ohio Department of Aging, we have tracked long-term services utilization in the state. Because long-term services and supports are provided in a range of settings with different funding sources, examining use relies on a number of data sources. Information on nursing homes and residential care facilities comes from the Biennial Survey of Long-Term Care Facilities completed by Scripps in 2012. Response rates were high, with 95% of nursing homes and 93% of residential care facilities completing the online survey. Data used to supplement the facility survey came from the Medicaid Cost Report, which is completed by each Medicaid-certified facility and compiled and provided to us by ODOM and the national Online Survey Certification and Reporting dataset (OSCAR) generated by the Centers for Medicare & Medicaid Services (CMS). To track characteristics of nursing home residents, the study relies on the Nursing Home Minimum Data Set (MDS), completed by certified nursing homes when a resident is admitted and for all residents at the end of each quarter. Data on PASSPORT, Choices, and the Assisted Living Waiver Program come from the PASSPORT Information Management System (PIMS). The two Ohio PACE sites provided participant assessment data directly to Scripps for analysis. Information for the Ohio Home Care Waiver, the Aging Carve-Out Program, and the Medicaid cost report information came from ODOM.

NURSING FACILITY USE

The nature of nursing facility use in Ohio has changed dramatically since we began tracking utilization rates in 1992. As shown in Table 5, while the number of beds in service has remained stable over the study time period, admissions have risen dramatically. In 1992, Ohio nursing homes recorded 71,000 admissions. From 1997 to 2011 the number of admissions increased from 130,000 to 216,000 individuals.

The increase has been largely driven by changes in Medicare admissions. In 1992, 30,000 of the admissions were “Medicare admits”; by 1997 that number had more than doubled to 80,000. By 2007 there were 126,500 Medicare admissions, and in 2011 there were more than 149,000 Medicare admissions. For many, nursing homes have become a place for short-term rehabilitative care after an acute hospital admission. A major reason for this change has been the reduction in the average length of a hospital stay reimbursed by Medicare as a result of the prospective payment system.

This continued growth in Medicare admissions means that the nursing home of today has become a mixed use provider of both post-acute and long-term services. For example, in a review of MDS Section Q, data that is now required to be asked of all new nursing home admissions, more than six in ten (63%) respondents reported that they expected to be discharged back into the community. This phenomenon has implications for policy makers as it impacts several major aspects of nursing home care, including reimbursement rates and methodology, regulatory approaches, and pre- and post-admission review strategies.

Table 5
Ohio Nursing Facility Admissions, Capacity, and Occupancy Rates, 1992–2011

	1992	1997	1999	2001	2005	2007	2009	2011
Adjusted Nursing Facility Beds[a]								
Total beds	91,531	99,302	95,701	94,231	91,274	92,443	93,209	94,573
Medicaid certified	80,211	88,679	93,077	87,634	87,090	90,559	90,876	90,834
Medicare certified	37,389	34,157	47,534	62,088	86,701	91,659	91,928	91,205
Number of Admissions								
Total	70,879	129,778	149,838	149,905	190,150	200,954	197,233	215,928
Medicaid resident	17,968	19,063	28,150	24,442	34,432	25,182	27,040	29,799
Medicare resident	30,359	80,006	78,856	90,693	116,810	126,528	109,315	149,273
Occupancy Rate (Percent)								
Total	91.9	87.7	83.5	83.2	86.4	87.7	84.7	85.7
Medicaid resident[b]	67.4	61.8	55.4	58.5	58.8	56.9	55.4	54.6
Medicare resident[c]	9.9	20.9	12.8	11.8	11.6	12.1	11.1	13.2

NA = Not available.

[a]Total beds include private, Medicaid, and Medicare certified beds. Because most but not all beds are dually certified for Medicaid and Medicare, the totals reported do not match. 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, 1999–2011.

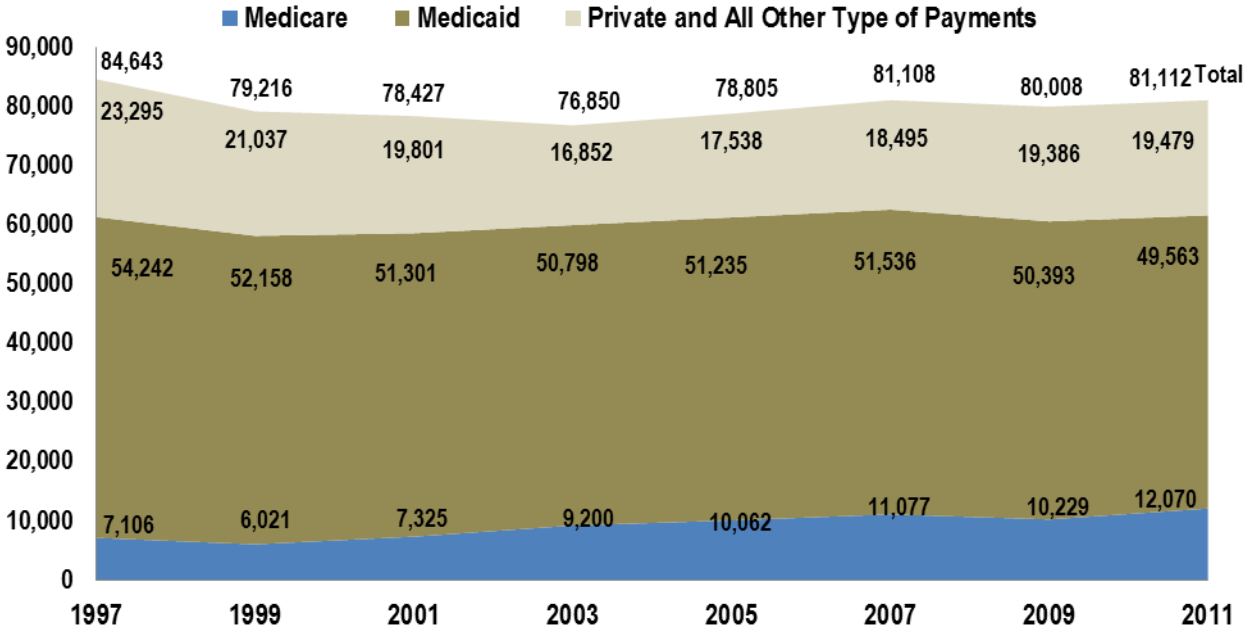
The question about how these use patterns affect Ohio nursing home occupancy rates is also presented in Table 5. Overall occupancy rates in Ohio nursing homes (86%) were up slightly in 2011. This rate is still considerably lower than the 1992 rate of 92%. As shown in Figure 2, the average daily nursing home census in 2011 was 81,112. Individuals paying privately out of pocket or through private insurance remained stable. The average number of residents each day reimbursed by Medicare increased from 10,229 to 12,070, and it is this increase that results in the higher overall rates in 2011. Because of the growth in Medicare admissions, for the first time our survey separated Medicare Advantage, which in 2011 accounted for 17% of Medicare's daily census. The Medicaid census continues to drop, decreasing over the two-year time period by 830 persons each day to 49,563. Since 1997, Ohio's average daily Medicaid census has dropped by more than 4679 individuals, a reduction of 9%. The stability in private pay residents includes a drop in long-term private pay residents but an increase in the number of individuals under age 65 using nursing homes for rehabilitative care now covered by private insurance.

NURSING FACILITY RESIDENT CHARACTERISTICS AND COSTS

In this section we examine the characteristics of those using nursing homes and the costs of this care. Nursing home residents are most often age 80 and above (52%), with one in six age 90 and older. (See Table 6.) Despite the concentration of residents in their 80s, as noted above, nursing homes today have a higher proportion of those under age 60 and 65 than in the past. For example, today 13% of all nursing home residents are under age 60; in 1994, the proportion under age 60 was 4%. This increase was reported in our previous analysis as well, and is most pronounced in the Medicaid program, where almost 17% of those in nursing homes are under age 60. The proportion of all residents under age 65 grew to more than 19%, up from 6.8% in 1994 and the proportion of Medicaid residents under age 65 is now approaching one in four (24.2%). Even though Medicare recipients are typically age 65 and older, the proportion of residents under age 65 reimbursed by Medicare was more than 13%.

Nursing home residents continue to be primarily white, widowed women, but the profile is changing. (See Table 7.) For example, today 66% of residents are women, down from 71% in 2004 and 74% in 1994. In 2012, 25% of residents were married, in comparison to 18% in 2004 and 15% in 1994. These demographic changes are very much related to the shift to short-term care for a growing number of individuals using Ohio nursing homes.

Figure 2
Average Daily Nursing Facility Census, 1997 - 2011



Source: Biennial Survey of Long-Term Care Facilities, 2012.

Table 6
Comparison of the Demographic Characteristics of Ohio's Certified Nursing Facility Residents and Residents with Medicaid or Medicare as Source of Payment, April–June 2012

	All (Percentages)	Medicaid (Percentages)	Medicare (Percentages)
Age			
45 and under	2.3	3.2	1.4
46–59	10.4	13.5	7.3
60–64	6.4	7.5	4.7
65–69	7.9	7.6	10.1
70–74	9.5	8.6	12.5
75–79	12.0	10.7	14.4
80–84	16.4	14.6	18.2
85–89	18.2	16.8	18.6
90–94	12.1	11.9	10.2
95+	4.8	5.6	2.6
Average Age	77.3	76.0	77.7
Gender			
Female	65.5	68.4	62.8
Race			
White	86.0	81.8	88.8
Black	13.1	17.1	10.4
Other	0.9	1.1	0.8
Marital Status			
Never married	16.1	21.9	10.3
Widowed/divorced/separated	58.7	62.8	56.2
Married	25.2	15.3	33.5
Resident Population Size*	107,737	51,865	27,384

*Data presented here reflect the characteristics of all residents that spent some time in a nursing facility, and those with Medicare and Medicaid (April–June 2012) as source of payment.

Source: MDS 3.0 April–June 2012

Table 7
Comparison of the Demographic Characteristics of Ohio's Certified Nursing Facility Residents Over Time, 1994, 2004–2012

	1994 (Percentages)	2004 (Percentages)	2008 (Percentages)	2010 (Percentages)	2012 (Percentages)
Age					
45 and under	0.2	2.5	2.2	2.2	2.3
46–59	3.8	7.6	8.7	9.4	10.4
60–64	2.8	4.0	4.7	5.6	6.4
65–69	5.1	5.2	6.6	7.0	7.9
70–74	9.0	7.8	8.6	8.9	9.5
75–79	14.0	13.5	12.9	12.1	12.0
80–84	19.4	19.8	18.9	17.4	16.4
85–89	21.6	19.9	19.5	19.5	18.2
90+	24.1	19.7	17.9	17.9	16.9
Average Age	83.1	79.4	78.6	78.2	77.3
Gender					
Female	73.8	70.9	68.0	66.9	65.5
Race					
White	88.5	86.4	86.8	86.1	86.0
Marital Status					
Never married	14.3	15.7	15.1	15.5	16.1
Widowed/divorced/ Separated	70.6	66.1	62.7	61.3	58.7
Married	15.1	18.2	22.2	23.2	25.2
Population	81,414♦	73,900♦	94,016*	105,039*	107,737*

♦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, 2008, and 2010.
MDS 3.0 April–June 2012.

In looking at physical functioning as measured by the resident's ability to perform the activity tasks of daily living (ADL), we find that, on average, today's nursing home residents are quite impaired, averaging between four and five ADL limitations and 83% reporting four or more ADL impairments. (See Table 8.) Almost nine of ten residents recently released from the hospital and receiving Medicare have four or more ADL impairments. More than six in ten residents are reported to experience incontinence (64%), with the Medicaid rate more than 70%. Under a new measure of cognitive functioning implemented in 2012, four in ten residents are reported to be impaired. As might be expected, the short-term Medicare recipients report considerably lower levels of cognitive impairment (16%).

As shown in Table 9 disability rates of residents appear to be quite consistent over the study time period. Despite high levels of disability among most residents, more than 5.7% of residents, regardless of the time period, were classified as having no ADL impairments, and almost 10% have zero or one ADL limitation. A review of Medicaid residents showed 7.4% with zero ADL impairments and 12.5% with zero or one ADL impairments. (See Table 8.)

Because of the increase in the number of Medicaid residents under age 60, we examined this group in comparison to the nursing home population age 60 and older. (See Table 10.) More than four of five of the under age 60 group are between 45 and 59, reflecting the growth of the number of baby boomers into this age group. Unlike the traditional older resident population, this group has a much lower proportion of females (46% vs. 73%), and this group is more likely to be non-white (27% vs. 16%). This group is much more likely to have never been married in comparison to the over 60 group (54% vs. 17%).

The analysis of the functional ability of the under 60 Medicaid group continues to raise questions about placement decisions. Of the under 60 group, 19% are reported to have no ADL limitations and 26% have one or zero activity impairments. (See Table 11.) Across every major indicator, these individuals appear to be considerably less impaired when compared to Medicaid residents age 60 and older. In an effort to gain a better understanding of the under 60 Medicaid residents, we examined length of stay for this population. (See Table 12.) About one-third of these individuals were residents for three months or less, with a majority of that group) spending 30 days or less in a nursing home. An additional 14% of the under age 60 Medicaid residents spent between 91 and 180 days in a facility, and 15% spent between six months and a year. Almost one-quarter of the under 60 group have been residents for two or more years, and another 14% have been residents for one to two years. The fact that one-third of these individuals (32%) have been residents for three months or less indicates that Medicaid is now using nursing homes for short-term rehabilitation in the same way as Medicare. On the other hand, four in ten are residents for one year or longer, an indicator that there is a sizeable population of long-stay residents who are below age 60. These use patterns highlight the complexity of today's nursing homes, again suggesting challenges to policy makers for both reimbursing and regulating facilities.

Table 8
Comparison of the Functional Characteristics of Ohio's Certified Nursing Facility Residents and Residents with Medicaid or Medicare as Source of Payment, April–June 2012

	All (Percentages)	Medicaid (Percentages)	Medicare (Percentages)
Needs Assistance in Activities of Daily Living (ADL)[1]			
Bathing	86.2	87.3	87.0
Dressing	86.7	84.6	91.6
Mobility	85.8	80.2	93.7
Toileting	85.4	81.1	91.6
Eating	26.8	31.5	19.4
Grooming	82.6	83.2	83.9
Number of ADL Impairments[2]			
0	5.7	7.4	3.0
1	4.0	5.1	2.3
2	3.6	3.5	2.6
3	4.1	4.1	3.7
4 or more	82.6	79.9	88.4
Average Number of ADL Impairments	4.5	4.5	4.7
Incontinence[3]	64.1	72.1	51.4
Cognitive Impairment[4]	41.2	45.2	16.2
Resident Population Size*	107,737	51,865	27,384

*Data presented here reflect the characteristics of all residents and those with Medicare and Medicaid (April–June 2012).

[1]"Needs assistance" includes limited assistance, extensive assistance, total dependence, and activity did not occur.
[2]From list above.
[3]"Occasionally, frequently, or multiple daily episodes."
[4]"Moderately" or "severely" impaired.

Source: MDS 3.0 April–June 2012.

Table 9
Comparison of the Functional Characteristics of Ohio's Certified Nursing Facility Residents Over Time, 1994, 2004–2012

	1994 (Percentages)	2004 (Percentages)	2008 (Percentages)	2010 (Percentages)	2012 (Percentages)
Needs Assistance in Activities of Daily Living[1]					
Bathing	94.0	93.6	85.1	75.4	86.2
Dressing	83.6	85.3	87.1	88.8	86.7
Mobility/Transfer♠	68.7	74.6	83.0	85.8	85.8
Toileting	75.1	80.1	83.8	86.4	85.4
Eating	38.5	32.5	30.5	36.5	26.8
Grooming	83.4	84.2	84.8	86.4	82.6
Number of ADL Impairments[2]					
0	5.1	5.4	6.1	5.5	5.7
1	7.2	6.1	4.4	3.7	4.0
2	4.9	3.9	3.5	2.9	3.6
3	7.7	5.4	4.5	3.9	4.1
4	75.1	79.2	81.5	84.0	82.6
Average Number of ADL Impairments	4.2	4.5	4.5	4.6	4.5
Incontinence[3]	59.4	60.9	56.2	60.6	64.1
Population	81,414♦	73,900♦	94,106*	105,039*	107,737*

♦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, 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 multiple daily episodes."
[4]"Moderately" or "severely" impaired.

Source: MDS Plus October–December 1994.
MDS 2.0 April–June 2004, 2008, and 2010.
MDS 3.0 April–June 2012.

Table 10
Comparison of the Demographic Characteristics of Medicaid Residents in Ohio's Certified Nursing Facility Residents by Age Group, April–June 2012

	Under 60 Years (Percentages)	60 Years and Older (Percentages)
Age		
Less than 45	19.7	—
45–59	80.3	—
60–64	—	9.0
65–69	—	9.1
70–74	—	10.3
75–79	—	12.8
80–84	—	17.6
85–89	—	20.1
90–94	—	14.4
95+		6.7
Average Age	50.7	81.2
Gender		
Female	45.6	73.0
Race		
White	73.1	83.6
Black	25.6	15.4
Other	1.3	1.0
Marital Status		
Never married	54.3	16.9
Widowed/divorced/separated	34.1	65.5
Married	11.6	17.7
Total Residents*	8723	43,142
Percent of Residents	16.8	83.2

*The data present the characteristics of the Medicaid residents that spent some time in a nursing facility between April and June 2012.

Source: MDS 3.0 April–June 2012.

Table 11
Comparison of the Functional Characteristics of Medicaid Residents in Ohio's Certified Nursing Facilities by Age Group, April–June 2012

	Under 60 Years (Percentages)	60 Years and Older (Percentages)
Needs Assistance in Activities of Daily Living (ADL)[1]		
Bathing	71.9	90.4
Dressing	69.1	87.7
Mobility	65.3	83.3
Toileting	65.6	84.2
Eating	24.9	32.8
Grooming	69.0	86.0
Number of ADL Impairments[2]		
0	18.5	5.2
1	7.9	4.5
2	5.1	3.1
3	5.3	3.8
4 or more	63.2	83.4
Average Number of ADL Impairments	3.7	4.6
Incontinence[3]	51.6	76.2
Cognitive Impairment[4]	18.4	50.2
Residents* (Number)	8723	43,142

*The data present the characteristics of all residents that spent some time in a nursing facility between April and June 2012 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 multiple daily episodes."
[4]"Moderately" or "severely" impaired.

Source: MDS 3.0 April–June 2012.

Table 12
Length of Stay for Medicaid Residents Under 60 in Ohio's Certified Nursing Facilities, April–June 2012

Number of Days in NF as of Assessment Date	Percentage
0–30 days	22.0
31–60	5.0
61–90	5.0
91–180	14.0
181–365	15.3
366–730	14.2
731–1095	7.5
More than 3 years	17.0
	100.0

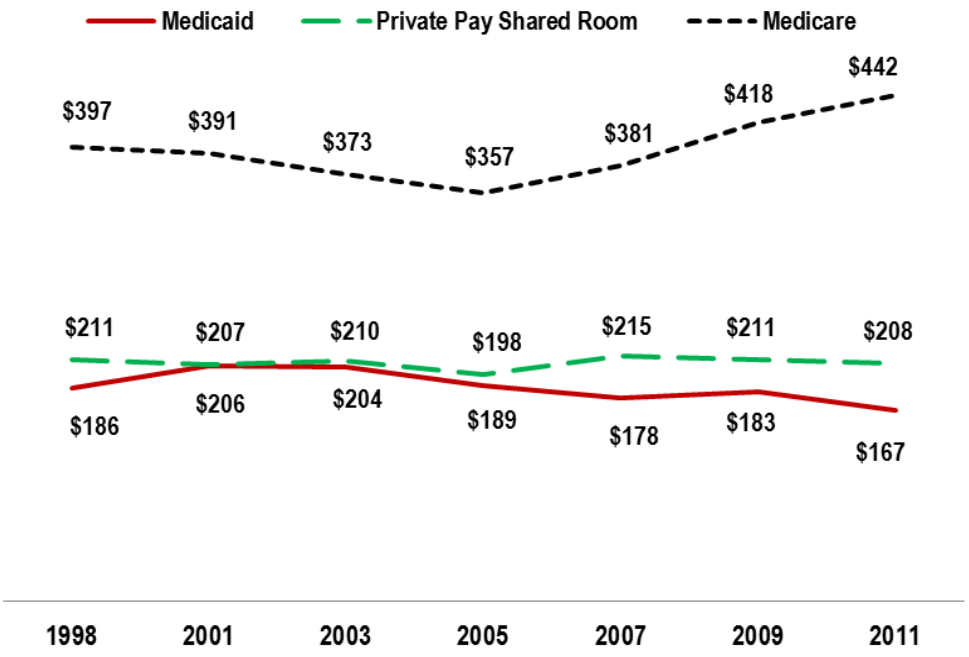
Source: MDS 3.0 April–June 2012.

Costs

In this section we present nursing home costs over time in 2011 dollars, as adjusted for inflation. As shown in Figure 3, the average Medicaid reimbursement rate in 2011 was $167 per day, or just under $61,000 annually. (It should be noted that this rate includes Ohio's franchise bed tax of $12 per day.) The 2009 Medicaid rate was $175 per day ($183 in 2011 dollars), but it included a bundled therapy reimbursement amount, which has been removed and is now billed as a separate charge (estimated to have added about $5 per day to the rate). The self-pay rate was $229 per day for a private room and $208 for a shared room and also includes the $12 per day bed tax. The shared room rate in 2009 was $201, but $211 when converted to 2011 dollars. The Medicare fee-for-service rate, linked to resident rehabilitation for short-term care, is $442 per day, and the Medicare managed care rate was $372 per day. The private pay insurance rate was $330 per day.

Overall, the historical analysis indicates that while Ohio Medicaid rates recorded steady increases throughout the 1990s (increasing from $123 to $178 per day in today's dollars), since 2001 the reimbursement rate has actually gone down when adjusted for inflation. Ohio's 2007 nursing home Medicaid rate ranked 7th nationally, while the 2011 rate now ranks 21st (Houser, et al., 2012).

Figure 3
Average Nursing Facility Per Diem by Source of Payment
in 2011 Dollars, 1998 - 2011



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, 1999–2011.

RESIDENTIAL CARE FACILITY USE AND COSTS

Ohio has 585 residential care facilities that include about 31,735 units, with more than 44,200 licensed beds. The growth in licensed residential care facilities has been dramatic, more than doubling the number of facilities from 265, and quadrupling the number of beds (10,700 beds) between 1995 and 2011. Much of the growth has occurred as a result of the development of the assisted living industry. As noted earlier, we estimate that 480 facilities would meet the Medicaid waiver definition of an assisted living residence. As of May 2013, 299 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%, a substantial increase from our 2009 survey (80.9%). (See Table 13.) Because residential care facilities have more licensed beds than units, the bed occupancy rate is lower, at 66.7%. Since the overwhelming majority of assisted living residences are single room, we believe the unit rate is a better measure of utilization. Occupancy rates in residential care facilities appear to have been increased as a result of the large expansion of the Assisted Living Waiver Program, which by 2011 had grown to about 3000 residents per day. For example, the assisted living unit occupancy rate in 2011 was 87.9%, compared to 81% in 2009. The residential care only facilities had a 2011 unit occupancy rate of 81.9%, just slightly higher than the 81% rate in 2009.

Table 13
Comparison of Occupancy and Length of Stay in Ohio's Residential Care Facilities, 2009–2011

	Overall (Percentages)		RCF Only (Percentages)		Assisted Living (Percentages)	
	2009	2011	2009	2011	2009	2011
Unit Occupancy	80.9	87.0	80.8	81.9	81.0	81.0
Bed Occupancy	64.3	66.7	67.5	71.4	62.8	62.8
Length of Stay	952 days	858 days	990 days	—	936 days	—

Source: Biennial Survey of Residential Care Facilities, 2009–2011.
Resident Satisfaction Survey (Vital Research), 2011.

Information on the characteristics of individuals who use residential care facilities is presented below. Unlike our nursing home data, which are based on individual records, these findings represent summary estimates provided by the facilities. To generate these numbers, facility respondents were asked to estimate how many of their residents had a functional impairment in areas such as bathing, dressing, and cognitive functioning. These findings indicate that about four in ten residents had two or more ADL limitations. (See Table 14.) Forty-two percent receive skilled nursing care, a proportion that has more than doubled since the 2007 survey. Three in ten are reported to have a cognitive impairment, an increase from 12% in the 2007 survey.

More detailed data are available on participants in the Assisted Living Medicaid Waiver Program (see Table 15). In 2012, the average age was 82, and almost half (45%) were 85 and older. Eight in ten were women, and the vast majority (92%) were not married. About nine in ten were impaired in bathing, and participants averaged between two and three ADL impairments. Almost half of waiver participants needed supervision (48%), increasing from 39% in 2008. These data indicate that the waiver participants, as expected, are more disabled than the typical residential care facility occupant.

PASSPORT

Use and Costs

PASSPORT has become one of the largest aging/disability Medicaid waiver programs in the United States, spending $526 million in 2011. The program has expanded considerably, increasing from serving 4215 individuals in 1992 to 15,000 in 1995 to 26,000 in 2006 to 34,170 in 2011. On any given day PASSPORT serves about 30,000 older Ohioans with severe disability. Of the 74 different aging/disability waivers nationwide, Ohio now ranks 8th in per capita

Table 14
Comparison of the Functional Characteristics of
Ohio's Residential Care Facilities Residents, 2011

	Overall (Percentages)* 2011	RCF Only (Percentages)* 2011	Assisted Living (Percentages)* 2011
Needs Assistance in Activities of Daily Living (ADL)			
Bathing	67.9	70.3	67.4
Dressing	53.6	56.7	53.0
Transferring	25.0	26.6	24.7
Toileting	34.7	43.5	33.0
Eating	7.8	11.2	7.2
Walking	23.1	22.3	23.3
With two or more activities	39.9	43.2	39.3
Received Skilled Nursing Care	42.0	35.4	43.3
Behavior Problems	9.5	19.7	7.7
Cognitive Impairment	29.7	39.8	27.9

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

Source: Biennial Survey of Residential Care Facilities, 2011.

expenditures (Eiken et al., 2011). To be eligible, applicants must meet the Medicaid nursing home eligibility criteria. Once PASSPORT applicants meet the economic and disability thresholds, the PASSPORT case managers, working in conjunction with participants and their families, develop a plan of care and arrange the necessary services. The administrative staff, case managers, and other program professionals are responsible for monitoring and quality management activities.

PASSPORT case managers choose from an array of services such as personal care, adult day care, home delivered meals, respite care, and medical equipment. As shown in Table 16, 68% of all program service dollars statewide are allocated to personal care. Since individuals with severe chronic disability require assistance with the tasks of daily living, such as bathing and dressing, the heavy utilization of personal care services is common in programs of this nature. About 16% of program service dollars are allocated to home delivered meals, a slight increase from 15% in 2010.

Table 15
Demographic and Functional Characteristics of Enrollees in the Assisted Living Waiver Program
2008–2012

Characteristics	2008	2010	2012
Age			
≤45	1.2	0.8	0.8
46–59	7.4	6.5	6.4
60–64	5.7	5.1	6.1
65–69	5.3	5.4	6.5
70–74	8.2	7.7	7.6
75–79	12.1	11.4	11.4
80–84	17.7	17.0	16.4
85–89	23.0	22.4	20.5
90–94	12.5	16.3	16.8
95+	6.9	7.4	7.5
Average Age	79.5	80.6	81.7
Gender			
Female	79.1	80.1	80.4
Male	20.9	19.9	19.6
Race			
White	88.0	88.6	89.1
Black	9.8	9.0	9.6
Other	2.2	2.4	1.3
Marital Status			
Nonmarried	93.1	92.4	91.9
Married	6.9	7.6	8.1
ADL Impairment			
Bathing	91.8	87.5	88.8
Dressing	48.5	49.8	51.6
Mobility	72.4	72.6	73.3
Toileting	25.2	20.2	23.2
Eating	3.9	4.9	4.6
Grooming	22.7	20.6	20.8
Average Number of ADL Impairments	2.6	2.6	2.6
IADL Impairment			
Community access	96.4	96.0	97.9
Environmental management	99.7	98.2	99.8
Shopping	97.9	97.4	97.1
Meal preparation	98.3	97.1	98.1
Laundry	94.3	95.3	98.1
Medication Administration	83.2	80.8	89.5
Needs Supervision			
24-hour	11.5	13.9	20.3
Partial time	27.8	23.4	27.3
Consumers Served	413	1943	4102

Source: PASSPORT Information Management System (PIMS), 2008–2012.

Table 16
PASSPORT Expenditures by Type of Service, 2004–2012

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

Source: PASSPORT Information Management System (PIMS) 2004–2012.

That 84% of all services dollars are allocated to personal care and meals is an indicator of the basic assistance that PASSPORT participants rely upon. Adult day services account for 2.5% of total expenditures, an amount that has dropped from 5.9% in 2004. Transportation represented 4.4% of service expenditures, an increase from 3.5% in 2010. Finally emergency response systems at 3.3%, which had doubled from 2008 to 2010, remained the same over the most recent two-year time period.

Participant Characteristics

A review of PASSPORT participants is presented in Tables 17 and 18. Thirty-four percent of participants are age 80 and over, with a mean age of 76. PASSPORT participants are typically women (76%), and about one in five is married. Three in 10 participants are non-white. More than four in five (84%) PASSPORT participants live in their own homes or apartments; the remainder generally live with a relative or friend. Despite overall stability in the PASSPORT population, we do see some interesting changes over the two decades. PASSPORT is serving a slightly younger population, with the 60–64 age group increasing from 9% in 2000 to 12% in 2012. The proportion of participants under age 70 grew from 24% in 2000 to 30% in 2012. Since 2000, the program has shifted slightly to serve a higher proportion of men (19% to 24%) and non-whites (27% to 30%).

Table 17
Demographic Characteristics of PASSPORT Consumers
2000–2012

	FY 2000 (Percentages)	FY 2004 (Percentages)	FY 2008 (Percentages)	FY 2012 (Percentages)
Age				
60–64	9.4	10.8	9.8	12.2
65–69	14.1	16.2	16.5	18.2
70–74	18.3	17.8	18.1	18.2
75–79	20.2	20.3	17.6	17.0
80–84	17.2	17.3	17.4	15.5
85–89	12.7	10.8	12.8	11.6
90–94	6.1	5.4	5.7	5.4
95+	2.0	1.4	2.1	1.9
Average Age	76.5	76.4	76.5	75.6
Gender				
Female	80.7	79.8	78.2	75.9
Race				
White	73.1	76.6	71.3	70.4
Black	25.3	21.9	25.1	25.6
Other	1.6	1.5	3.6	4.0
Marital Status				
Never married	5.8	6.3	7.7	10.2
Widowed	55.6	51.4	46.1	41.0
Divorced/separated	20.6	23.0	26.6	29.2
Married	18.0	19.3	19.6	19.5
Usual Living Arrangement				
Own home/apartment	74.7	83.8	80.0	83.9
Relative or friend	21.4	15.7	16.3	15.3
Congregate housing for elderly/RCF	0.8	0.3	0.1	0.2
Nursing facility	2.3	—	2.7	0.3
Other	0.8	0.2	0.9	0.3
Number of Consumers Served*	20,374	22,560	26,165	34,173

Source: PASSPORT Information Management System (PIMS) FY 2012.

PASSPORT participants remain severely impaired, averaging three ADL impairments, with more than six in ten recording three or four ADL limitations. (See Table 18.) More than nine in ten (94%) are impaired in the instrumental activities of daily living, such as meal preparation and shopping. Four in ten participants need assistance with medications, and one in five requires supervision. On both the average ADL and IADL measures and on the items assessing supervision needed and medication administration, the profile is consistent over the study time period.

PASSPORT is a statewide program implemented at the regional level by 13 administrative agencies. Tables 19–21 provide data on the characteristics of PASSPORT participants by site. While the overall program structure, eligibility criteria, and services are universal, we do find some differences in participant characteristics across regions. Some variation, such as the proportion of minorities, can easily be explained by the region's demographic composition, while other differences, such as the rate of participant need for supervision, are less evident. As described earlier, there is considerable variation in the number of participants served by site, ranging from 630 in the Lima area to 5940 in the Cleveland region. (See Table 19.) While the mean age of PASSPORT participants is 76, there is variation. In particular, the proportion of younger participants (in the 60–64 age range) varies from a high of 17% in the Dayton region to a low of 9% in the Cleveland area. The racial breakdown of participants reflects the regional differences in demographics of the state. The Cleveland, Cincinnati, Columbus, and Dayton regions serve a high proportion of blacks, (46%, 37%, 35%, 35%) compared to Marietta, Rio Grande, and Sidney (2.3%, 2.4%, 3.9%).

As described in Table 20, there is also site variation in the level of functional impairment. While most of the regions are close to the state average of three impairments in activities of daily living tasks, the Cleveland and Youngstown sites report higher rates (3.3, 3.2), while the Sidney region reports lower impairment levels at 2.3. Two other functional measures were also examined across regions: the need for supervision and the need for medication assistance. While some variation is expected, these measures show dramatic differences, which may be the result of real differences across sites, but also may reflect different approaches to data collection. For example, the need for medication assistance varies from a low of 12% in Rio Grande to a high of 63% in the Sidney area, a greater level of variation than would be expected. Since Sidney has the lowest ADL score, it appears that the medication assistance item is being assessed differently in that site. About one in five participants report a need for some supervision, with a range from 13% to 32%. (See Table 21.)

Two additional measures examining hospital and nursing home admissions over a one-year time period also demonstrate differences by region. (See Table 21.) For example, the Cincinnati and Mansfield regions report fewer than 10% of participants having had a hospital admission in the past year, compared to Lima and Youngstown areas with 38% and 35% respectively. Nursing home admissions over the past year also show variations, with Mansfield and Cincinnati areas reporting 3% and 4% rates, compared to Lima and Youngstown sites with rates of 18%.

Table 18
Functional Characteristics of PASSPORT Consumers, 2000–2012

	FY 2000 (Percentages)	FY 2004 (Percentages)	FY 2008 (Percentages)	FY 2012 (Percentages)
Percentages with Impairment/Needing Hands-On Assistance in Activities of Daily Living (ADL)[c]				
Bathing	96.7	95.5	96.3	95.6
Dressing	63.1	61.7	60.4	62.8
Mobility[d]	74.5	78.4	81.6	83.9
Toileting	23.3	20.4	20.1	21.8
Eating	7.2	10.6	5.5	5.5
Grooming	36.9	32.8	32.0	29.1
Number of ADL impairments*				
0	0.8	0.8	0.8	1.1
1	2.9	3.8	3.5	3.4
2	36.4	34.8	35.5	34.2
3	32.0	34.1	33.8	33.9
4 or more	27.9	26.5	26.4	27.4
Average Number of ADL Impairments	3.0	3.0	3.0	3.0
Percentage with Impairment in Instrumental Activities of Daily Living (IADL)				
Community access[e]	91.3	89.5	87.9	85.9
Environment management[f]	99.9	99.7	99.8	99.8
Shopping	97.7	97.6	97.1	96.6
Meal preparation	87.0	88.9	88.1	88.3
Laundry	96.7	96.2	95.9	96.0
Medication Administration	45.6	32.2	40.6	42.1
Number of IADL Impairments**				
0	0.0	0.1	0.0	0.1
1	0.0	0.1	0.1	0.2
2	0.4	0.3	0.5	0.8
3	3.8	3.7	4.2	4.5
4 or more	95.8	95.8	95.2	94.5
Average Number of IADL Impairments**	5.2	5.0	5.1	5.1
Supervision Needed				
24-hour	NA	8.1	8.8	9.6
Partial time	NA	11.1	11.1	11.2
Number of Consumers Served[♣]	20,374	22,560	26,165	34,173

NA = Not available.
*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] Needs 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) FY 2012.

Table 19
PASSPORT Participant Demographic Characteristics by Region, 2012

Area Agency on Aging (AAA)	Location	Total Participants	Avg Age (60–64)	Mean Age	White	Black	Other
1	Cincinnati	2740	13.1	75.7	57.8	37.3	4.5
2	Dayton	3787	16.5	74.2	60.6	35.0	4.4
3	Lima	634	11.5	75.5	86.3	9.8	3.9
4	Toledo	2309	11.4	75.8	68.1	28.2	3.7
5	Mansfield	2032	12.8	75.1	91.9	7.2	0.9
6	Columbus	3835	11.8	75.2	56.9	34.9	9.5
7	Rio Grande	3384	13.1	74.5	96.7	2.4	0.8
8	Marietta	947	11.3	76.2	96.1	2.3	1.6
9	Cambridge	2051	12.1	75.2	93.4	5.5	1.1
10a	Cleveland	5938	8.7	77.2	48.5	45.9	5.6
10B	Akron	4171	12.8	75.5	73.1	23.5	0.1
11	Youngstown	1463	10.3	76.7	74.6	22.4	4
CSS	Sidney	880	15.5	74.8	94.4	3.9	2.3
	Statewide	34,173	12.4	75.5	76.8	19.9	3.3

Source: PASSPORT Information Management System, (PIMS), FY 2012.

Table 20
PASSPORT Participant Functional Disability Characteristics by Region, 2012

Area Agency on Aging (AAA)	Location	Participants	Avg. ADLs (out of 6)	0–1 ADL	2–3 ADL	4+ ADL	Medication Assistance needed (%)
1	Cincinnati	2,740	2.9	7.0	66.9	26.0	48.2
2	Dayton	3,787	3.0	6.1	66.3	27.6	38.8
3	Lima	634	2.7	2.7	77.4	19.9	42.8
4	Toledo	2,309	2.9	3.4	75.3	21.3	52.3
5	Mansfield	2,032	3.0	5.8	67.7	26.5	48.2
6	Columbus	3,835	2.9	9.9	62.0	28.1	55.6
7	Rio Grande	3,384	3.0	0.4	74.7	24.9	11.9
8	Marietta	947	2.9	7.4	63.5	29.1	51.9
9	Cambridge	2,051	2.9	1.3	77.5	21.3	44.6
10a	Cleveland	5,938	3.3	1.1	63.5	35.4	37.1
10B	Akron	4,171	3.0	4.4	67.9	27.8	43.6
11	Youngstown	1,463	3.2	2.3	65.8	31.9	42.2
CSS	Sidney	880	2.3	16.9	71.6	11.5	62.5
	Statewide	34,173	2.9	5.3	69.2	25.5	44.6

Source: PASSPORT Information Management System, (PIMS), FY 2012.

Table 21
PASSPORT Participant Need for Supervision and Utilization by Region, 2012

Area Agency on Aging (AAA)	Location	Participants	24-hour Supervision (%)	Partial Supervision (%)	1 or more Hospital admits (prior year) (%)	1 or more NH admits (prior year) (%)
1	Cincinnati	2740	10.8	9.8	8.3	4.0
2	Dayton	3787	9.5	9.2	31.1	12.3
3	Lima	634	8.2	10.9	38.3	17.5
4	Toledo	2309	10.1	14.6	22.1	10.1
5	Mansfield	2032	9.2	12.4	9.7	3.2
6	Columbus	3835	11.1	12.6	15.8	7.1
7	Rio Grande	3384	5.9	9.2	28.7	8.8
8	Marietta	947	11.3	20.3	20.1	7.7
9	Cambridge	2051	7.6	10.3	31.4	14.7
10a	Cleveland	5938	11.6	13.8	27.2	11.1
11	Youngstown	1463	10.3	10.6	34.8	17.6
10B	Akron	4171	8.8	5.5	16.7	6.8
CSS	Sidney	880	5.8	7.1	23.4	10.7
	Statewide	34,173	9.2	11.3	23.7	10.1

Source: PASSPORT Information Management System, (PIMS), FY 2012.

It will be important to make sure that these data are being collected comparably to ensure that these regional differences are not the result of variations in site training or interpretation of the measures. ODA and the sites should be able to use comparably collected data to enhance quality. A systematic review of participant characteristics by site should become standard monitoring practice at the state level.

Program Disenrollment

Given the age and frailty level of participants, it is not surprising that the two major reasons for disenrollment are that the consumer dies (46%) or moves to a nursing home (34%). Ssee Table 22.) Circumstances do change, such that in some instances participants are no longer financially eligible (3%), move out of state (5%), or leave the program for other reasons (6%), such as to move in with family members. A review of the disenrollment patterns for 2008, 2010, and 2012 show some fluctuation over time. From 2008 to 2010 the proportion of participants leaving the program because of death increased from 42% to 49%, and the proportion admitted to nursing homes decreased from 38% to 31%. In 2012 the proportion of participants who passed away in the program dropped to 46% and the termination rate to nursing home increased to 34%.

In the last few years the PASSPORT program has been involved in an extensive effort to help participants receive services at home for a longer period of time, even in the face of critical illness. While still below 2008 rates, it is unknown whether the 2012 increase in terminations to nursing homes and lower death rates reflect natural fluctuations or have been impacted by policy changes implemented to control the care plan costs as a result of state budget constraints. A review of these patterns over the next two years will be important for site managers and state policy makers.

COMPARISON ACROSS MEDICAID LONG-TERM CARE PROGRAMS

In this section we present a comparison of the characteristics of participants in the array of long-term care Medicaid programs designed to assist adults with physical disability. Each of these programs requires individuals to meet the nursing home level-of-care criteria, but age requirements do vary. PASSPORT, Choices, and the Aging Carve-Out waiver programs require individuals to be age 60 and older. PACE has an age requirement of 55, and the Assisted Living Waiver Program uses age 21. Medicaid-funded nursing homes do not have age restrictions.

There are some noteworthy age differences across programs. (See Table 23.) Assisted living (24%) and nursing homes (18%) serve the highest proportions of the oldest old, those over age 90. PACE, with an eligibility age of 55, has the highest proportion of younger aged "participants." Almost half (49%) of PACE participants are below age 69, compared to about 30% of nursing homes and PASSPORT and 20% for assisted living. Women are more likely to use long-term care services, but nursing homes (31%) now serve the highest proportion of men. The racial profile of these programs also differs. The two residential settings, assisted living (11%) and nursing homes (18%), have the lowest proportion of non-whites. PASSPORT and

Table 22
Reasons Consumers Were Disenrolled from PASSPORT, 2008–2012

Reasons	2008 (Percentages)[a]	2010 (Percentages)[a]	2012 (Percentages)[a]
Died	41.7	49.2	45.5
Admitted to nursing facility for 30+ days	38.3	31.1	34.0
Admitted to hospice care	0.2	0.3	0.2
Admitted to hospital for 30+ days	1.1	0.9	1.0
Did not meet financial eligibility	3.7	4.9	3.0
Could not agree on a plan of care	1.2	0.9	1.2
Did not meet level-of-care	1.7	0.7	1.5
No longer resides in Ohio	5.0	3.9	4.6
Other (including transfer to other waivers)	2.3	2.4	3.0
Voluntarily withdrew from program	4.6	5.7	6.0

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

Source: PASSPORT Information Management System (PIMS) 2008–2012.

Transition Carve-Out have about one-third non-white participants. Almost two-thirds of PACE participants are non-white.

Levels of impairment also vary by program. (See Table 24.) Medicaid nursing home residents record the highest levels of disability, averaging between four and five ADL limitations. Choices (3.6) and the Aging Carve-Out waiver (3.7) participants average almost four ADL impairments, PASSPORT three ADL limitations, and PACE and assisted living waiver between two and three. Eighty-four percent of nursing home residents and Aging Carve-Out participants have three or more ADL impairments. Eight in ten Choices participants and six in ten PASSPORT enrollees (59%) have three or more ADL limitations. About one-half of PACE (54%) and assisted living waiver participants (49%) report three or more ADL impairments. Measures on need for supervision and cognitive impairment are not consistent across programs and settings, but these data suggest that nursing homes, assisted living, and the Choices waiver serve the highest proportion of individuals needing supervision or who have cognitive impairment.

Table 23
Demographic Characteristics of Ohio Medicaid Waiver Consumers, PACE Participants and Medicaid Nursing Facility Residents, 2012

	PASSPORT[1]	Choices[1]	Assisted Living Waiver[1]	PACE[2]	Transitions Aging Carve-Out[3]	Medicaid Nursing Facility[4]
Age (Percent)						
<60	—	—	7.2	12.4	0.6	16.7
60–69	30.4	26.5	12.6	36.8	86.9	15.1
70–74	18.2	21.2	7.6	12.8	7.1	8.6
75–79	17.0	18.5	11.4	12.4	2.4	10.7
80–84	15.5	14.0	16.4	12.2	1.5	14.6
85–89	11.6	12.6	20.5	7.8	0.9	16.8
90–94	5.4	5.3	16.8	4.6	0.6	11.9
95+	1.9	1.9	7.5	1.0	0.0	5.6
Average Age	75.6	76.1	80.4	71.6	64.6	76.0
Gender (Percent)						
Female	75.9	82.0	80.4	74.1	72.7	68.4
Race (Percent)						
White	70.4	84.2	89.0	35.2	66.0	81.8
Black	25.7	13.9	9.6	64.1	32.6	17.1
Other	4.0	2.0	1.4	0.7	1.4	1.1
Number of Consumers/Residents	34,173	585	4102	897	2375	51,865

Source: [1]PASSPORT Information Management System (PIMS), FY 2012.
[2]Ohio has two PACE sites, TriHealth SeniorLink in the Cincinnati area and McGregor PACE Center in the Cleveland area. Data are based on the initial and/or annual level-of-care assessments of the participants. Data presented here are based on 77% of the enrollees.
[3]Unpublished data for calendar year FY 2012, Ohio Department of Medicaid, Feb. 2013.
[4]Quarterly nursing facility. MDS, 3.0 April–June 2012.

Table 24
Functional Characteristics of Ohio Medicaid Waiver Consumers, PACE Participants and Medicaid Nursing Facility Residents, 2012

	PASSPORT[1]	Choices[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) (Percent)						
Bathing[a]	95.6	95.7	88.8	73.8	97.5	87.3
Dressing	62.8	82.5	51.6	58.9	93.7	84.6
Mobility[b]	83.9	76.6	73.3	81.1	85.8	80.2
Toileting	21.8	34.3	23.2	26.2	43.9	81.1
Eating	5.5	10.1	4.6	5.4	22.3	31.5
Grooming	29.1	68.2	20.8	25.9	25.8	83.2
Number of ADL Impairments						
0	1.1	0.5	4.1	10.0	0.4	7.4
1	3.4	1.2	14.0	14.5	1.4	5.1
2	34.2	18.5	33.0	21.6	14.5	3.5
3	33.9	29.2	25.7	28.5	35.0	4.1
4 or more	27.4	50.6	23.2	25.4	48.7	79.9
Average Number of ADL Impairments*	3.0	3.6	2.6	2.6	3.7	4.5
Supervision Needed						
24-hour	9.6	16.9	20.3	16.3	NA	NA
Partial time	11.2	21.4	27.3	NA	NA	NA
Cognitive Impairment[c]	NA	NA	NA	NA	6.6	45.2
Per Member, per Month LTSS Medicaid[5] (Dollars)	$1,460	$2,165	$1,688	$2,851	$3,300	$4,340
Number of Consumers/Residents	34,173	585	4102	897	2375	51,865

NA = Not available
*From the list above
[a] "Needs assistance" includes limited assistance, extensive assistance, total dependence, and activity did not occur.
[b] Needs hands-on assistance with at least one of the following three activities, *bed mobility, transfer* or *"locomotion."*
[c] Moderately or severely impaired in cognitive skills.

Source: [1]PASSPORT Information Management System (PIMS), FY 2012.
[2]Ohio has two PACE sites, TriHealth SeniorLink in the Cincinnati area and McGregor PACE Center in the Cleveland area. Data are based on the initial and/or annual level-of-care assessments of the participants. Data presented here are based on 77% of the enrollees.
[3]Unpublished data for calendar year 2012, Ohio Department of Job and Family Services, Ohio Health Plans, Bureau of Home and Community Services, Nov. 2012.
[4]Quarterly nursing facility. MDS 3.0 April–June 2012.
[5]The per member, per month data include case management and are based on FY 2011 data from Ohio Department of Medicaid.

Although these comparisons are important, measurement and data collection differences do compromise our ability to understand variation across programs. The state should continue its efforts to collect and measure data comparably across programs and settings.

We also include comparative Medicaid cost data. Participant or resident contributions to the Medicaid program are included in the average calculated cost. Comparisons should be examined in the context of each program. For example, the Medicaid monthly cost for PACE ($2,851) is based on a negotiated capitated rate that includes all of the acute and long-term services available under the Medicaid program. It is supplemented by a capitated Medicare rate for those eligible. Participant average monthly long-term care Medicaid costs range from $1,460 in PASSPORT to $4,340 in nursing homes. Choices participants ($2,165) and Aging Carve-Out ($3,300) have higher monthly costs than PASSPORT, but serve a more impaired population. The lower Medicaid program costs for assisted living are in part a result of higher contribution levels by participants in this waiver.

LONG-TERM CARE SYSTEM LEVEL CHANGES

This report has documented some important changes in how long-term services are structured and financed in Ohio. In this section we examine two system-level questions: (1*) Has Ohio made progress in changing the balance in the system of long-term services and supports to respond to the growing number of individuals with severe disability*? (2) *Have changes in the system resulted in utilization and cost changes for the state?*

System Balance

Over the past two decades Ohio has made progress in changing the long-term care delivery system for its older population. As shown in Figure 4, in 1993 more than nine out of ten older Ohioans received Medicaid-funded long-term care in the nursing home. That ratio has steadily changed over the past two decades, and in 2011 the ratio was 55% of Medicaid long-term care recipients served in nursing homes and 45% received home and community-based services. Because nursing home care is more expensive, this still means that in 2011 more than three-quarters (76%) of long-term care Medicaid expenditures for older adults with disability went to nursing homes. Ohio's ranking on this measure is now 24th, an improvement from 2008 when the ranking was 33rd, and from 2004 when Ohio ranked 47th in this category. Top ranked states such as New Mexico, Washington, and Oregon spend about 40% of Medicaid funds on nursing homes, while states such as Tennessee, Mississippi, and North and South Dakota spend more than 85% of their Medicaid funds on nursing homes. Ohio's efforts, such as the expansion of PASSPORT, the Assisted Living Waiver Program, HOME Choice, and the nursing home diversion and transition initiative, have all contributed to these changing utilization patterns.

Utilization ratios for those under age 60 with disabilities (excluding individuals with developmental disabilities) in Ohio have also changed in the last decade in a much less pronounced way. As shown in Figure 5, in 1997 36% of individuals under age 60 receiving Medicaid long-term care services did so in the community setting. This 1997 ratio was more

balanced than the spending patterns for older people. By 2005 the ratio had increased to 49% community-based services and 51% institutional care. Over the past four years the ratio has remained almost the same, with 2011 showing a 50/50 ratio of HCBS to institutional care. Despite the fact that the Ohio Home Care waiver has increased by 22% since 2005, the increase in nursing home use by those under 60 over this same time period means that the ratio has been essentially unchanged.

Figure 4
Percent Distribution of Ohio's Long-Term Care Services and Supports Utilization by People Age 60 and Older, 2011

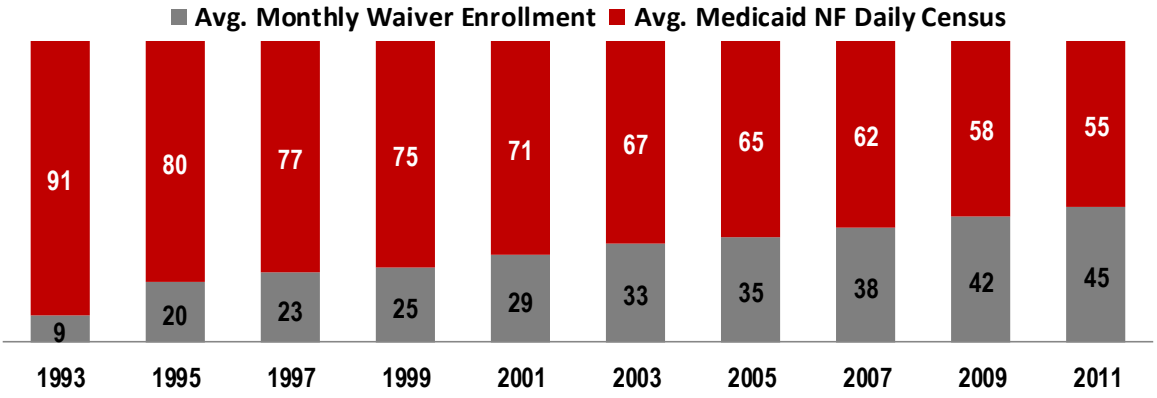
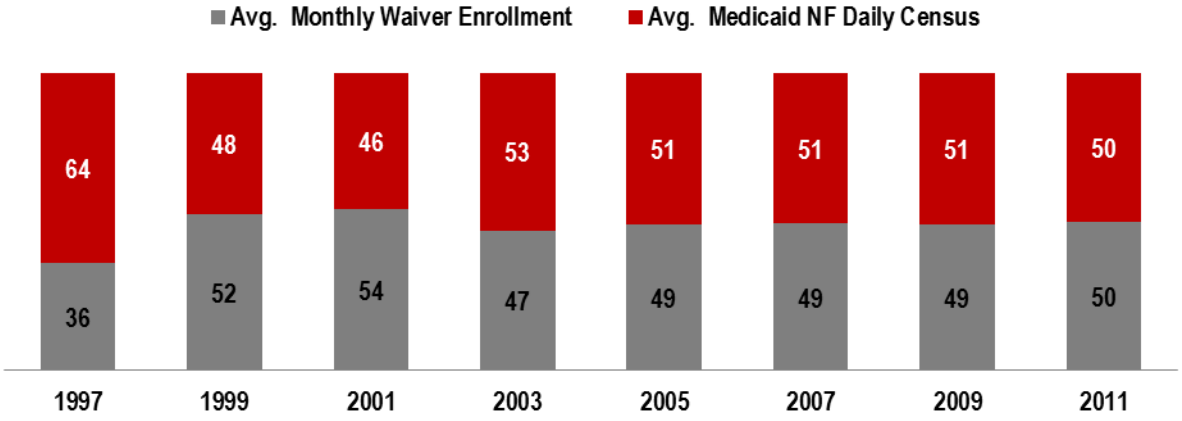


Figure 5
Percent Distribution of Ohio's Long-Term Care Services and Supports Utilization by People Under Age 60, 2011

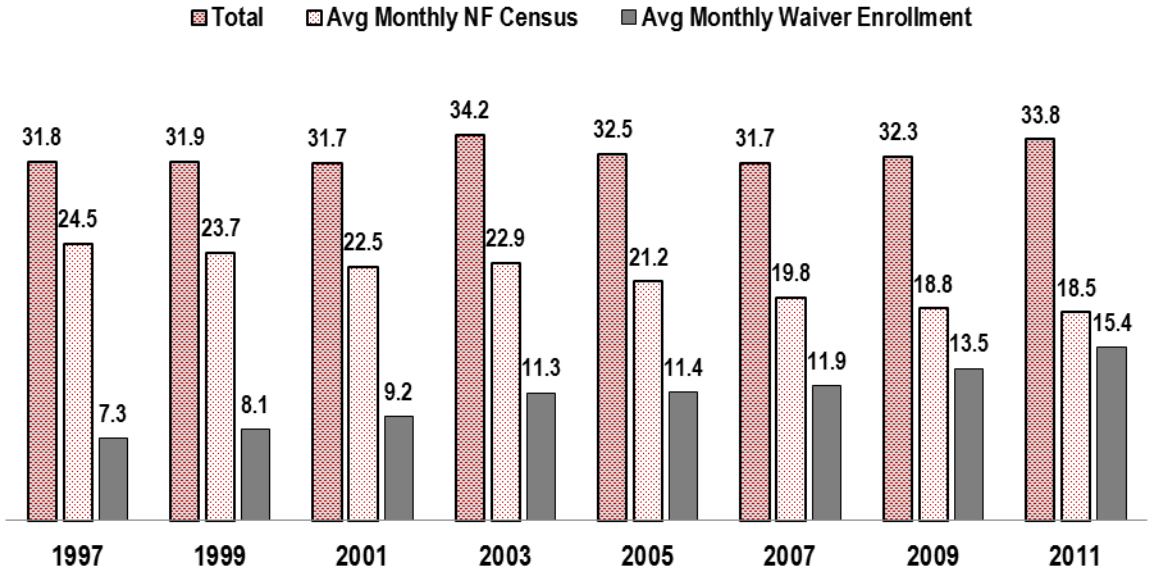


Source: Mehdizadeh, S. & Applebaum, R. (June 2013). *Ohio's progress toward a balanced system of long-term services and supports, 2011.* Oxford, OH: Scripps Gerontology Center, Miami University.

Utilization Patterns

One of the questions raised by states as they have struggled to control growing Medicaid expenditures is: *Will an expansion of Medicaid home and community-based services result in an increase in home care program participants that is not offset by reductions in nursing home use, thus increasing the numbers served by Medicaid?* To address this question, we have presented Medicaid nursing facility and home care utilization data between 1997 and 2011 in Figure 6. In 1997, Medicaid had a long-term services utilization rate for the 60 and over population of 31.8/1000. At the time the nursing home use rate was 24.5/1000 and home care was 7.3/1000. Ten years later in 2007, the overall utilization rate was 31.7/1000, unchanged over that time period. However, the nursing home use rate has dropped to 19.8/1000, and the home care rate has increased to 11.9/1000. In 2011 the overall rate increased slightly to 33.8/1000, with the nursing home use rate dropping to 18.5 and the HCBS rate increasing to 15.4. These data indicate that the overall utilization rate over the 15-year time period has been relatively constant, but the slight increase in 2011 will need to be monitored in future years. Some of the rate increase is explained by a change in the age mix of Ohio's older population. For example, during this time period the 60-plus population grew by 19%, and the number of individuals receiving long-term services grew by 27%, a higher rate of growth. However, during this same 15-year time span the 85-plus population grew by 50%.

Figure 6
Number of People Age 60 and Older on Medicaid Residing in Nursing Facilities or Enrolled in HCBS Per 1000 Persons in Population



Source: Mehdizadeh, S. & Applebaum, R. (June 2013). *Ohio's progress toward a balanced system of long-term services and supports, 2011*. Oxford, OH: Scripps Gerontology Center, Miami University.

The most notable change over the time period involves the location of where older people receive long-term services. As shown in Figure 7, in 1997 47,652 older Ohioans were in nursing homes supported by Medicaid, and 14,168 individuals were enrolled in PASSPORT, for a total of 61,820 individuals served. While a higher number of older people received long-term services in 2011 (78,480), Ohio served about 4800 fewer older individuals in nursing homes and about 21,500 more individuals in home and community-based service programs than in 1997. As a result of a large expansion of the Assisted Living Medicaid Waiver Program and the elimination of the PASSPORT waiting list, HCBS participation increased by more than 5200 between 2009 and 2011. These data indicate that between 1997 and 2011 Ohio lowered the average daily nursing home census for older people by 4800 people (11%) during a time period when the population age 85 and older grew by more than 75,000 people.

Data for the under age 60 population paints a somewhat different picture. (See Figure 8.) Between 1997 and 2011, Medicaid nursing home use for the under age 60 group increased by 26% (1700 people). While some of this increase is attributable to the large number of baby boomers moving into the 45–59 age group (31% population increase), the rate of growth for age 85 and older was higher at 47%, and nursing home use actually dropped. The large increase in the 45–59 age group does indicate that state policy makers will need to take the demographic changes into consideration as they develop future long-term service programs.

Costs

The final question in our analysis asks: *How have changes in long-term service utilization affected Medicaid costs?* To address this question we compare the 1997 use patterns to 2011. To adjust for inflation we compare utilization patterns using 2011 rates. As shown in Figure 9, the 1997 use patterns would require spending of $2.69 billion on Medicaid long-term care, with $2.44 billion on nursing homes and $248 million on home and community-based services (HCBS). In 2011 total Medicaid expenditures were $2.88 billion, with $2.19 billion on nursing homes and $690 million on HCBS. Based on the policy and program changes that have been made over the last 15 years, these findings indicate that despite a 19% increase in the over 60 population and a 50% increase in the 85 plus population, Ohio is spending just 7% more on Medicaid long-term services in 2011 than it did in 1997 ($195 million in 2011 dollars). With projections indicating a doubling of the older population with severe disability over the next 30 years, it will be critical for Ohio to use these policy lessons in preparation for the demographic challenges ahead.

Figure 7
Average Number of People Under 60 Years of Age Receiving Medicaid Long-Term Services and Supports, 1997-2011

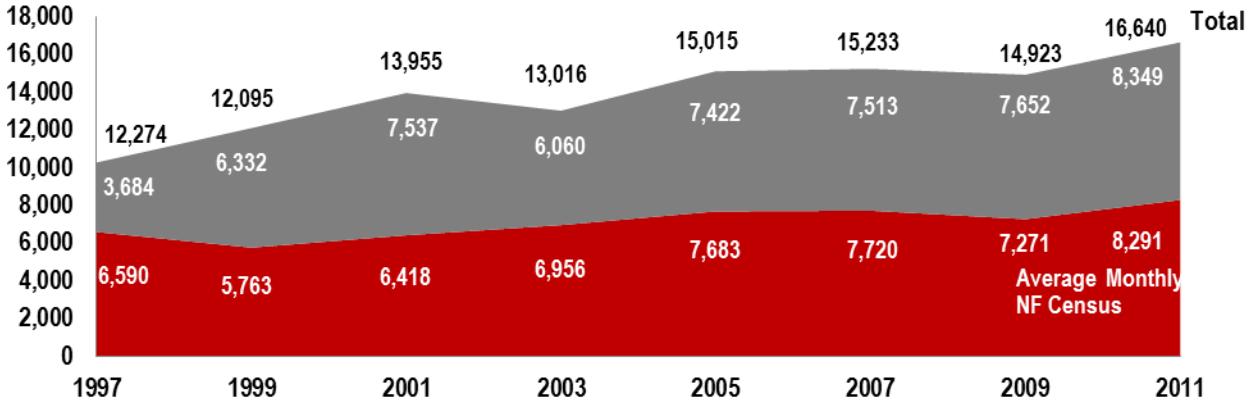
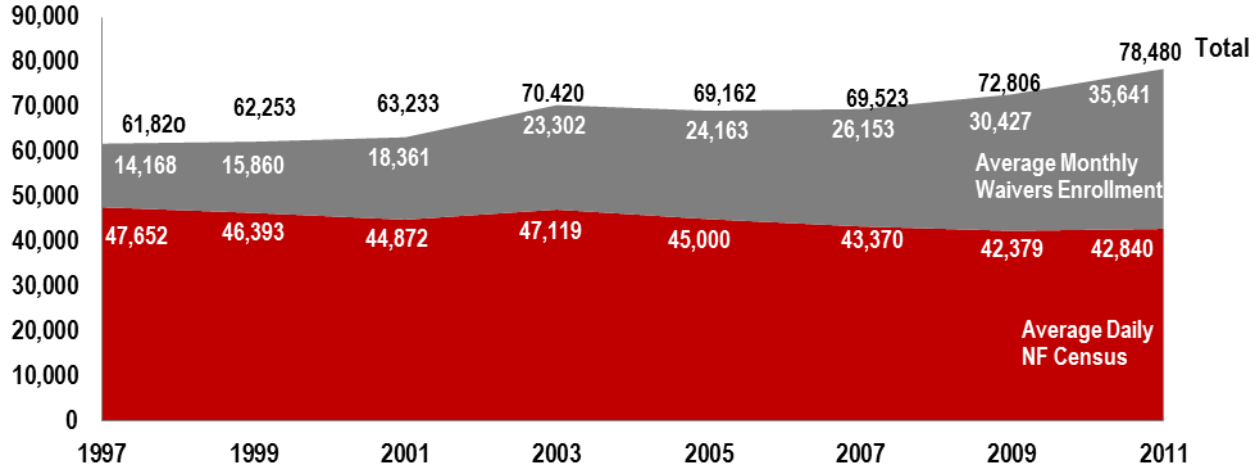
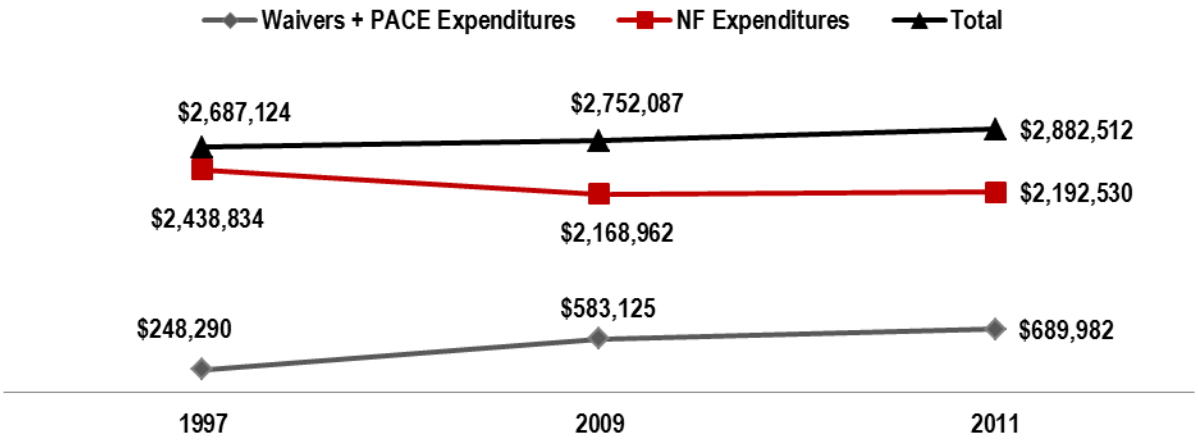


Figure 8
Average Number of People Age 60 and Older Receiving Long-Term Services and Supports, Paid by Medicaid, Over Time, 1997-2011



Source: Mehdizadeh, S. & Applebaum, R. (June 2013). *Ohio's progress toward a balanced system of long-term services and supports, 2011.* Oxford, OH: Scripps Gerontology Center, Miami University.

Figure 9
Comparison of Total Medicaid Expenditures on Services and Supports for People Age 60 and Older, 1997 - 2011 at 2011 PMPM Rates (in Thousands of Dollars)



Source: Mehdizadeh, S. & Applebaum, R. (June 2013). *Ohio's Progress toward a balanced system of long-term services and supports*, Oxford, OH: Scripps Gerontology Center, Miami University.

RECOMMENDATIONS

Ohio has made good progress in providing older people with a disability the opportunity to choose where they want to reside. Despite these noteworthy changes, it is the demographics of tomorrow that generate the most important questions. Between now and 2040, when the baby boomers will be aging in full force, Ohio will nearly double the population needing long-term services and supports. Growing the long-term services component of the Medicaid budget proportionally to the increase in the older and disabled population in combination with Medicaid's past inflationary increases could have a staggering effect on the state budget, easily doubling the proportion allocated to Medicaid (currently 24%). Given the pressures of education, economic development, infrastructure support, and countless other demands on state government, such a scenario is just not feasible.

States around the nation, confronted with similar problems, are now developing their responses. While the perfect solution does not exist, what is clear is that as a state we will need to be innovative, efficient, and effective to meet this unprecedented challenge. The recommendations below represent ideas for Ohio as it continues to work toward long-term system reform:

1) Ohio has made substantial progress in creating a more balanced and efficient Medicaid-funded system of long-term services and supports. In the past two decades the state has gone from serving more than 90 of 100 older people with

severe disability in nursing homes to now serving 45 of 100 through home and community-based services. Despite a 50% increase in the population age 85 and older, the average daily census of older people using Medicaid in Ohio nursing homes has dropped by 11%. While Ohio has increased the number of older people receiving home and community based services by 27%, Medicaid long-term services and supports costs have risen by 7%. These data indicate that efforts to create better balance in the system need not result in major increases in Medicaid costs. Ohio's strategy to reform the system of long-term services has been effective, but state policy makers will need to continue these efforts as the older population with disability increases at even a faster rate than it has in the last 20 years. Even with the substantial progress achieved, Ohio continues to have an oversupply of nursing home beds, resulting in overutilization, particularly for younger individuals with disability. Creative approaches to right-sizing the industry can ensure continued progress in developing a balanced system and help ensure better success of the industry.

2) Despite the good progress, what is missing from Ohio's overall strategy is a comprehensive, systematic effort to prepare for the unprecedented increase in the older population. Today fewer than 10% of older Ohioans residing in the community are Medicaid recipients, but six in ten nursing home residents are supported by Medicaid. Efforts such as the Integrated Care Delivery System Demonstration are testing important questions about how the state can more efficiently and effectively integrate acute and long-term services. What the demonstration does not address is how to delay or avoid middle and upper income elders from relying on Medicaid to finance their long-term services and supports. Today about 51% of physically and cognitively impaired Ohioans receive Medicaid long-term services. Making Medicaid more efficient is certainly important, but it will be critical to think about how as a state we can both reduce the prevalence of disability and assist individuals in adapting to their environment. For example, can we provide better opportunities to prevent or forestall severe disability? How can we use technology to help individuals with disability remain in their own homes independently for as long as they desire? While such efforts will require a partnership between the public and private sectors, state leadership to help develop and expand these efforts is critical. Given Ohio's emphasis on development, can the state become a national leader in technology that will support independence for older people with disability?

3) We again recommend that Ohio look carefully at utilization rates of the under 60 population and formulate a strategy to respond to the needs of these individuals. This report indicates that Ohio has changed how it delivers long-term services and supports to older individuals with severe disability. Over the last decade-and-a-

half, despite the increase in the number of those age 85 and above by almost 50%, Ohio has seen an 11% reduction in Medicaid nursing home use by older individuals. At the same time we have experienced a 26% increase in the under age 60 population using Medicaid nursing homes.

The increase in nursing home use by those under age 60 appears to be the result of two factors. First, the under age 60 population has grown dramatically, as the bulk of the baby boomers are now between age 50 and 60 (population age 45–59 has grown by 31%). Second, evidence indicates that a portion of individuals under age 60 using nursing homes have lower levels of disability and in some instances the nursing home may not be the best care setting. We found that 19% of the under age 60 population did not have an ADL impairment, and 26% had zero or one ADL limitation. In a previous study we found 4.4% of Medicaid nursing home residents not meeting level of care, and many of those were individuals under age 60 who experienced chronic mental illness. The Ohio Home Care Waiver is designed to serve individuals with physical disability. Adults with chronic mental illness, in general, do not have access to home and community-based services, and in some instances these individuals are ending up in Ohio nursing homes.

4) Because of the high volume of nursing home admissions (216,000), we recommend that the state develop a pre-admission review and follow-up approach that would allow more careful review and follow-up of some residents and fewer resources allocated to individuals who will clearly be discharged in less than 20 days as a result of Medicare coverage rules. This is now applicable to Medicaid as well, which is now being used for short-term care (90 days or less) for about one-third of those admitted. The tremendous increase in nursing home admissions and discharges and the high number of individuals that spend a short time in nursing homes suggest that the system has changed. This means that Ohio needs to alter its pre-admission approach in response to these changes. For example, the current review system was designed when there was an assumption that once an individual went into a nursing home, he/she would never be able to return home. To prevent inappropriate placement, states developed extensive pre-admission review systems. However, the volume of admissions is so high that the state has had to move to a system in which many individuals receive only a record review and hospitals are able to essentially exempt individuals from the review process, resulting in some inappropriate admissions. A more efficient screening process would allow the state to focus resources on follow-up, assisting some individuals with the transition from the nursing home back to the community.

5) As Ohio moves to a more unified system of long-term services, it becomes even more important to be able to make sound comparisons across long-term care

settings. We recommend that Ohio have at least a core set of measures, collected in a comparable way across settings. Although cost differentials are anticipated, it would be important for Ohio to have a better understanding of the program differences. In some instances programs appear to be serving similar target populations with cost differentials. However, without comparable data it is difficult to understand programmatic differences in costs and utilization. While this recommendation is applicable across the range of long-term programs, it can also be used to examine within program variation as well. For example, a better understanding of the variation across the PASSPORT Administrative Agencies could contribute to quality improvement efforts.

Ohio has a window of opportunity to address these challenges before the demographic changes of the baby boomers are upon us. Through its extensive efforts, Ohio has indeed responded; however, the demographic and financial challenges of the future suggest that the current reforms represent only the first steps of a longer journey. Elephants can dance, but can they also learn new steps to meet the needs of an ever changing older population in Ohio.

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