Providing Long-Term Services and Supports to an Aging Ohio:

Progress and Challenges

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EXECUTIVE SUMMARY

Background

Despite today's difficult economic times, there is an expectation that our state economy will rebound from this economic cycle. What still remains daunting, however, are the challenges we face as a state and nation as we become an aging society. The unprecedented growth in our aging population has generated considerable attention, particularly in the areas of retirement and health care, where federal programs such as Social Security and Medicare have been the focus of considerable attention. One area of major importance, providing assistance to those individuals who need long-term services and supports, however, falls primarily on the shoulders of the states. It is the states that are responsible for overall program design and operations in the long-term services and supports arena.

With U.S. long-term care (LTC) expenditures approaching $200 billion and growing, the cost of care is having a major impact on both individuals and government. Nationally, estimates indicate that private out-of-pocket long-term care expenditures and private insurance will top $70 billion in 2008. The Medicaid program, the single largest funder of long-term care, spent $101 billion in 2007. This represents about one-third of total Medicaid expenditures (Ohio LTC expenditures were about 36% of total Medicaid expenditures). 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 topping $4.8 billion in 2007. The overall state cost of the Medicaid program is about 24% of the entire state budget, up from 21% ten years earlier. In 2007, Ohio spent $3.4 billion on institutional long-term care (72.4%) and $1.4 billion on community-based services (27.6%).

How states allocate their long-term care Medicaid dollars has been the subject of considerable debate over the past ten years. Because initial federal Medicaid policy allowed states to spend funds on nursing home care only, it is no surprise that in all states nursing home expenditures dominated. In 1981, Congress gave states the ability to seek a waiver from Medicaid, which would allow funds to be allocated to home- and community-based services. Since that time Medicaid has dramatically expanded home care services and in 2007 Medicaid home- and community-based expenditures topped $27 billion. The Centers for Medicare and Medicaid Services (CMS) and other analysts have used the ratio of institutional expenditures compared to home- and community-based services as an indicator of how balanced a state is in delivering long-term services and supports. Ohio's ratio (72% institutional vs. 28% community) provides the state with a balancing ranking of 43rd, low, but an improvement from 47th in 2004. Because of the large increase in the number of individuals that will need assistance over the next 20-30 years, policy analysts have recommended that a more balanced system will afford states the best chance to meet the growing need in a cost effective manner. Large states like Ohio, who thought they were doing the right thing when they heavily invested in the nursing home industry, have faced the most difficult challenges when it comes to system reform.

With more than 2 million individuals age 60 and over, Ohio ranks 6th in the nation in the sheer size of the population in this age category. About one in five older Ohioans (about 377,000 people) experience a moderate or severe disability requiring long-term assistance. By adding individuals of all ages to our estimates, we find that in 2007 there were about 309,000 Ohioans who experienced severe disability. To complicate matters the older population with severe disability is projected to more than double between now and 2040 and we also expect steady increases in disability numbers for younger age groups. Combined with the constant increases in

Medicaid long-term care expenditures, our projections indicate that unless the system is altered, the Medicaid program could consume half of the state budget by the year 2020. Because such expenditure increases are not politically or economically feasible, it is critical for Ohio to continue its work on system reform. We hope the findings and recommendations from this report can contribute to Ohio's efforts to create an efficient and effective system of long-term services and supports.

Summary of Findings

Demographics and Cost

- In 2007, 309,000 Ohioans of all ages had severe disability and that group will grow to 348,000 by 2020 (13% increase). Forty percent of these individuals rely on the Medicaid program.

- In 2007, Ohio spent $4.8 billion on Medicaid long-term care: $3.4 billion on institutional care (72%) and $1.4 billion on community-based services (28%) (43rd highest institutional/community ratio, but changed from 47th in 2004).

- Ohio's Medicaid program spent more than $13 billion in 2007; about 36% of those funds went to long-term care. State Medicaid expenditures account for 24% of Ohio's overall budget.

Long-Term Care Programs

- Four in ten individuals with severe disability receive assistance only from family or privately purchased care.

- One-quarter of Ohioans with severe disability live in nursing homes.

- Seventeen percent of Ohioans 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 of all ages, Assisted Living for individuals age 21 and older, and several waivers for individuals with intellectual disabilities.

- Ohio's PASSPORT Medicaid waiver program, providing in-home services to individuals age 60 and over with severe disability, has grown from 15,000 in 1995 to 28,000 in 2007. Only two states have larger waivers for older adults: Washington and Texas.

- Ohio has 973 nursing homes with 96,000 licensed beds. Sixty-three percent of nursing home revenue comes from the Medicaid program compared to fifty-nine percent nationally.

- Between 1995 and 2007, Ohio tripled the number of residential care facility beds to 38,000. Ohio has 556 residential care facilities and we classify 367 of these as assisted living residences. As of April 2009, 182 of these facilities were participating in the Assisted Living Waiver Program.

Research Findings on Long-Term Care 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 2007 that number had increased to 201,000. The number of short-term Medicare admissions has been a major reason for this increase, rising from 30,000 in 1992 to 126,500 in 2007.

- For many residents, nursing homes are used 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 to 11% in 2008, from 4% in 1994. Almost 15% of Medicaid nursing home residents are under age 60.

- Nursing home occupancy rates increased by 2.9% in 2007. Private pay residents increased by 5%, Medicare by 10%, and the proportion of Medicaid residents was unchanged.

- Over the past 10 years the Medicaid census in nursing homes has dropped from 54,242 in 1997 to 51,536 (5% decrease). The census for the over-60 Medicaid population has dropped by 9%, and has increased by 17% for those under age 60.

- In 2007, Medicaid nursing home reimbursement averaged $164 per day, (a drop of $10 a day from 2005), private pay rates were $198 per day (up by $15 from 2005) and Medicare was $351 per day.

- In 2007, residential care facility unit occupancy rates were 77%, unchanged from 2005. The Assisted Living Waiver Program has grown to more than 1200 participants.

- Levels of disability vary among Ohio's Medicaid long-term care program participants. Nursing home residents average between four and five activity limitations, Ohio Home Care, Aging Transitions Carve-Out, and Choices waiver participants average four activity limitations, PASSPORT enrollees average three limitations and PACE and the Assisted Living waiver participants average between two and three activity limitations.

- Medicaid costs, after participant contributions, also vary by program, ranging from $38 per day for PASSPORT to $136 for nursing homes. PACE receives a $91 daily capitated rate that covers both acute and long-term care costs under Medicaid.

- Ohio has begun to change the long-term care delivery system for older people with severe disability. In 1993, nine of ten older people supported by Medicaid were in nursing homes; by 2007, that proportion had dropped to 62%. The proportions have also changed for the under 60 population dropping from 64% using nursing homes in 1997, to 51% in 2007.

- Although the state has expanded the number of older people receiving in-home services over the last ten years, the utilization rate has remained relatively constant. In 1997, Medicaid had a utilization rate of 32 per 1000 persons age 60 and over and in 2007, the rate was 34 persons per 1000.

- Estimates indicate that had Ohio not increased its waiver expenditures over the last 12 years but simply allowed both nursing homes and home-and community-based participation to increase at the 1995 rates, 6100 fewer people would have been served, but Ohio would have spent an additional $190 million on Medicaid long-term care in 2007.

Recommendations

As an aging state, Ohio has begun to respond to today's concerns, but the challenges of tomorrow generate the most important questions. Between now and 2040, when the baby boomers will be aging in full force, Ohio is going to more than double the population needing long-term services and supports. Growing the long-term care 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. Although the perfect solution does not exist, there is a general consensus among long-term care experts about the steps necessary for states to meet these unprecedented challenges.

Creating a system based on the principles of consumer choice that ensure individuals can select their long-term services and support settings is the hallmark of the expert advice. Translating this principle into action requires states to ensure that there is choice in the system and thus efforts such as Ohio's Unified Budget Workgroup are critical to accomplishing these goals. The recommendations below represent ideas for Ohio as it continues to work toward long-term system reform.

(1)   We 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 begun to change how it delivers long-term services and supports to individuals with severe disability over age 60. Over the last ten years, despite the increase in the number of those age 85 and above by more than 74,000, Ohio has seen a 9% reduction in Medicaid nursing home use by individuals age 60 and older. At the same time we have experienced a 17% increase in the under 60 population using Medicaid nursing homes.

The increase in nursing home use by those under age 60 appears to be the result of several factors. First, the under 60 population has grown dramatically, as the bulk of the baby boomers are now between age 50 and 60. Second, the Ohio Home Care Waiver had a ceiling of 7600 in 2007 and had a waiting list of 3000. (Recent policy changes have resulted in an elimination of this waiting list.) Third, 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 18% of the under 60 population did not have an ADL impairment and 25% had zero or one ADL limitations. In a previous study we had found 4.4% of Medicaid nursing home residents not meeting level of care and a majority 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.

(2)	Because of the high volume of nursing home admissions (more than 200,000); 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 less resources allocated to individuals who will clearly be discharged in less than 20 days as a result of Medicare rules and coverage. The tremendous increase in nursing home admissions and discharges and the high number of individuals that spend a short time in nursing homes suggests that the system has changed. This means that Ohio needs to alter its pre-admission review and follow-up processes in response to these changes. For example, the current pre-admission 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 mechanisms. However, the volume of admissions is so high that the state 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. We believe that some of the inappropriate admissions occur in this manner. 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.

(3)	We recommend that Ohio continue to pursue housing options, for delivering "assisted living" type services. Occupancy rates in residential care facilities that meet the assisted living waiver criteria are 77%, indicating that there is excess capacity. On the other hand, Ohio's Assisted Living Waiver Program has 600 individuals waiting to enroll. Although many of those

waiting do not live in counties that have assisted living facilities, that is not always the case. Continued efforts to attract assisted living facilities will be important as the state continues to build long-term capacity. It is also clear that a large proportion of Ohio counties do not have a supply of assisted living facilities. Nationally, states have attempted to incorporate assisted living into other types of available housing for older people and individuals with disability in an effort to expand this option.

(4)   We recommend that Ohio have the same measures, collected in a comparable way, across programs and settings. Level of disability and costs do vary considerably across long-term care programs and 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 impossible to understand programmatic differences in costs and utilization. Efforts to collect data in a comparable fashion would also assist Ohio in its efforts to develop a Long-Term Care Profile Tool, which was a recommendation of the Unified Long-Term Care Budget Workgroup.

(5)   We recommend that Ohio expand its options for self-directed care for adults with disability. Results from the National Cash and Counseling Demonstration and Evaluation found that individuals participating in the self-direction program were safer, had higher satisfaction, and were less likely to use nursing home care (Brown and Dale, 2007). At this point self-direction for older people is available in about one-third of the state through the Choices program. This program has proven quite popular in rural areas, where home care provider shortages have been a challenge. The Ohio Home Care Program allows participants to hire individual workers, but the program's capacity has been limited.

Ohio has a window of opportunity to address these challenges before the demographic changes as a result of the baby boomers are upon us. Through its efforts on the Unified Budget and other reforms, Ohio has begun to respond; however, the system changes required to respond to the demographic and financial challenges suggest that the current reforms represent only the first steps of a longer journey.

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BACKGROUND

Despite today's difficult economic times, there is an expectation that our state economy will rebound from this economic cycle. What is more daunting, however, is the challenge we face as a state and nation as we become an aging society. The unprecedented growth in our aging population has generated considerable attention, particularly in the areas of retirement and health care, where Social Security, private pension systems and Medicare have been the focus of major attention. Health and retirement represent mounting concerns for our nation, and the vast majority of programs and policies in these areas are driven by the federal government. But, another area of major importance, providing assistance to those individuals who need long-term services and supports, falls primarily on the shoulders of the states. This issue has received less national attention, but it has enormous implications for state policy.

Although heavily funded from the joint federal/state Medicaid program, it is the states that are responsible for overall program design and operations in the long-term services and supports arena. As states have developed their systems of long-term care, they have chosen different strategies, such that today there is considerable variation across the nation on the approaches used. In most states, the initial strategies involved heavy investment in nursing homes as the way to deliver long-term care. During the 1960's and 1970's this was seen as a progressive move by states to ensure that older citizens had access to the 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, states began to shift to other types of long-term care, such as in-home services, supportive housing, adult family care, and assisted living residences.

The tremendous growth in the older population, combined with the development of new options and recognition that individuals with disability could live in a community environment, has changed how individuals used – and how states financed – long-term care. These changes caused states, including Ohio, to examine how to best structure long-term services and supports. States now struggle with supporting a nursing home industry that they helped to expand, while at the same time creating the array of service and support options that consumers are expecting and that will be sustainable as America ages. In this report we track Ohio's progress over the last 15 years, as it has responded to the growing long-term care needs of the state. Ohio has made some important policy and programmatic changes that have improved its ability to meet the mounting challenges. This study documents these changes and highlights future areas for policy and programmatic consideration.

DEMOGRAPHICS

With more than 2 million individuals age 60 and over, Ohio ranks 6th in the nation in the sheer size of the population in this age category (Mehdizadeh, et al., 2004). By 2020, the number of Ohioans age 60-plus is expected to grow by 36%. Although the increase 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. About one in five older Ohioans (about 377,000 people) experience a moderate or 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 from 207,000 today to 249,000 by 2020 (20% increase) and by 2035 the number will top 274,000 (32% increase). Adding individuals of all ages with all types of disability to our estimates, we find that in 2007 there were about 309,000 Ohioans experiencing severe disability (see Table 1). A more extensive

breakdown of the entire population with severe disability is provided in Table 2, where we find

that 59% of this group includes adults with physical or cognitive disability, 12% are individuals

with intellectual disability, and 29% experience severe mental illness. Estimates indicate that this

number will grow to just over 348,000 by 2020 (Mehdizadeh, 2008).

Table 1
Projections of Disability Among the
Ohio Population, 2005[a]-2020

Year	Total Population	Population with Moderate Disability	Population with Severe Disability
2005	11,464,042	789,115	304,511
2007	11,584,158	802,154	308,573
2010	11,764,333	821,727	314,650
2015	11,960,864	837,860	329,419
2020	12,177,857	852,382	348,129

[a] 2005 Data are U.S. Census Bureau estimates.
Source: Reproduced from Mehdizadeh, S. (2008). *Disability in Ohio: Current and future demand for services*. Oxford, OH: Scripps Gerontology Center, Miami University.

COSTS

With U.S. long-term care expenditures approaching $200 billion and growing, the cost of

care is having a major impact on both individuals and government. 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 will top $70 billion in 2008 (Georgetown, 2007). The

Medicaid program, the single largest funder of long-term care, spent $101 billion in that area in

Table 2
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
2005	11,464,045	178,241	36,597	89,673	304,511
2007	11,584,158	181,220	36,899	90,454	308,573
2010	11,764,330	185,672	37,352	91,626	314,650
2015	11,960,871	195,507	37,875	96,037	329,419
2020	12,177,862	208,154	38,485	101,490	348,129

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

2007. This represents about one-third of total Medicaid expenditures (Ohio LTC expenditures were about 36% of total Medicaid expenditures). Nationally, nursing homes and intermediate care facilities for those with intellectual or developmental disability (ICF/MR) represented $60 billion in expenditures, while the home-and community-based waiver programs accounted for $27.5 billion in program expenditures. An additional $10.4 billion was spent on the Medicaid personal care service option, which Ohio does not use. These patterns are a shift from ten years earlier, when nursing home expenditures were $44 billion, home-and community-based waiver programs spent $8.2 billion, and $3.2 billion went to personal care (Burwell, 1999; Burwell, Sredl, & Eiken, 2008). In 2007, there were more than 300 separate home- and community-based waiver programs in the United States. Finally, the Medicare program covers a growing proportion of long-term care expenditures, accounting for almost one-fifth of total long-term care payments. This $20 billion expenditure represents a large increase from $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 topping $4.8 billion in 2007. The overall state cost of the Medicaid program is about 24% of the entire state budget, up from 21% ten years earlier. In 2007, Ohio spent $3.38 billion on institutional long-term care (72.4%) – nursing facilities and intermediate care facilities for individuals with intellectual or developmental disability (ICF/MR) – and $1.44 billion on community-based services (27.6%), the 43rd highest institutional/community spending ratio among the 50 states. 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 $695 million in 2007 (49%) compared to $741 million for community-based services (51%), (Ohio ranks 40th highest in institutional ratio). For adults with physical and cognitive disability, Ohio spent $ 2.64 billion on institutions (80%) compared to $695 million (20%) for community-based services (33rd highest institutional ratio). Even though the ratio for intellectual and developmental disability (ID/DD) Medicaid expenditures is close to 50/50, because many states have substantially reduced their institutional Medicaid expenditures for individuals with intellectual disabilities, Ohio ranks as less balanced in the ID/DD sector than it does in the adult disability category from a comparative perspective. In 2004, Ohio had been ranked 47th among the states in its ratio of institutional to community-based expenditures and now ranks 43rd (Burwell et al., 2008).

These numbers and other data presented throughout this report indicate that Ohio has begun to shift its long-term services and supports strategy. In the last biennium budget, the General Assembly created the Unified Long-Term Care Budget Workgroup to comprehensively address system reform. The Workgroup made a series of concrete recommendations, many of

which are now under consideration in the current budget bill. The assembly of the workgroup, which was composed of an array of stakeholders – including elected officials, state program and regulatory staff, consumers and advocacy groups, academicians, and providers – was the first time that Ohio had engaged in a comprehensive planning process to address the long-term services and support challenges facing the state.

The state has also continued to make programmatic changes in the long-term care 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 19,000 older people with severe disability ten years ago to serving more than 28,000 participants today. In 2006, Ohio became the 42nd state to operate an Assisted Living Medicaid Waiver Program. Today that program has an average daily census of about 1300 and will meet its federal ceiling of 1800 by the end of the fiscal year (Applebaum et al., 2009). Ohio has also received a major Money Follows the Person (MFP) grant from the Centers for Medicare and Medicaid Services (CMS). This program, Home Choice, is designed to work with individuals transitioning from facility-based to community-based settings.

LONG-TERM SETTINGS

To gain a better understanding of how long-term services and supports are delivered in the state, we review the range of settings and type of assistance used by individuals in Ohio who experience a severe disability. As shown in Figure 1, of the almost 309,000 Ohioans with severe disability, four in ten receive assistance from family or privately purchase services, but do not receive publicly supported assistance. About one-quarter of those with severe disability reside in nursing homes and an additional 2.4% reside in institutions classified as ICF/MR, which serve

Figure 1
Proportion of Ohio's Population with Severe Disability
in Different Long-Term Care Settings, 2007
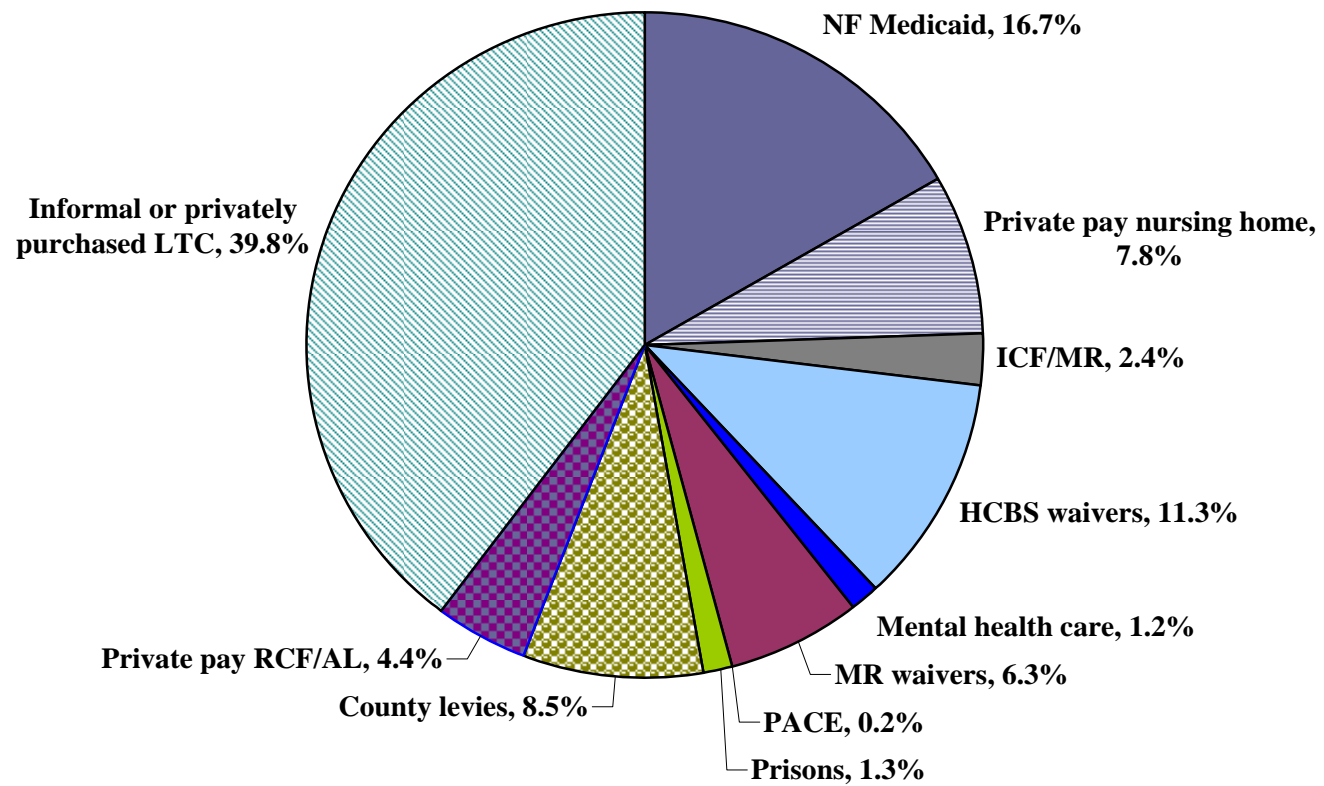
- NF Medicaid, 16.7%
- Private pay nursing home, 7.8%
- ICF/MR, 2.4%
- HCBS waivers, 11.3%
- Mental health care, 1.2%
- MR waivers, 6.3%
- PACE, 0.2%
- Prisons, 1.3%
- County levies, 8.5%
- Private pay RCF/AL, 4.4%
- Informal or privately purchased LTC, 39.8%

Source: Reproduced from Mehdizadeh, S. (2008). *Disability in Ohio: Current and Future Demand for Services*. Oxford, OH: Scripps Gerontology Center, Miami University. Actual utilization data are replaced for estimates.

those with intellectual disabilities. Another 4.4% are living in residential care facilities. Just under 17% of Ohioans with severe disability are supported by Medicaid in nursing homes. A growing number of Ohioans with severe disability are relying on Medicaid home-and community-based waiver programs including 11.5% of adults enrolled in PASSPORT, Choices, the Ohio Home Care Waiver Program, and the long-term care/acute care PACE program. An additional 6% of Ohioans with intellectual disabilities were enrolled in the Medicaid waiver programs for individuals with intellectual disabilities. Finally, more than 8% of Ohioans with severe disability rely on county-funded levy programs for assistance.

In sum, we find that about 122,000 severely disabled Ohioans out of the state total of 309,000 (39.5%) relied on Medicaid for assistance with long term services and supports in 2007. In the following sections, we provide an overview of the Medicaid programs designed to serve these individuals. The bulk of our analysis will focus on older adults, and in some cases we examine programs for individuals with physical or cognitive disabilities across the life span. In this report we do not include program data on individuals with intellectual disabilities.

As previously described, there are a range of settings in which individuals receive long-term services and supports. Individuals who experience severe disability receive assistance in their own homes, in the homes of friends and relatives, in adult care facilities, congregate housing, continuing care retirement communities, assisted living and other residential care facilities, and nursing homes. In this section we provide an overview of the long-term services and supports provided in the community or in residential care settings.

COMMUNITY

Most Ohioans with disability live in their own homes or in the home of a family member; in fact, more than two-thirds of individuals with severe disability in Ohio live in the community.

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. Estimates have valued informal care provided for older people in Ohio to be almost $12 billion annually (Family Caregiver Alliance, 2004). For those Ohioans needing additional support, two major 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 eight states that uses locally funded and managed programs to deliver in-home services. These programs are typically designed for individuals age 60 and over and are deemed important because Medicaid waiver programs are limited to people with severe disability and very low income. In Ohio, 70 of 88 counties have passed senior levies generating more than $131 million to support services (Payne et al., 2006; ODA, 2009). 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 2007, county levy programs served approximately 100,000 older people in Ohio. We estimate that about 25,000 of these individuals were severely disabled.

The use of county levies receives both praise and criticism. On the positive side, these levies promote local control and involvement, providing substantial community resources designed to help local elders. On the other hand, such an approach means that the service delivery system has tremendous variability across the state, with some counties developing well-

funded home care systems, while others experience large service gaps. Many other states have developed statewide programs for individuals with moderate income and disability levels, but Ohio's approach relies on local counties.

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 Job and Family Services (ODJFS), 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 28,000 older people who receive services through the PASSPORT program. 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.

Table 3 provides an enrollment breakdown for the 13 agencies operating PASSPORT at the regional level. By and large, the urban area agencies on aging in Cleveland, Akron, Columbus, Dayton, and Cincinnati report the largest number of program participants. The major exception to this pattern is the Rio Grande site. Although Rio Grande has about 4% of the state's severely disabled population, it serves more than 11% of the statewide caseload, and records a 55.5% penetration rate. A number of factors can explain PASSPORT participation rates,

Table 3
Distribution of Ohio's Older Population and
PASSPORT and Choices Consumers:
By Area Agency on Aging
June 2008

Area Agency on Aging (AAA)	Location	Estimated Total 60+ Population[1]	Estimated Population 60+[2] with Severe Physical and/or Cognitive Disability	Proportion of Ohio's Population 60+ with Severe Physical and/or Cognitive Disability	Number of PASSPORT/ Choices Consumers[3]	Proportion of PASSPORT/ Choices Consumers	PASSPORT/ Choices Consumers as Percent of the Severely Disabled Population
1	Cincinnati	270,133	17,994	12.4	2329	8.9	12.9
2	Dayton	163,491	10,963	7.5	2433	9.3	22.2
3	Lima	69,313	4908	3.4	445	1.7	9.1
4	Toledo	172,896	11,866	8.2	1884	7.2	15.9
5	Mansfield	104,921	6931	4.8	1596	6.1	23.0
6	Columbus	263,457	16,649	11.5	2712	9.7	16.3
7	Rio Grande	89,639	5559	3.8	3083	11.2	55.5
8	Marietta	50,989	3156	2.2	699	2.6	22.2
9	Cambridge	104,240	6989	4.8	1491	5.7	21.3
10A	Cleveland	416,722	29,172	20.1	4840	18.5	16.6
10B	Akron	233,973	16,039	11.1	3140	12.0	19.6
11	Youngstown	149,874	10,452	7.2	1177	4.5	11.3
CSS*	Sidney	66,182	4316	3.0	680	2.6	15.8
	Total	2,155,837	145,000	100.0	26,511	100.0	18.3

∗ Catholic Social Services serves part of the Dayton region and is the only private agency involved with the administration of PASSPORT services.

Source: [1]U.S. Bureau of Census; U.S. Population Projections Detailed Data Files.
File 2. Annual projections by 5-year and selected age groups by sex. Retrieved electronically on 11/19/2008 from
http://www.census.gov/population/www/projections/projectionsagesex.html
[2]Mehdizadeh, S. (2008). *Disability in Ohio: Current and Future Demand for Services*. Oxford, OH: Scripps Gerontology Center, Miami University.
[3]PASSPORT Information Management System (PIMS). Choices consumers are included in this column.

including the community economic profile, the presence or absence of county levy programs, and outreach and organizational approaches at each site. Overall, on a statewide basis, PASSPORT serves about 18% of the severely disabled population.

The Ohio Department of Aging also operates a companion waiver to PASSPORT, designed to allow older consumers the opportunity to self-direct their own services. The consumer becomes the employer of record in this model and can hire, fire, and train their 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 being implemented in Columbus, Rio Grande, Marietta, and Toledo and serves about 400 participants.

The state's other large community program for individuals with physical and cognitive limitations is the Ohio Home Care Waiver. This waiver program is managed at the state level by ODJFS and operated statewide by an independent case management agency, CareStar. In 2007, the program served 9800 participants. The program targets individuals under age 60, with about half of its enrollees between ages 45 to 59. Ten percent of those served are under age 14. The program reports a waiting list of almost 3000 individuals. Technically, when an individual reaches age 60 they are transferred to a companion waiver program called the Transitions Aging Carve-Out Waiver. That program currently serves about 1300 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) delivers medical (physician and specialist) and a range of supportive and social services, including rehabilitation, prescription drugs, medical equipment, personal care services, meals, and transportation. 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 and 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 Concordia Care in Cleveland, serving Cuyahoga county residents. In 2008, there were 725 PACE participants.

RESIDENTIAL CARE

There is an array 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 2008, Ohio had 78 certified adult foster homes, and 652 adult care facilities (Brothers-McPhail & Mehdizadeh, 2009). Nursing homes and a portion of residential care facilities that are termed assisted living residences serve individuals with severe levels of disability.

One state program designed to support individuals with moderate levels of disability is the Residential State Supplement (RSS). Targeting low-income individuals age 18 or older who require supervision, but do not need nursing home care, the program provides a monetary supplement to pay for accommodations in residential settings, such as adult foster care, adult care facilities, or residential care facilities. Program participants are also deemed eligible for Medicaid. The RSS program is administered by ODA, and the area agencies on aging conduct the initial program assessment to determine functional eligibility. More than half of RSS participants are age 45 to 64, and just under 20% are age 65 or older. The program served about 1900 individuals in 2007.

Nursing Homes

Ohio has 973 nursing homes that contain some 96,000 licensed beds (92,400 beds in service in 2007). The number of nursing home beds per 1000 persons age 65 and older is 60, giving Ohio the 9th highest supply of beds per capita in the nation (Houser et al., 2006). The vast majority of nursing homes are either freestanding or part of a continuing care retirement community. Six percent are part of hospital units and 2% are county homes (see Table 4). The average nursing home in Ohio has 95 beds, and three quarters are located in urban communities. More than seven in ten facilities are proprietary. About 20% are part of continuing care retirement communities. A large part of the funding base for nursing homes is the Medicaid program, which provides about 63% of total revenues. Medicare accounts for 14% of funding, with out-of-pocket costs comprising the remaining 23%. It is interesting to note that private long-term care insurance is reported as providing less than 1% of the total. Nursing homes are licensed and inspected by the Ohio Department of Health (ODH) and the Medicaid payment system is administered by ODJFS.

Residential Care/Assisted Living Facilities

Residential care facilities provide personal care to 17 or more individuals, with a limit of 120 days of skilled nursing care in a year. In 2007, there were 556 residences containing just over 38,000 beds; up from 19,400 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 new Assisted Living Medicaid Waiver Program to systematically identify assisted living

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Table 4
Ohio's Nursing Facility Characteristics, 2007

	All Nursing Facilities	County Homes	Hospital-Based Long-Term Care Unit
Number of Facilities	973	20	57
Licensed/Certified Nursing Facility Beds 12/31/07	96,040	2171	3037
On average, number of beds available daily	92,443	2074	2883
Average Number of Beds	95	104	51
Location (percent)			
Urban	73.3	40	79.0
Rural	26.7	60	21.0
Ownership (percent)			
For Profit	71.5	--	5.3
Not for Profit	26.4	--	94.7
Government	2.1	100.0	--
Average Daily Charge (dollars)			
Medicaid	164.0	152.0	196.4
Medicare	351.2	312.0	369.8
NF Private Pay (private room)	208.6	167	422.7
NF Private Pay (shared room)	188.1	157	399.4
Payment Sources (percent)			
Medicaid	63.5	67.1	21.5
Medicare	13.7	10.1	57.4
Private (self, others, and insurance)	22.8	22.8	21.1
Long-Term Care Insurance Only	0.5	0.0	1.2

Source: Bi-annual Survey of Long-Term Care Facilities, 2008.

facilities. Requirements include a private bedroom and bathroom, locking door, in-unit socialization space, 24 hour staffing, and the availability of a registered nurse. Based on our statewide survey, we estimate that 367 facilities appear to meet the state definition of assisted living. As of April 2009, 182 facilities have been approved to participate in the Ohio Assisted Living Waiver Program. In looking at the geographic distribution of the 367 assisted living facilities, we find that five Ohio counties do not have any assisted living residences, and 20 have one assisted living facility. A further breakdown of those assisted living facilities actually participating in the waiver program finds that 35 counties (40%) have no Assisted Living Waiver Program participating facilities and 32 counties have one or two participating facilities. The waiver program has more than 600 individuals waiting to enroll, and the lack of an available facility is the major cause (Applebaum et al., 2009).

Residential care facilities report an average of 70 beds and 54 units per residence (see Table 5). Four of five residences are located in urban areas, and one-third are part of a continuing care retirement community. There are a variety of room configurations that 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 $900 to $7,200, depending on the type of unit. The overall statewide average was $3,200 per month.

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 care utilization in the state. Because long-term services and supports are provided in a range of settings with different funding sources, tracking utilization relies on a number of data sources. Information on nursing homes

Table 5
Comparison of the Characteristics of
Ohio's Residential Care Facilities

	All RCFs	RCF Only	Assisted Living
Number of Facilities	556	189	367
Total Licensed RCF beds	38,131	6,746	28,303
Total Number of Units	29,956	5,078	22,353
Average Number of Beds	70	50	77.1
Average Number of Units	54	37.3	61
Residential Care Facilities (Average Monthly Rate)	$3,235	$3,159	$3,274
Location (percent)			
Urban	78.2	80.9	79.6
Rural	21.8	19.1	19.9
Ownership (percent)			
Proprietary	67.3	69.2	66.9
Not for Profit	32.7	30.7	33.1
Part of CCRC (percent)	33.3	33.1	33.5

Source: Bi-annual Survey of Residential Care Facilities, 2008.

and residential care facilities comes from the biannual survey of facilities completed by Scripps in 2008. Response rates were high, with 96% of nursing homes and 93% of residential care facilities completing the on-line survey. Data from the Medicaid Cost Report, completed by each facility and compiled and provided to us by ODJFS and the national Online Survey Certification and Reporting (OSCAR) data generated by CMS, were used to supplement the facility survey. 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 during or 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, TriHealth, in Cincinnati, and Concordia Care, in Cleveland, provided participant assessment data directly to Scripps for analysis. Information for the Ohio Home Care Waiver and the Aging Carve-Out came from ODJFS (Medicaid Management Information System, Office of Ohio Health Plans, and Bureau of Home & Community Services). Medicaid cost data also came from ODJFS via the Decision Support System, Office of Ohio Health Plans.

NURSING FACILITY USE

The nature of nursing home use in Ohio has changed dramatically since we began tracking utilization rates in 1992. As shown in Table 6, while the number of beds in service has remained stable over the study time period (around 92,000), admissions and discharges have risen dramatically. In 1992, Ohio nursing homes recorded 71,000 admissions. By 1997, that number had risen to 130,000, and by 2007, 201,000 individuals (55% increase over the ten-year period) were admitted to Ohio facilities.

The major increase has been driven by Medicare program changes. In 1992, 30,000 of the admissions were "Medicare admits"; by 1997 that number had more than doubled to 80,000; and by 2007, there were 126,500 Medicare admissions (58% ten-year increase). For many, nursing homes have become a place for short-term rehabilitative care after an acute hospital admission. A major reason for this change is the reduction in the average length of a hospital stay reimbursed by Medicare as a result of the prospective payment system.

These changes mean that the nursing home of today is quite different from the industry that we profiled in 1994. To better understand how nursing homes are being used, we identified every new admission to Ohio nursing homes in 2001 and tracked resident outcomes for three years. Findings showed that after three months, of all individuals admitted to Ohio nursing

Table 6
Ohio Nursing Facility Admissions, Discharges, and Occupancy Rates: 1992-2007

	1992	1993	1997	1999	2001	2003	2005	2007
Adjusted Nursing Facility Beds[a]								
Total beds	91,531	93,204	99,302	95,701	94,231	90,712	91,274	92,443
Medicaid certified	80,211	82,207	88,679	93,077	87,634	NA	87,090	90,559
Medicare certified	37,389	36,140	34,157	47,534	62,088	NA	86,701	91,659
Number of Admissions								
Total	70,879	82,800	129,778	149,838	149,905	168,924	190,150	200,954
Medicaid resident	17,968	17,542	19,063	28,150	24,442	NA	34,432	25,182
Medicare resident	30,359	41,733	80,006	78,856	90,693	NA	116,810	126,528
Number of Discharges								
Total	68,195	79,977	126,385	148,253	141,611	NA	190,534	199,831
Medicaid resident	23,568	25,466	27,450	36,562	30,374	NA	43,168	37,695
Medicare resident	20,443	28,810	66,594	66,058	71,884	NA	96,151	109,628
Occupancy Rate (Percent)[b]								
Total	91.9	90.7	87.7	83.5	83.2	84.7	86.4	87.7
Medicaid resident[c]	67.4	67.0	61.8	55.4	58.5	NA	58.8	56.9
Medicare resident[d]	9.9	12.4	20.9	12.8	11.8	NA	11.6	12.1

NA = Not available.
[a]Total beds include private, Medicaid, and Medicare certified beds. Because some beds are dually certified for Medicaid and Medicare, the individual categories cannot be summed. The total beds, Medicaid, and Medicare certified beds are adjusted to account for facilities that did not respond to the survey in each year.
[b]The occupancy rate since 1996 is based on facilities that did not have ICF-MR certified beds. In facilities with ICF-MR beds all beds are dually licensed, therefore it is impossible to separate Medicaid-IMR residents from other residents.
[c]Medicaid certified beds occupied by residents with Medicaid as source of payment.
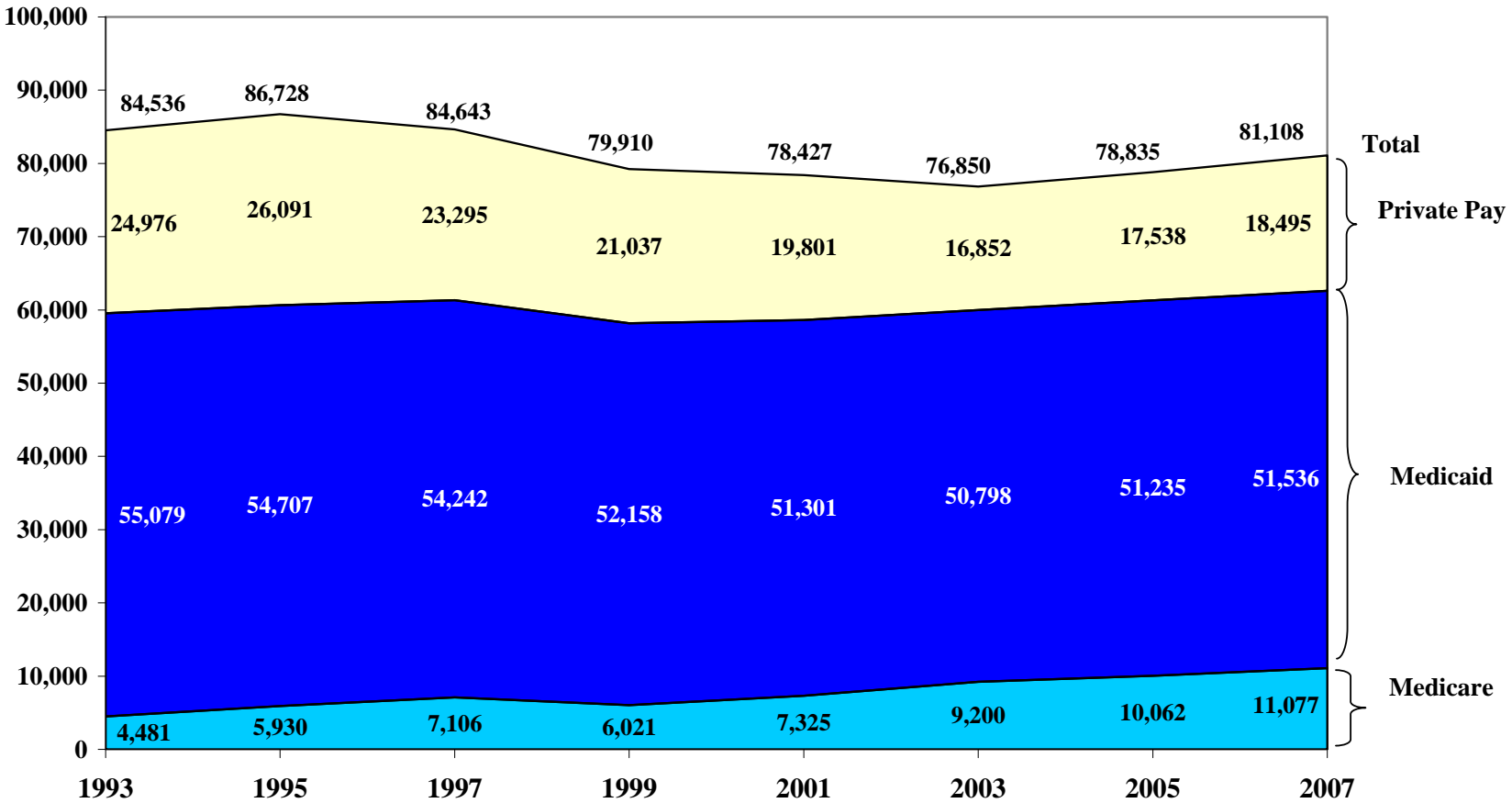[d]Medicare certified beds occupied by residents with Medicare as source of payment.

Source: Annual Survey of Long-Term Care Facilities. Ohio Department of Health 1992-1998, Annual and Bi-annual Survey of Long-Term Care Facilities, Ohio Department of Aging and Scripps Gerontology Center, 1999-2007.

homes, 43% continued as residents. (Of those no longer in the facility about 80% returned to the community and 20% died.) After six months, less than one-third remained as residents; and after nine months, only one-fifth of all admitted remained (Mehdizadeh, Nelson & Applebaum, 2006). These data highlight the changing nature of nursing home care, indicating that two very different populations are now being served. These changes have important implications for system design and reform.

The question about how these use patterns affect Ohio nursing home occupancy rates is examined in Table 6. Overall occupancy rates in Ohio nursing homes increased slightly in 2007, from 86.4% in 2005 to 87.7%. In 2007, the average daily nursing home census was 81,108, a 2.9% increase in the last two years. Individuals paying privately increased to 18,495 (5.4% increase), and the average number of residents each day reimbursed by Medicare increased to 11,077 (10% increase). The Medicaid census was flat at 51,536, increasing by 0.6% (see Figure 2). The increase in private pay residents represents a shift in the ten-year drop in the private market that occurred between 1995 and 2005.

In breaking down the Medicaid census by age we see a pattern showing a decrease in the over-60 Medicaid nursing home population and an increase in the under 60 group. In 1997, the Medicaid average daily census was 54,242, and 12.1% of this group was under age 60. By 2007, there was a drop in overall daily census to 51,536, but the under 60 population had risen to 15.0% of the total (increasing from 6590 to 7720). For the 1997 - 2007 time period, this represents a 17% increase in the average daily census of those under 60 and a 9% decrease in Medicaid nursing home use for Ohioans 60 and older. In the following section we will provide more detail on the nursing home population and discuss the implications of these changes for state policy makers.

Figure 2
Average Daily Nursing Home Census 1993 to 2007

	1993	1995	1997	1999	2001	2003	2005	2007	
Total	84,536	86,728	84,643	79,910	78,427	76,850	78,835	81,108	
Private Pay	24,976	26,091	23,295	21,037	19,801	16,852	17,538	18,495	
Medicaid	55,079	54,707	54,242	52,158	51,301	50,798	51,235	51,536	
Medicare	4,481	5,930	7,106	6,021	7,325	9,200	10,062	11,077	

Source: Survey of Long-Term Care Facilities in Ohio, 1993-2007.

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NURSING FACILITY RESIDENT CHARACTERISTICS AND COSTS

In this section we examine the characteristics of those using nursing homes and the costs of this care. Because nursing homes are experiencing a considerable resident turnover, data presented reflect those who spent time in a nursing home during a three-month period in 2008. Nursing home residents are most often age 80 and above (56%), with almost one in five age 90 and older (see Table 7). Despite the concentration of residents in their eighties, nursing homes today have a higher proportion of those under age 60 than in the past. For example, today 11% of all nursing home residents are under age 60; in 1994, the number was 4%. This increase was reported in our 2006 analysis as well, and is largely driven by utilization changes recorded in the Medicaid program, where 14.7% of those using the nursing home are under age 60. Nursing home residents continue to be primarily white women who are widowed, but the profile is changing slightly. For example, today 68% of residents are women, down from 71% in 2004 and 74% in 1994. In 2008, 22% of residents were married, in comparison to 18% in 2004 and 15% in 1994. The proportion of minorities served in nursing homes has also increased slightly. All of these demographic changes are very much related to the shift to short-term care for a growing number of individuals using Ohio nursing homes.

In looking at physical functioning as measured by the resident's ability to perform activity of daily living tasks (ADL), we find that, on average, today's nursing home residents are quite impaired, with more than 80% reporting four or more ADL impairments (see Table 8). More than half of the residents are reported to experience incontinence (56%) or cognitive impairment (55%). Residents are slightly more functionally impaired than in 1994, and slightly less impaired in the areas of incontinence and cognitive impairment; thus on balance, appear to be relatively consistent from a case mix standpoint over the past decade.

Table 7
Comparison of the Demographic Characteristics of Ohio's
Certified Nursing Facility Residents by Payment Source:
2008

	All (Percentages)	Medicare (Percentages)	Medicaid (Percentages)
Age			
45 and under	2.2	1.1	3.1
46-59	8.7	5.9	11.6
60-64	4.7	4.0	5.6
65-69	6.6	9.1	6.9
70-74	8.6	11.7	8.3
75-79	12.9	16.5	11.8
80-84	18.9	21.5	17.1
85-89	19.5	18.3	18.1
90-94	12.6	9.3	12.0
95+	5.3	2.6	5.5
Average Age	78.6	78.3	77.1
Gender			
Female	68.0	64.0	69.7
Race			
White	86.8	89.9	83.0
Black	12.3	9.3	15.9
Other	0.9	0.8	1.1
Marital Status			
Never Married	15.1	8.6	20.0
Widowed/Divorced/Separated	62.7	56.5	64.9
Married	22.2	34.9	15.1
Population Size*	94,016	17,323	54,045

*Data presented here reflect the characteristics of all residents during the period of April – June 2008.

Source: MDS 2.0 April – June 2008.

Table 8
Comparison of the Functional Characteristics of Ohio's
Certified Nursing Facility Residents by Payment Source:
2008

	All (Percentages)	Medicare (Percentages)	Medicaid (Percentages)
Needs Assistance in Activities of Daily Living (ADL)[1]			
Bathing	85.1	86.5	81.4
Dressing	87.1	90.5	84.5
Mobility	83.0	92.4	77.8
Toileting	83.8	89.8	80.2
Eating	30.5	21.6	34.6
Grooming	84.8	82.9	84.4
Number of ADL Impairments[2]			
0	6.1	3.8	7.6
1	4.4	2.8	5.4
2	3.5	3.1	3.9
3	4.5	4.2	4.8
4 or more	81.5	86.1	78.3
Average Number of ADL Impairments	4.5	4.6	4.4
Incontinence[3]	56.2	34.0	64.1
Cognitive Impairment[4]	55.3	29.4	63.4
Average Case Mix Score	2.2	2.8	1.9
Population Size*	94,016	17,323	54,045

*Number of people who spent some time in a nursing home between April 1, 2008 and June 30, 2008.
[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 2.0 April – June 2008.

Despite this high level of disability, 6% of residents, regardless of payer source, are classified as having no ADL impairments, and more than 10% have zero or one ADL limitation. In an earlier analysis we found that 4.4% of individuals residing in nursing homes did not meet level of care as defined by Medicaid, and the primary diagnosis for this group was mental illness. That study also found the ineligible group to contain a higher proportion of residents under age 60 (Mehdizadeh & Applebaum, 2005). In looking at the Medicaid group of nursing home residents in 2008, we see 7.6% with no ADL impairment and 13% with zero or one impairment.

Because of the increase in the number of Medicaid residents under age 60 and some of the findings discussed above, we examined the under 60 age group in comparison to the 60 and over nursing home population (see Table 9). Almost four of five of the under age 60 group are between 45 and 59, reflecting the growth of the baby boomers into this age group. Unlike the traditional older resident population, this group has a much lower proportion of females (45% vs. 74%) and this group is more likely to be non-white (26% vs. 15%). Perhaps reflecting some of the social and mental health issues mentioned previously, this group is much more likely to have never been married (55% vs. 14%).

The analysis of the functional ability of the under 60 group continues to raise questions about placement decisions. Just over 18% of the under 60 group are reported to have no ADL limitations, and one quarter have one or zero activity impairments (see Table 10). The 60 and over group averages almost one more ADL impairment higher than the under 60 group (4.5 vs. 3.7). Across every major indicator these individuals appear to be considerably less impaired when compared to Medicaid residents age 60 and older. These findings suggest that while the

Table 9
Comparison of the Demographic Characteristics of Ohio's
Certified Nursing Facility Medicaid Residents by Age Group:
June 2008

	Under 60 Years (Percentages)	60 Years and Older (Percentages)
Age		
Less than 18	0.2	--
18-30	3.6	--
31-44	17.4	--
45-59	78.8	--
60-64	--	6.6
65-69	--	8.1
70-74	--	9.7
75-79	--	13.8
80-84	--	20.1
85-89	--	21.2
90-94	--	14.0
95+		6.5
Average Age	50.2	81.8
Gender		
Female	44.6	74.0
Race		
White	73.7	84.6
Black	24.7	14.3
Other	1.6	1.1
Marital Status		
Never Married	55.2	14.1
Widowed/Divorced/Separated	33.6	70.1
Married	11.2	15.8
Medicaid Residents[*]	7968	46,077
Percent of Medicaid Residents	14.7	85.3

[*]The data present the characteristics of all Medicaid residents who spent some time in a nursing facility between April and June 2008.

Source: MDS 2.0 April – June 2008 and Medicaid Decision Support System (DSS), 2009.

Table 10
Comparison of the Functional Characteristics of Ohio's
Certified Nursing Facility Medicaid Residents by Age Group:
June 2008

	Under 60 Years (Percentages)	60 Years and Older (Percentages)
Needs Assistance in Activities of Daily Living (ADL)[1]		
Bathing	65.7	84.1
Dressing	71.4	86.8
Mobility	64.0	80.2
Toileting	67.2	82.4
Eating	32.1	35.0
Grooming	73.5	86.3
Number of ADL Impairments[2]		
0	18.2	5.8
1	6.8	5.2
2	5.0	3.8
3	5.6	4.6
4 or more	64.6	80.6
Average Number of ADL Impairments	3.7	4.5
Incontinence[3]	49.2	66.8
Cognitive Impairment[4]	54.7	64.9
Average Case Mix Score[5]	1.95	1.91
Medicaid Residents*	7968	46,077

*The data present the characteristics of all Medicaid residents who spent sometime in a nursing facility between April and June 2008.

[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.
[5] Case mix scores are used by Medicaid to determine reimbursement rates. A higher case mix score means that the resident has a higher level of disability.

Source: MDS 2.0 April – June 2008 and Medicaid Decision Support System (DSS), 2009.

functional characteristics of older nursing home residents are increasing, the under 60 age group is a less functionally disabled population.

Costs

In this section we present nursing home costs over time in 2007 dollars, as adjusted for inflation. As presented in Figure 3, the average Medicaid reimbursement in 2007 was $164 per day, or just under $60,000 annually. The private pay rate was $198 per day, or $72,300 annually. The Medicare rate, which is linked to resident rehabilitation and is for short-term care, is $351 per day, or $128,100 annually, although Medicare does not cover care for this long. The private pay rate represents a jump of $15 per day from 2005, and the Medicaid rate represents a drop of ten dollars per day after being adjusted for inflation. Part of the private pay increase is driven by growth in private insurance reimbursement rates.

Overall, the historical analysis indicates that while Ohio Medicaid rates saw steady increases throughout the 1990's (increasing from $123 to $172 per day in today's dollars), since 2001, the reimbursement rate has actually gone down when adjusted for inflation. Ohio's 2006 nursing home Medicaid rate ranked 9th (in terms of reimbursement) nationally, but 2007 comparative U.S. data are not yet available (AARP, 2006).

RESIDENTIAL CARE FACILITY USE AND COST

In 2007, Ohio had 556 residential care facilities that included about 30,000 units, with over 38,000 licensed beds. The growth in licensed residential care facilities has been dramatic, more than doubling the number of facilities from 265, and more than tripling the number of beds (10,700 beds) between 1995 and 2007. Much of the growth has occurred as a result of the

Figure 3
Average Per Diem for Nursing Home Residents in 2007 Dollars: 1992-2007
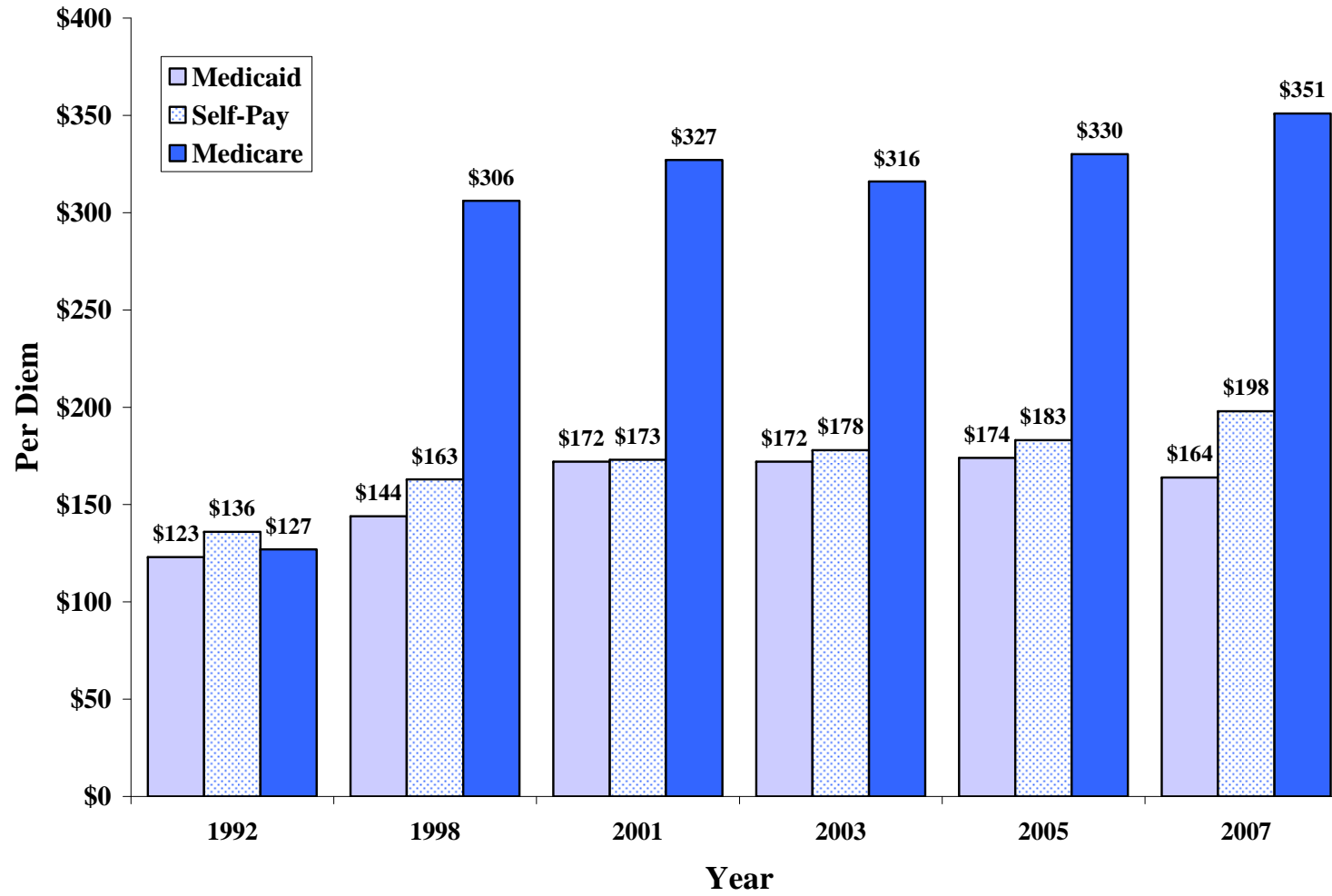
Source: Survey of Long-Term Care Facilities in Ohio, 1992-2007.

development of the assisted living industry. As noted earlier, we estimate that 367 facilities would meet the Medicaid waiver definition of an assisted living residence. As of April 2009, 182 of these 367 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 77%; a rate that was virtually unchanged from our 2005 survey (see Table 11). Because residential care facilities have more licensed beds than units, the bed occupancy rate is lower, at 66%. Since the overwhelming majority of assisted living residences are single room, we believe the unit rate is a better measure of utilization. It should be noted that our survey, which covers the year 2007, is not affected by the assisted living waiver. The program grew slowly during 2007, with enrollment at year's end of about 300 participants and an average daily enrollment of about 150. As of April 2009, the program has grown to more than 1200. This increase could influence occupancy rates in future years.

Information on the characteristics of individuals who use residential care facilities is also presented. 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 one in five residents had two or more ADL limitations. About 15% receive skilled nursing care and 12% have cognitive impairment.

More detailed data are available on participants in the Assisted Living Medicaid Waiver Program (see Table 12). As of October 2008, there were just under 1000 program participants. The average age was 80 and more than four in ten were 85 and older. Eight in ten were women, and the vast majority (93%) were not married. More than 90% were impaired in bathing and participants averaged between two and three ADL impairments. Almost 40% of waiver

Table 11
Comparison of the Functional Characteristics of
Ohio's Residential Care Facilities Residents

	Overall (Percentages)[*]	RCF Only (Percentages)[*]	Assisted Living (Percentages)[*]
Unit Occupancy	76.9	77.7	75.2
Bed Occupancy	66.1	65.9	66.7
Needs Assistance in Activities of Daily Living (ADL)			
Bathing	27.6	21.4	30.2
Dressing	20.8	15.9	22.8
Transferring	8.8	7.6	9.9
Toileting	13.7	12.0	14.4
Eating	3.8	3.4	3.9
Mobility	27.7	18.8	33.3
With Two or More Activities	17.1	14.6	18.2
Received Skilled Nursing Care	14.5	12.0	15.6
Behavior Problems	5.8	7.6	5.2
Cognitive Impairment	11.8	12.0	11.7

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

Source: Bi-annual Survey of Residential Care Facilities, 2008.

participants needed supervision. These data indicate that the waiver participants are considerably more disabled than the typical residential care facility resident; this could have implications for future enrollment policies for the program.

PASSPORT USE AND COSTS

PASSPORT has become one of the largest aging/disabled Medicaid waiver programs in the United States, spending about $280 million in 2007. The program has expanded considerably, increasing from serving 4215 individuals in 1992 to 15,000 in 1995, to 26,000 in

Table 12
Demographic and Functional Characteristics of Enrollees
in the Assisted Living Waiver Program
October 2008

Characteristics	Percent
Age	
≤45	1.1
46-59	6.4
60-64	5.7
65-69	6.0
70-74	8.3
75-79	12.0
80-84	17.6
85-90	25.3
91+	17.6
Average Age	79.8
Gender	
Female	79.2
Male	20.8
Race	
White	88.9
Black	9.2
Other	1.9
Marital Status	
Non-Married	92.7
Married	7.3
ADL Impairment	
Eating	4.2
Toileting	23.3
Grooming	22.8
Dressing	47.0
Mobility	72.7
Bathing	91.8
IADL Impairment	
Shopping	97.6
Laundry	94.0
Meal Preparation	97.8
Community Access	96.9
Environmental Management	99.5
Sample Size	978

Source: Reproduced from Applebaum, et al. (2009). *An evaluation of the Assisted Living Medicaid Waiver Program.* Oxford, OH: Scripps Gerontology Center, Miami University.

2006 to 28,000 today. Of the 74 different aging/disability waivers nationwide, only Washington

state and Texas have larger programs (Burwell et al., 2008). 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, through 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 13

more than three quarters of all program service dollars 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 11% of program service dollars are allocated to home-delivered meals. That

87% of all service dollars are allocated to personal care and meals is an indicator of the basic

assistance that PASSPORT participants rely upon. Adult day services and transportation each

receive about 4% of the overall allocation. Finally, homemaker services, emergency response,

and home modifications receive the remaining 5% of the service allocation.

Participant Characteristics

A review of PASSPORT participants indicates that the overall characteristics have

remained quite consistent over the past 15 years (see Tables 14 and 15). Almost four in ten

participants are age 80 and over, with a mean age of 77. PASSPORT participants are typically

women (78%), and about one in five are married. Almost three in ten participants are non-white.

Four in five PASSPORT participants live in their own homes or apartments, the remainder

generally live with a relative or friend. The demographic characteristics show considerable

consistency over the 15 year time period of this study.

Table 13
PASSPORT Expenditures by Type of Service
2006 and 2008

Type of Services	(Percentages)	(Percentages)
	2006	2008
Personal Care	74.9	75.6
Home Delivered Meals	10.6	11.2
Adult Day Services	4.0	3.5
Transportation	3.0	3.8
Home Medical Equipment and Supplies	3.3	2.0
Homemaker Services	1.1	1.0
Emergency Response	2.2	1.9
Home Modification	0.7	0.7
Other	0.2	0.3

Source: PASSPORT Information Management System (PIMS).

The theme of consistency is again highlighted in the analysis of participant functioning.

PASSPORT participants remain severely impaired, averaging three ADL impairments, with

more than 60% recording three or four ADL limitations. 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. For example, the mean number of ADL and

IADL impairments remains exactly the same when comparing our initial data collection time

period and today.

In reviewing health status, we find that three in ten consumers report circulatory disorders

as a primary diagnosis (see Table 16). Problems with endocrine (15%), musculoskeletal (16%),

and respiratory systems (10%) and injury's (10%) are the primary categories. Nervous system

Table 14
Demographic Characteristics of PASSPORT Consumers:
1994, 2004, 2006, and 2008

	December 1994 (Percentages)[a]	June 2004 (Percentages)[a]	October 2006 (Percentages)[a]	June 2008 (Percentages)[a]
Age				
60-64	9.4	10.8	10.7	9.8
65-69	13.2	16.2	16.0	16.5
70-74	16.3	17.8	17.4	18.1
75-79	17.1	20.3	18.5	17.6
80-84	16.9	17.3	18.2	17.4
85-89	15.0	10.8	11.5	12.8
90-94	8.6	5.4	5.8	5.7
95+	3.5	1.4	1.9	2.1
Average Age	77.7	76.4	76.7	76.5
Gender				
Female	80.0	79.8	78.7	78.2
Race				
White	73.2	76.6	74.1	71.3
Black	25.5	21.9	23.8	25.1
Other	1.3	1.5	2.1	3.6
Marital Status				
Never Married	5.2	6.3	6.6	7.7
Widowed	59.8	51.4	49.4	46.1
Divorced/Separated	12.2	23.0	24.2	26.6
Married	20.8	19.3	19.8	19.6
Current Living Arrangement[b]				
Own home/apartment	79.0	83.8	79.5	80.0
Relative or friend	18.9	15.7	17.9	16.3
Congregate housing for elderly	1.1	0.3	0.2	0.1
Nursing facility	--	--	1.3	2.7
Other	0.1	0.2	1.1	0.9
Number of Consumers Served[*]	7161	22,560	25,491	26,165

[*]The number of consumers served in 1994 represents total consumers served during the year. However, in 2004, 2006, and 2008 this number represents consumers who had an active service plan at this indicated time.
For explanations of "a" and "b", please see table endnotes, page 62.

Source: PASSPORT Information Management System (PIMS).

Table 15
Functional Characteristics of PASSPORT Consumers:
1994, 2004, 2006, and 2008

	December 1994 (Percentages)[a]	June 2004 (Percentages)[a]	October 2006 (Percentages)[a]	June 2008 (Percentages)[a]
Percentages with Impairment/Needing Hands-On Assistance in Activities of Daily Living (ADL)[c]				
Bathing	96.7	95.5	96.0	96.3
Dressing	71.4	61.7	60.1	60.4
Mobility[d]	46.7	78.4	75.6	81.6
Toileting	35.5	20.4	21.1	20.1
Eating	11.4	10.6	10.9	5.5
Grooming[e]	NA	32.8	32.9	32.0
Number of ADL impairments[*]				
0	NA[e]	0.8	0.8	0.8
1	NA	3.8	3.5	3.5
2	NA	34.8	34.6	35.5
3	NA	34.1	33.6	33.8
4 or more	NA	26.5	27.5	26.4
Average Number of ADL Impairments	NA[e]	3.0	3.0	3.0
Percentage with Impairment in Instrumental Activities of Daily Living (IADL)				
Community access[f]	89.8	89.5	84.8	87.9
Environment management[g]	97.1	99.7	???	99.8
Shopping	97.6	97.6	97.4	97.1
Meal preparation	88.3	88.9	88.5	88.1
Laundry	97.0	96.2	95.7	95.9
Medication Administration	38.8	32.2	41.4	40.6
Number of IADL Impairments[**]				
0	2.3	0.1	3.9	0.0
1	0.2	0.1	1.0	0.1
2	0.8	0.3	0.5	0.5
3	3.5	3.7	3.8	4.2
4 or more	93.2	95.8	90.8	95.2
Average Number of IADL Impairments[**]	5.1	5.0	4.9	5.1
Supervision Needed[h]				
24 hour	NA	8.1	9.5	8.8
Partial time	NA	11.1	9.1	11.0
Number of Consumers Served[♣]	7161	22,560	25,491	26,165

NA = Not available.

[♣]The number of consumers served in 1994 represents total consumers served during the year. However, in 2004 and 2006 and 2008, this number represents consumers who had an active service plan at the indicated time.

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

For explanations of "a" through "h" please see table endnotes, page 62.

Source: PASSPORT Information Management System (PIMS).

Table 16
Health Status of PASSPORT Consumers

	(Percentages)[a] October 2006		(Percentages)[a] June 2008	
Primary Diagnosis, Diseases of				
Circulatory System		30.4		29.3
Endocrine, Nutritional, Metabolic Immunity		15.0		15.3
Musculoskeletal System and Connective Tissue		14.8		15.7
Respiratory System		11.0		10.2
Injury and Poisoning		8.5		10.3
Nervous System and Sense Organs		7.3		6.5
Alzheimer's Disease	2.9		2.6	
Parkinson's Disease	1.4		1.4	
Other degenerative nervous system	3.0		2.5	
Mental/Cognitive Disorders		6.2		5.5
Dementia	4.1		3.9	
Other mental disorders	2.1		1.6	
Other		6.8		7.2
Number of Hospital Admissions				
During Previous Year				
0		73.9		73.8
1		14.7		15.1
2		5.9		5.8
3-5		4.6		4.5
6-10		0.9		0.8
More than 10 times		--		--
Number of Nursing Home Admissions				
During Previous Year				
0		92.0		91.1
1		6.4		6.9
2		1.2		1.5
3 or more		0.4		0.4
Number of Prescribed Medications				
0		5.7		1.0
1-2		3.3		3.0
3-5		13.0		12.4
6-10		36.6		37.2
11-15		27.2		29.1
16-25		13.4		16.2
More than 25		0.8		1.1
Total Number of Medications (including				
over the counter medication)				
0		5.2		0.5
1-2		2.3		1.9
3-5		9.7		9.5
6-10		33.8		33.3
11-15		30.1		32.1
16-25		17.6		20.9
More than 25		1.3		1.8
Number of Consumers Served		25,491		26,165

Source: PASSPORT Information Management System (PIMS).

(6.5%), cognitive disorders (5.5%), and an "other" category (7.2%) round out the list. More than one quarter had at least one hospital admission in the past year, and more than 11% had two or more admits in the past year. Nine percent had at least one nursing home admission in the past year. More than 95% take three or more prescription medications, and almost four in five take six or more prescription drugs.

Because PASSPORT is such a large program, examining overall caseload averages could mask potential changes in the program that occur over time. To gain a better idea of program changes, we also compare the characteristics of participants at admission over time. As shown in Table 17 and 18, we do see some changes in new admissions over the years. Newly admitted participants are younger (average age of 74 vs. 77), less likely to be female (73% vs. 77%), more likely to be married (24% vs. 20%) and more likely to live in their own homes (85 vs. 77) than earlier admission cohorts. Figure 4 provides a detailed overview of the age changes seen in PASSPORT. In 1996, 11% of enrollees were age 60 to 64, and in 2008 that proportion had climbed to 19%. The 65 to 69 age group shows similar patterns, increasing from 13% to 17%. On the other side of the age continuum, the 80 to 84 enrollee proportions have dropped from 17% in 1996 to 15% in 2008. The 85 to 89 age group dropped from 14% to 11%. A large part of these changes are explained by the population changes, in which we see large increases between the 1990 and 2000 census in the age categories 50 to 69.

The admission changes appear to have an effect on the disability characteristics of enrollees over time. The mean number of ADL limitations drops slightly, but the biggest change is in the proportion with four or more ADL limitations. In 1996, about one third of enrollees were in this category; by 2008 that proportion had dropped to one-quarter. Medication administration also dropped, from 50% in 1996 to 39% in 2008. Information regarding cognitive

Table 17
Comparison of the Demographic Characteristics
of PASSPORT New Enrollees* Over Time

	PASSPORT 1996 (Percentages)[a]	PASSPORT 2001 (Percentages)[a]	PASSPORT 2008 (Percentages)[a]
Age			
60-64	10.5	13.2	19.3
65-69	13.1	14.9	17.3
70-74	17.7	18.3	16.8
75-79	18.8	19.5	15.4
80-84	17.4	16.3	15.2
85-89	13.8	10.8	10.9
90-94	6.5	5.8	4.2
95+	2.2	1.2	0.9
Average Age	76.8	75.6	74.1
Gender			
Female	77.0	77.5	73.3
Race			
White	72.8	77.5	71.8
Black	25.9	20.8	24.7
Other	1.3	1.7	3.5
Marital Status			
Never Married	5.8	5.3	9.2
Widowed	56.7	53.3	41.1
Divorced/Separated	17.2	20.1	26.0
Married	20.3	21.3	23.7
Usual Living Arrangement[b]			
Own home/ apartment	76.7	81.8	84.6
Relative or friend	21.5	17.2	14.7
Congregate housing for elderly	0.6	0.1	0.2
Group home	0.2	--	--
Nursing facility	0.9	0.6	0.3
Other	0.1	0.3	0.2
Number of Consumers Served*	3883	2991	2301

*The enrollees in the first six months of each year as indicated.
For explanations of "a" and "b", please see table endnotes, page 62.

Source: PASSPORT Information Management System (PIMS).

Table 18
Comparison of the Functional Characteristics
of PASSPORT New Enrollees[♣] Over Time

	PASSPORT 1996 (Percentages)[a]	PASSPORT 2002 (Percentages)[a]	PASSPORT 2008 (Percentages)[a]
Percentage with Impairment/Needing Hands-On Assistance in Activities of Daily Living (ADL)[c]			
Bathing	96.1	94.5	93.4
Dressing	64.1	58.9	57.0
Mobility[d]	57.8	79.8	78.1
Toileting	30.1	22.5	22.0
Eating	8.0	5.4	5.2
Grooming	59.0	32.4	26.8
Number of ADL Impairments			
0	1.5	1.3	1.0
1	3.7	3.8	5.7
2	29.3	36.5	39.4
3	32.0	31.7	29.2
4 or more	33.5	26.7	24.7
Average Number of ADL Impairments[*]	3.2[c]	2.9	2.8
Percentage with Impairment in Instrumental Activities of Daily Living (IADL)			
Community access[f]	91.8	90.3	85.6
Environment management[g]	99.9	99.9	99.7
Shopping	97.5	97.3	97.0
Meal preparation	85.3	88.1	89.4
Laundry	95.6	95.1	94.3
Medication Administration	49.6	49.1	39.1
Number of IADL Impairments[**]			
0	0.0	0.0	0.0
1	0.0	0.1	0.2
2	0.4	0.3	0.7
3	4.4	4.7	4.5
4 or more	95.2	94.9	94.6
Average Number of IADL Impairments[**]	5.2	5.2	5.1
Number of Consumer Served	3883	2991	2301

[♣]The enrollees in the first six months of each year as indicated.
*From list above.
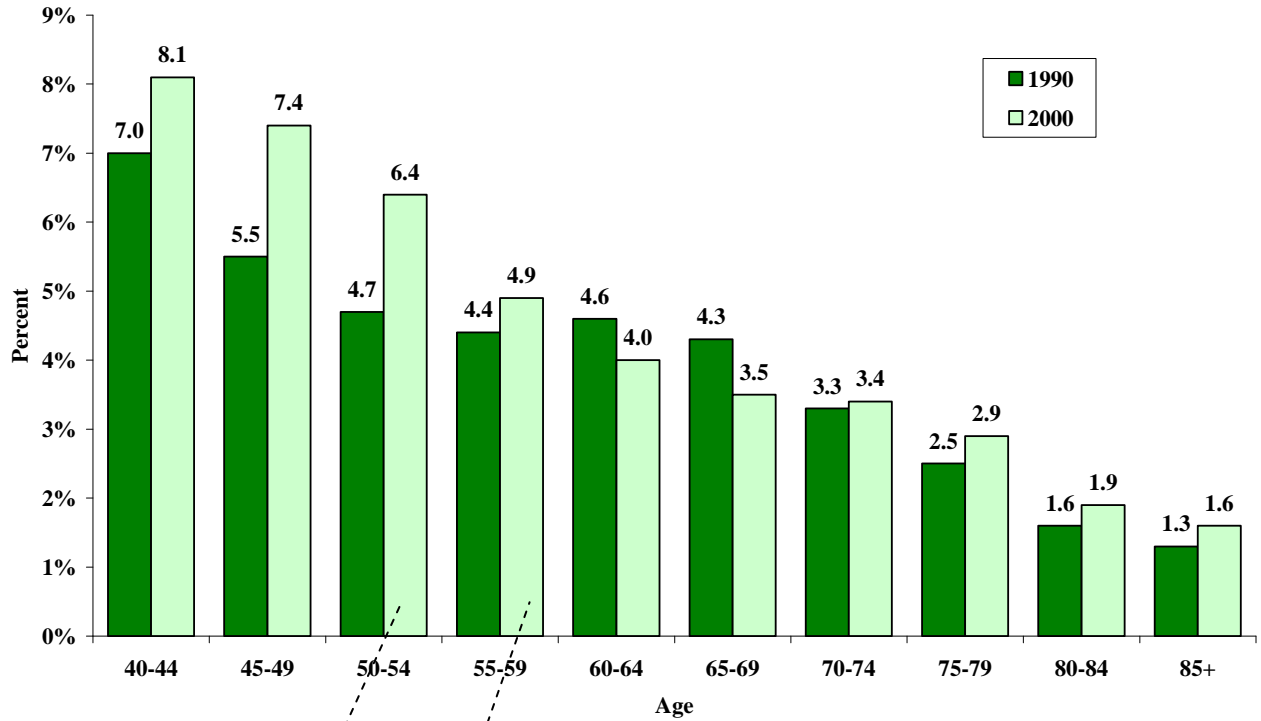**From list above (including Medication Administration).
For explanations of "a" through "g", please see table endnotes, page 62.
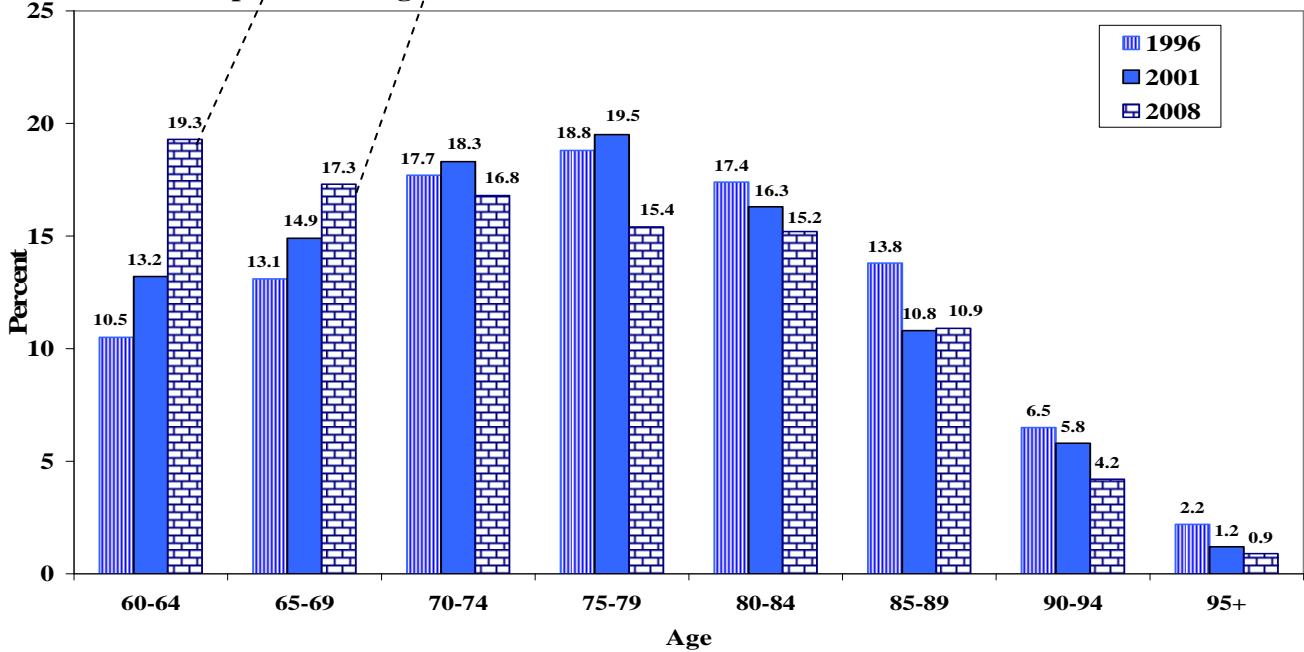*Source:* PASSPORT Information Management System (PIMS).

Figure 4

Ohio's Population Distribution by Age Group (40-85+), 1990 & 2000

Legend: ■ 1990 □ 2000

Age	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
1990	7.0	5.5	4.7	4.4	4.6	4.3	3.3	2.5	1.6	1.3
2000	8.1	7.4	6.4	4.9	4.0	3.5	3.4	2.9	1.9	1.6

Comparison of Age Distribution of New PASSPORT Enrollees: 1996-2008

Legend: ▥ 1996 ■ 2001 ▦ 2008

Age	60-64	65-69	70-74	75-79	80-84	85-89	90-94	95+
1996	10.5	13.1	17.7	18.8	17.4	13.8	6.5	2.2
2001	13.2	14.9	18.3	19.5	16.3	10.8	5.8	1.2
2008	19.3	17.3	16.8	15.4	15.2	10.9	4.2	0.9

impairments or need for supervision, which could shed light on the differences in the characteristics of the PASSPORT enrollees at different time periods, was not measured in the same manner, and thus is not comparable. Interpretation of changes must be handled cautiously, since in some instances changes in measurement or procedures that have occurred over this 13-year time period could account for differences. However, when combined with the drop in age, it appears that there are cohort changes in the program.

PASSPORT 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 (42%); or moves to a nursing home, hospice, or long-term hospitalization (40%) (see Table 19). Circumstances do change, such that in some instances participants are no longer financially (4%) or functionally eligible (2%), withdraw from the program (5%) or move out of state (5%), typically to join family members. An important policy question involves the high proportion of those leaving PASSPORT for nursing homes. A recent study examining the common characteristics of the PASSPORT consumers who disenrolled and entered nursing homes found that individuals over age 83, and those between ages 71 and 83 with dementia or Parkinson's disease, were most likely to leave the program (Noe, Nelson, Mehdizadeh, & Bailer, forthcoming). Could a more expansive array of services with higher expenditures affect these rates, or is the program operating exactly as it should? A more in-depth examination of individuals disenrolling is recommended.

Table 19
Reasons Consumers Were Disenrolled
from PASSPORT: 2006, 2008

Reasons	2006 (Percentages)[a]	2008 (Percentages)[a]
Died	46.3	41.7
Admitted to Nursing Facility for 30+ Days	35.8	38.3
Admitted to Hospice Care	0.5	0.2
Admitted to Hospital for 30+ Days	1.2	1.1
Did Not Meet Financial Eligibility	5.5	3.7
Could Not Agree on a Plan of Care	3.2	1.2
Did Not Meet Level of Care	1.4	1.7
No Longer Resides in Ohio	4.1	5.0
Other	2.0	2.3
Voluntarily Withdrew from Program	--	4.6
Total Consumers Disenrolled	4017	2238

Source: PASSPORT Information Management System (PIMS).

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 (see

Tables 20 and 21). All of the programs discussed were profiled earlier in the report. 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 an age 21 cut-off. Finally, the Ohio Home Care Waiver is designed for

Table 20
Demographic Characteristics of Medicaid Waiver Consumers,
Medicaid Nursing Home Residents, and PACE Program Participants, 2008

	PASSPORT[1]	Choices[2]	Assisted Living Waiver[3]	PACE[4]	Ohio Home Care[5]	Aging Carve-Out[6]	Medicaid Nursing Home[7]
Age (Percent)							
<60	--	--	7.5	8.9	91.8	--	14.7
60-69	26.3	26.5	11.7	35.1	6.9	84.5	12.5
70-74	18.1	18.1	8.3	15.3	0.6	6.5	8.3
75-79	17.6	17.0	12.0	12.4	0.4	4.0	11.8
80-84	17.4	18.4	17.6	13.8	0.2	2.4	17.1
85-90	12.8	12.2	21.7	8.6	0.1	1.7	18.1
91-94	5.7	3.9	13.5	4.2	--	0.8	12.0
95+	2.1	3.9	7.7	1.7	--	0.1	5.5
Average Age	76.5	76.5	79.8	72.6	NA	NA	77.1
Gender (Percent)							
Female	78.2	81.6	79.2	78.5	60.3	72.9	74
Race (Percent)							
White	71.3	81.1	89.0	32.8	73.9	64.4	84.6
Black	25.1	15.2	9.2	66.2	25.5	32.9	14.3
Other	3.6	3.7	1.9	1.0	0.6	2.7	1.1
Number of Consumers/Residents	26,165	345	978	738	6,697	1,576	46,077

NA = Not available

Source: [1]PASSPORT Information Management System (PIMS)

[2] PASSPORT Information Management System (PIMS).

[3]Applebaum, R., et al. (2009). *An evaluation of the Assisted Living Medicaid Waiver Program.* Oxford, OH: Scripps Gerontology Center, Miami University. Data as of November 1, 2008.

[4]Ohio has two PACE sites. TriHealth SeniorLink in the Cincinnati area, and Concordia Care in the Cleveland area. Data is based on the initial and/or annual level of care assessments of the participants.

[5]Unpublished data for Calendar year 2007, Ohio Department of Job & Family Services, Ohio Health Plans, Bureau of Home and Community Services, July 2, 2008. Only about 8% of consumers in this program were age 60 or older.

[6]Unpublished data for Calendar year 2007, Ohio Department of Job & Family Services, Ohio Health Plans, Bureau of Home and Community Services, July 2, 2008.

[7]Quarterly nursing facility, MDS, June, 2008.

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Table 21
Functional Characteristics of Medicaid Waiver Consumers,
Medicaid Nursing Home Residents, and PACE Program Participants, 2008

	PASSPORT[1]	Choices[2]	Assisted Living Waiver[3]	PACE[4]	Ohio Home Care[5]	Aging Carve-Out[6]	Medicaid Nursing Home[7]
Percentage with Impairment/Needing Hands-On Assistance in Activities of Daily Living (ADL)[c] (Percent)							
Bathing	96.3	95.5	91.8	68.4	93.6	98.4	84.1
Dressing	60.4	81.0	47.0	62.3	87.1	94.3	86.8
Mobility[d]	81.6	84.2	72.7	9.7	81.8	77.4	80.2
Toileting	20.1	36.6	23.3	24.1	50.7	46.6	82.4
Eating	5.5	9.5	4.2	4.4	31.4	21.6	35.0
Grooming	32.0	59.5	22.8	14.8	34.9	33.0	86.3
Number of ADL Impairments[*]							
0	0.8	0.0	1.0	1.7	1.1	0.4	5.8
1	3.5	2.1	13.9	23.8	5.2	1.7	5.2
2	35.5	15.8	37.1	25.6	15.8	17.4	3.8
3	33.8	29.8	26.8	26.4	25.5	31.6	4.6
4 or more	26.4	52.3	21.3	22.3	52.4	48.9	80.6
Average Number of ADL Impairments[*]	3.0	3.7	2.6	2.6	3.8	3.7	4.5
Supervision Needed							
24-Hour	8.8	17.6	10.8	20.5	NA	NA	NA
Partial	11.0	17.3	27.0	NA	NA	NA	NA
Cognitive Impairment[i]	NA	NA	NA	NA	17.2	13.7	64.9
Daily Medicaid Cost[8] (Dollars)	38	51	58	91	88	85	136
Number of Consumers/Residents	26,165	345	978	738	6,697	1,576	49,874

NA = Not available

Source: [1]PASSPORT Information Management System (PIMS).
[2] PASSPORT Information Management System (PIMS).
[3]Applebaum, R., et al. (2009). *An evaluation of the Assisted Living Medicaid Waiver Program.* Oxford, OH: Scripps Gerontology Center, Miami University. Data as of November 1, 2008.
[4]Ohio has two PACE sites. TriHealth SeniorLink in the Cincinnati area, and Concordia Care in the Cleveland area. Data is based on the initial and/or annual level of care assessments of the participants.
[5]Unpublished data for Calendar year 2007, Ohio Department of Job & Family Services, Ohio Health Plans, Bureau of Home and Community Services, July 2, 2008. Only about 8% of consumers in this program were age 60 or older.
[6]Unpublished data for Calendar year 2007, Ohio Department of Job & Family Services, Ohio Health Plans, Bureau of Home and Community Services, July 2, 2008.
[7]Quarterly nursing facility, MDS, June, 2008.
[8]The nursing home daily Medicaid reimbursement is based on calendar year 2006 data, converted to 2007 fiscal year data, while all other costs are for fiscal year 2007.

individuals under age 60, although some participants have continued in the program beyond age 60. Medicaid funded nursing homes do not have age restrictions.

There are some noteworthy age differences across programs. Assisted living (21.2%) and nursing homes (17.5%) serve the highest proportions of the oldest old, those over age 90. PASSPORT (8%), Choices (8%), and PACE (6%) serve a smaller proportion of individuals in their 90s. PACE, with an eligibility age of 55, has the highest proportion of younger aged participants. Forty-four percent of PACE participants are below age 69, compared to about just over one-quarter for nursing homes, PASSPORT and Choices, and less than 20% for Assisted Living. All of the programs serve a majority of females, generally more than three-fourths, except for the Ohio Home Care Program, which serves 40% men. The open age eligibility is certainly an explanatory factor for this difference. The racial profile of these programs also differs. The two residential settings, assisted living (11%) and nursing homes (15%), have the lowest proportion of non-whites. PASSPORT, Ohio Home Care, and Transition Carve-Out have between one-quarter and one-third non-white participants. Two-thirds of PACE participants are non-white.

Levels of impairment also vary by program. Medicaid nursing home residents record the highest levels of disability, averaging between four and five ADL limitations. Choices, Ohio Home Care, and Aging Transitions Carve-Out waiver participants average almost four ADL impairments, PASSPORT three ADL limitations, and PACE and assisted living waiver between two and three. Eighty-five percent of nursing home residents have three or more ADL impairments, as do 80% of participants in Choices, Aging Transitions Carve-Out and Ohio Home Care. Sixty percent of PASSPORT participants have three or more ADL limitations, as do

just under half of PACE and Assisted Living waiver participants. 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 with cognitive impairment. 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. Again, comparisons should be made in the context of each program. For example, the Medicaid daily cost for PACE ($91) is the negotiated capitated rate that includes all of the acute and long-term services that are available under the Medicaid program. It is supplemented by a capitated Medicare rate for those eligible. Participants average daily long-term care Medicaid costs range from $38 in PASSPORT to $136 for nursing homes. Choices participants, who report higher levels of disability than PASSPORT, also have higher costs ($51 vs. $38). The Ohio Home Care ($88) and Aging Carve-Out ($85) waivers have higher costs than the PASSPORT and Choices waiver programs. The Ohio Home Care and Aging Carve-Out programs serve a more disabled population in comparison to PASSPORT, which could explain cost differences. Our limited comparison; however, does not provide enough data to explain precisely cost differences between across programs.

LONG-TERM CARE SYSTEM LEVEL CHANGES

This report has documented some important changes in how long-term care is structured and financed in Ohio. In this section we examine two system level questions: (1) Has Ohio made

progress in changing the balance between institutional and community-based long-term services and supports to respond to the growing number of individuals with severe disability? (2) Have changes in the system resulted in increased utilization and increased costs for the state?

System Balance

Evidence on overall system change is mixed. Over the past 15 years, Ohio has made progress in changing the setting of long-term care service delivery for its older population. As shown in Figure 5, in 1993, more than nine out of ten older Ohioans receiving Medicaid funded long-term care did so in the nursing home. That ratio has steadily changed over the past decade and a half and in 2007, the ratio was 62% of Medicaid long-term care recipients were served in nursing homes, and 38% received home-and community-based services. Because nursing home care is more expensive, this still means that in 2007, 80% of long-term care Medicaid expenditures went to nursing homes. Ohio's ranking in this category is now 33rd, with top ranked states such as New Mexico and Oregon spending 45% of funds on nursing homes and states such as Tennessee, Mississippi, North and South Dakota, and Utah spending more than 90% of their Medicaid funds on nursing homes. State efforts such as the expansion of PASSPORT, Home First (when a consumer residing in a nursing home who desires community placement can be enrolled in a Medicaid waiver program despite the existence of a waiting list), the Assisted Living Waiver Program, and Money Follows the Person have all contributed to these changing utilization patterns, but Ohio continues to serve a higher proportion of older individuals in nursing homes than a majority of other states.

Figure 5
Percent Distribution of Ohio's Medicaid Long-Term Care Utilization
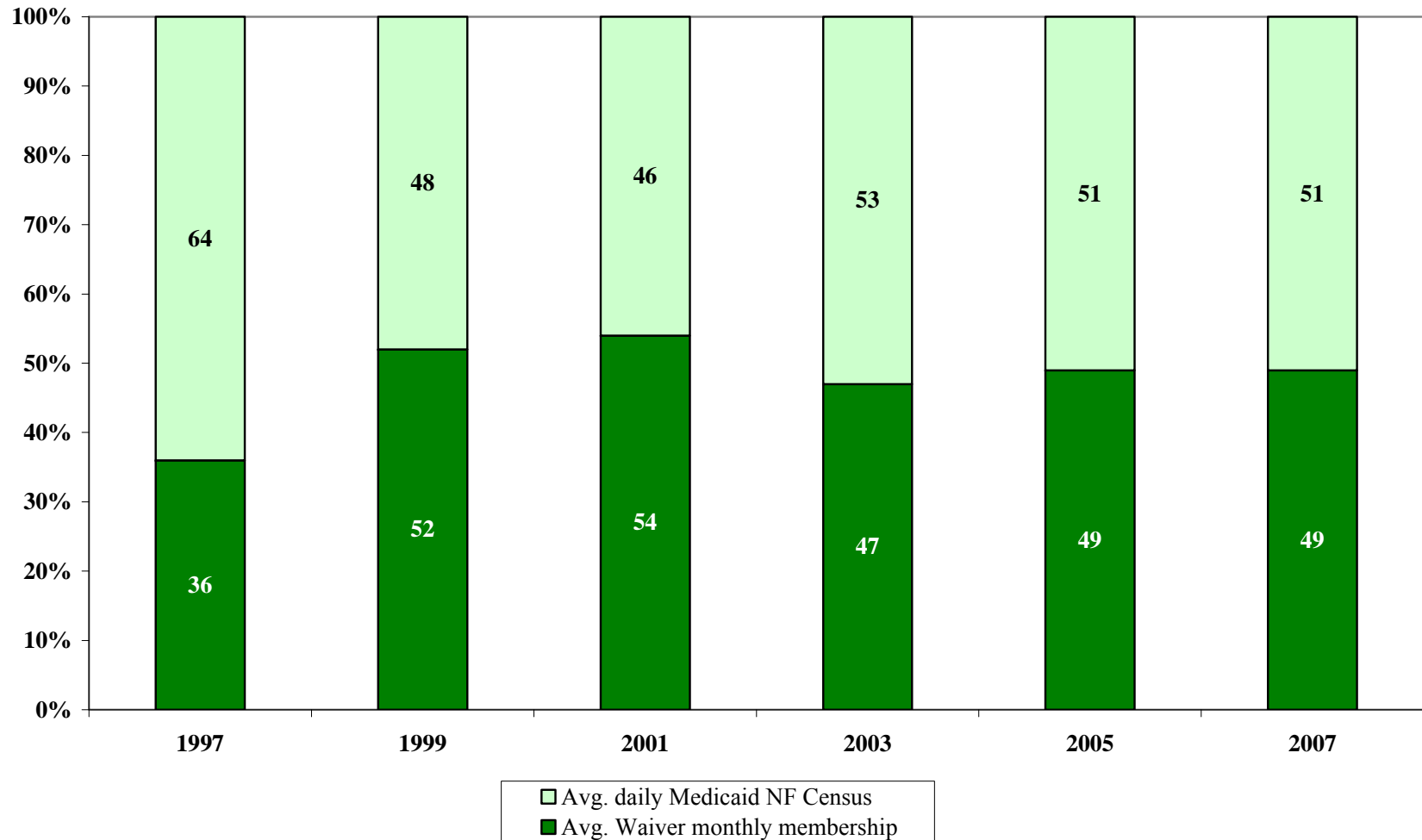**by People Age 60 or Older and by Setting: 1993 to 2007**
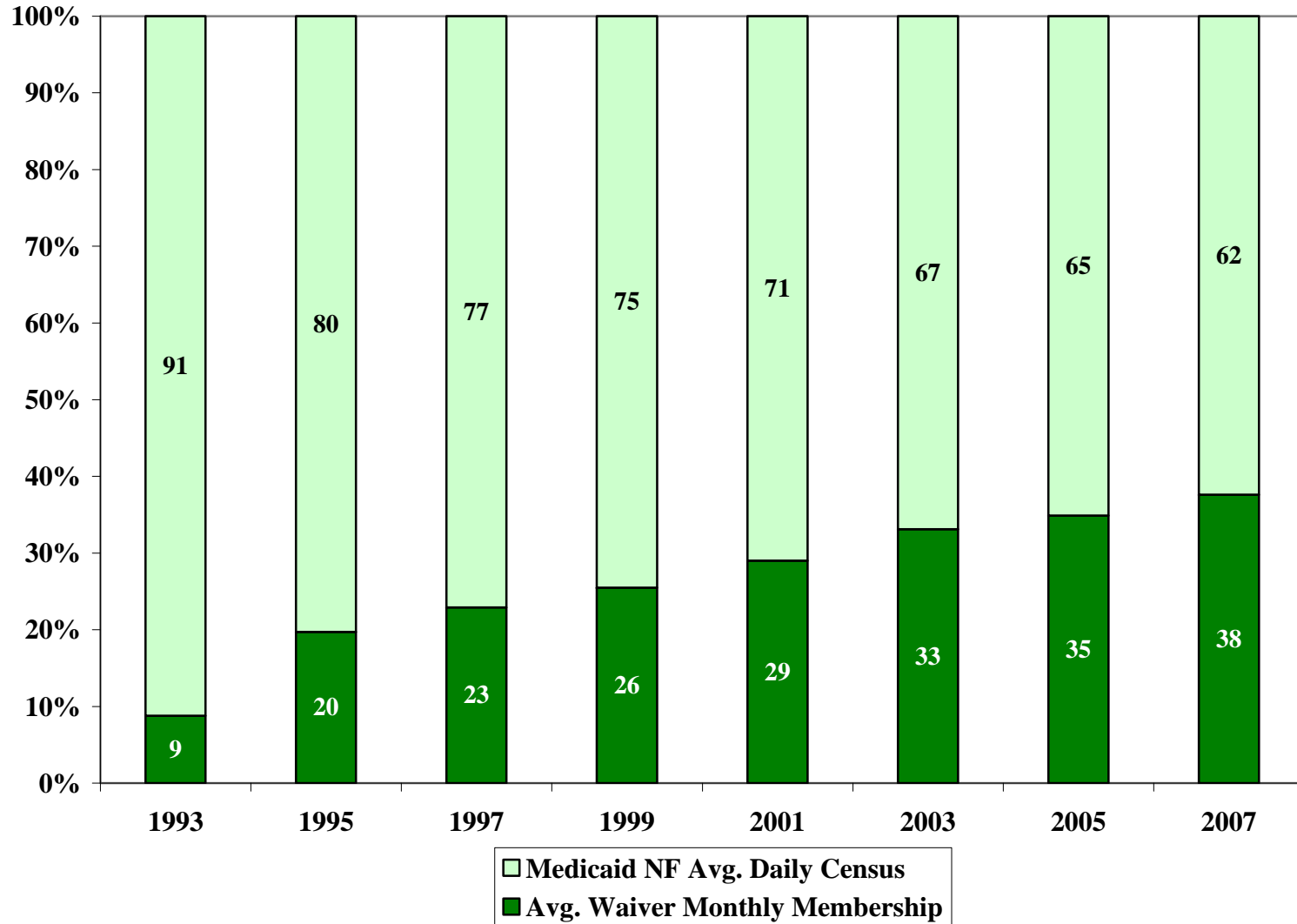
Source: Medicaid Decision Support System (DSS); MDS; PASSPORT Information Management Systems (PIMS).

Utilization ratios for the under age 60 disabled population in Ohio have also changed in the last ten years, but in a much less pronounced way. As shown in Figure 6, in 1997, 36% of individuals under age 60 receiving Medicaid long-term care services did so in the community setting. This ratio was more balanced than the spending patterns for older people. By 2005, the ratio had increases to 49% community-based services and 51% institutional care. In 2007, the ratio has remained the same. Despite the fact that the 45 to 60 age group has grown markedly in the past decade, the Ohio Home Care waiver has had only relatively small expansions and the program in 2007 had an estimated waiting list of almost 3000 individuals. (Recent policy changes have now eliminated this waiting list.)

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 2007 in Figure 7. In 1997, Medicaid had a utilization rate for the 60 and over population of 32 persons per 1000. At the time, nursing home use was 25 persons per 1000 and home care was seven persons per 1000. By 2007, we see that the Medicaid long-term care overall utilization rate is 34 persons per 1000. However, the nursing home use rate has dropped to 21 in 1000 persons 60 and over, and the home care rate has increased to 13 in 1000.

Figure 6
Percent Distribution of Ohio's Medicaid Long-Term Care Utilization
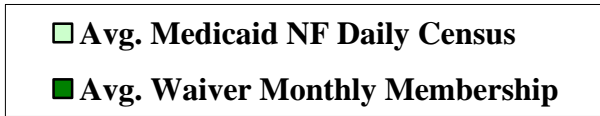**for People Under Age 60 by Setting: 1997 to 2007**

Source: Medicaid Decision Support System (DSS); MDS; U.S. Census Bureau.

Figure 7
Number of People Age 60+* Residing in a Nursing Facility
or Enrolled in a Waiver Program, 2007
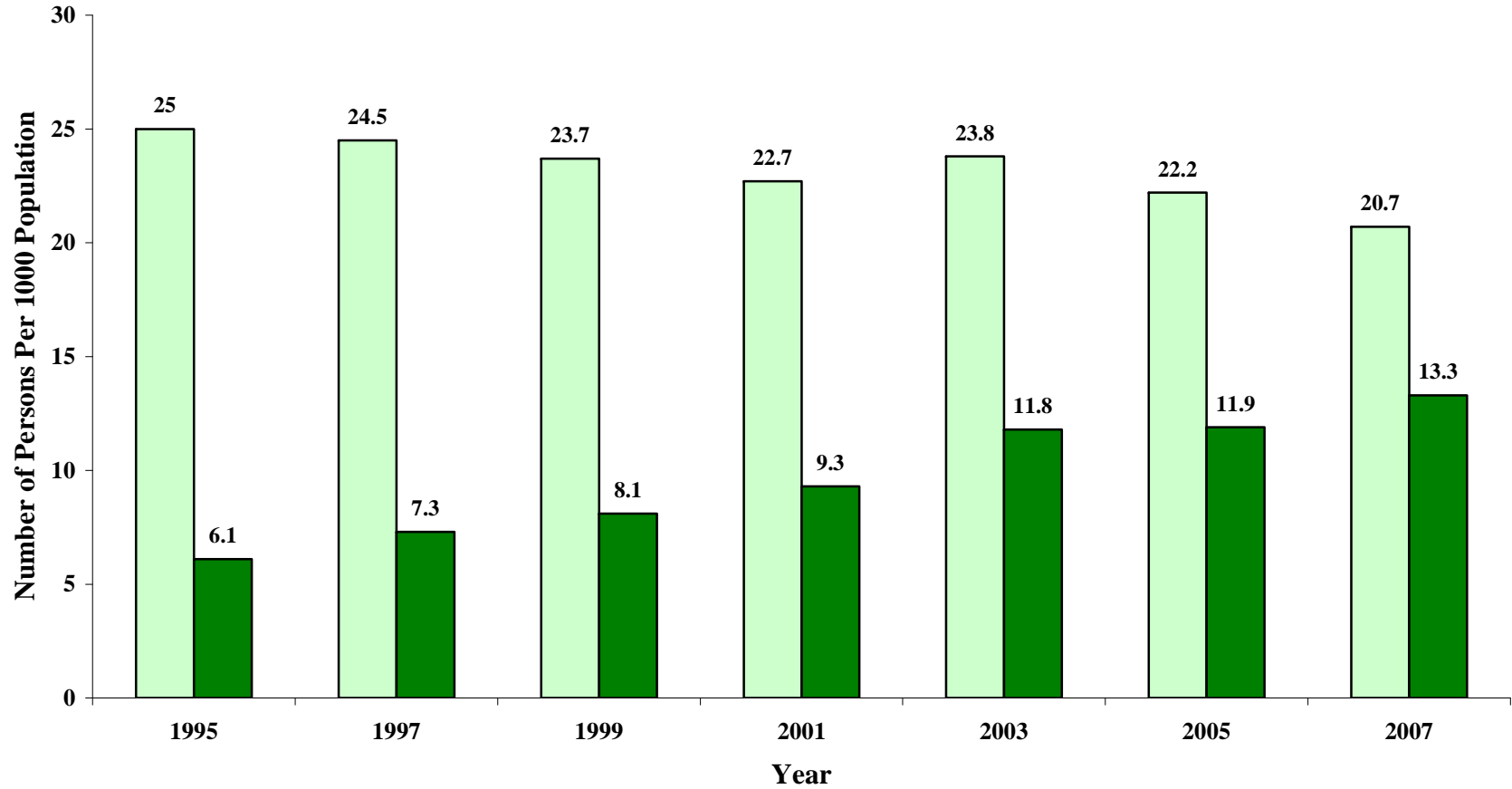
*The number of people are per 1000 persons
over age 60 in the population.

☐ Avg. Medicaid NF Daily Census

■ Avg. Waiver Monthly Membership

Source: Medicaid Decision Support System (DSS); MDS; PASSPORT Information Management Systems (PIMS); U.S. Census Bureau.

Over this 15 year (1993 - 2007) time period, there has been a major expansion of PASSPORT and other waivers, but these data indicate that the overall long-term care utilization rate has remained relatively constant. The growth of the older population – the over-85 group has increased by more than 74,000 individuals over this time period – means that more people are receiving long-term care today than ten years ago, but the Medicaid utilization rates per 1000 older population are relatively constant.

Costs

The final question in our analysis asks: How have changes in state Medicaid expenditure patterns affected overall utilization and total costs? To address this question, we present two use and cost scenarios. In the first scenario, we estimate what PASSPORT and nursing home use would have been if the programs grew only based on population growth rates (see Figure 8). In this model we assume that PASSPORT, which served 11,944 older people in 1995 (a rate of six persons per 1000), would have grown to 12,873 by 2007. Under this scenario we estimate that by 2007 Ohio's nursing home population over age 60 would be more than 52,356. These are based on the use rates in 1995 and are our best projections, but they are estimates, nonetheless. Under such a scenario Ohio would be serving 65,229 individuals over age 60 in its Medicaid program. Medicaid costs would have been $2.6 billion for nursing homes and $179 million for PASSPORT, for a total of $2.78 billion. The second model is based on the actual numbers from 2007, which include 43,370 older individuals in nursing homes supported by Medicaid and almost 28,000 aging waiver participants, for a total of 71,334. Actual costs were $2.15 billion for nursing homes and $441 million for waivers for a total of $2.59 billion. This model suggests that

Figure 8
Comparison of the Projected Nursing Home and Waivers Utilization* by Date
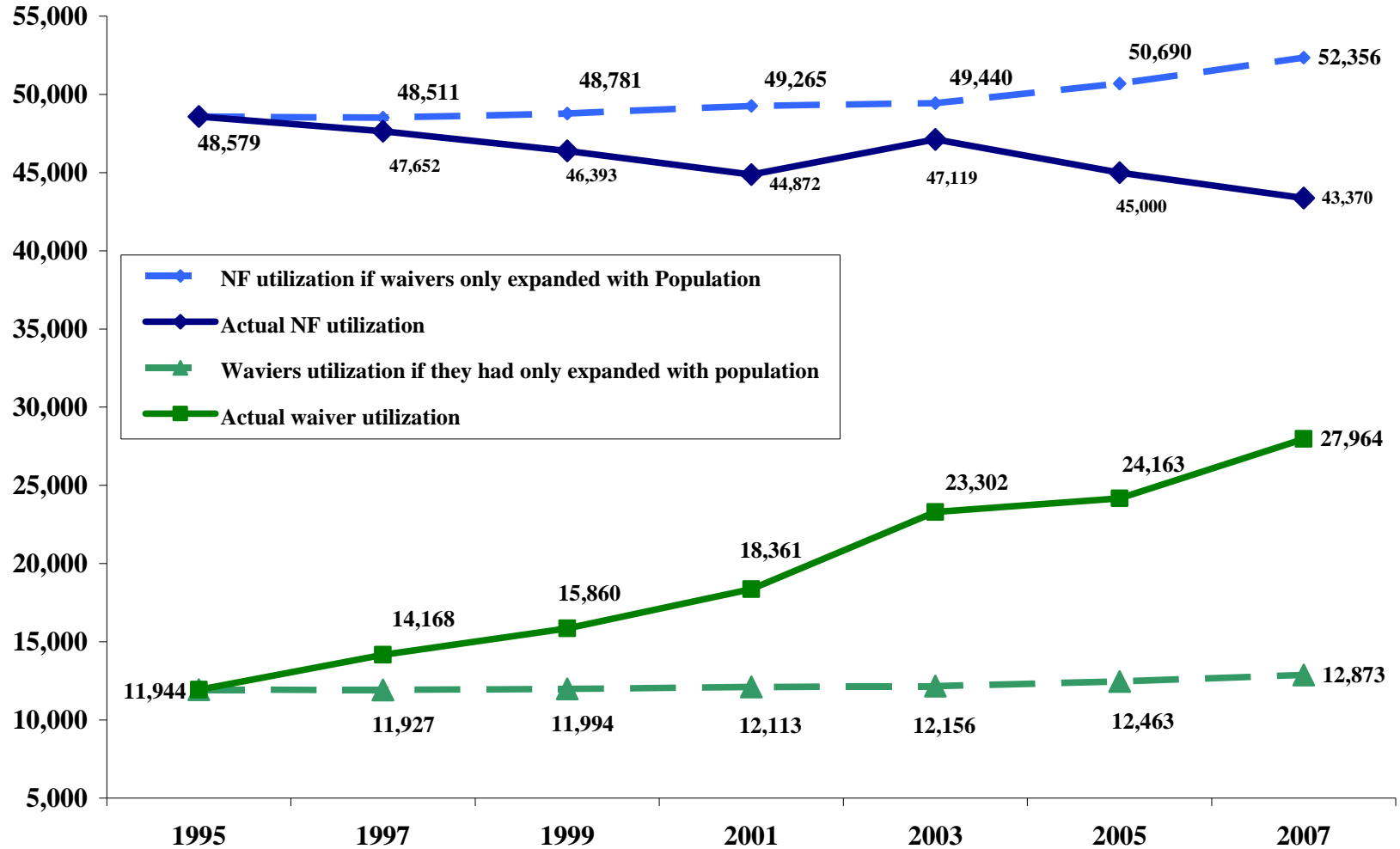
* When Medicaid waivers for the 60+ population and/or nursing home utilization are expanded in proportion to projected growth in the older Population.

while Ohio is now serving about 6100 more individuals today, its 2007 costs are about $190 million lower under the current system of long-term services and supports. As Ohio continues to plan for growth in the population that will need long-term services and supports, further review of service allocation strategies will be critical.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

DEMOGRAPHICS AND COSTS

- Ohio's older population (2 million strong) is the 6th highest in the nation – one in five older Ohioans have a moderate or severe disability requiring long-term care.

- In 2007, 207,000 older Ohioans had severe disability and that number will increase by 20% by 2020.

- In 2007, 309,000 Ohioans of all ages had severe disability and that group will grow to 348,000 by 2020 (13% increase). Forty percent of these individuals rely on the Medicaid program.

- In 2007, Ohio spent $4.8 billion on Medicaid long-term care including services for older people and Ohioans with intellectual or physical disabilities: $3.4 billion on institutional care (72%) and $1.4 billion on community-based services (28%) (43rd highest institutional/community ratio, but changed from 47th in 2004).

- Ohio's Medicaid program spent more than $13 billion in 2007; about 36% of those funds went to long-term care. State Medicaid expenditures account for 24% of Ohio's overall budget.

LONG-TERM CARE PROGRAMS

- Four in ten individuals with severe disability receive assistance only from family, or privately purchased care.

- One-quarter of Ohioans with severe disability live in nursing homes.

- Seventeen percent of Ohioans 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 of all ages, Assisted Living for individuals age 21 and older, and several waivers for individuals with intellectual disabilities.

- Ohio's PASSPORT Medicaid waiver program, which provides in-home services to individuals age 60 and over with severe disability, has grown from 15,000 in 1995 to 28,000 in 2007. Only two states have larger waivers for older adults: Washington and Texas.

- Ohio has two sites that are part of the Program for All-Inclusive Care for the Elderly (PACE) that integrates acute and long-term care through a managed care model for 725 Ohioans age 55 and above.

- Ohio has 973 nursing homes with 96,000 licensed beds. Sixty-three percent of nursing home revenue comes from the Medicaid program compared to fifty-nine percent nationally.

- Between 1995 and 2007, Ohio tripled the number of residential care facility beds to 38,000. Ohio has 556 residential care facilities and we classify 367 of these as assisted living residences. As of April 2009, 182 of these facilities were participating in the Assisted Living Waiver Program.

RESEARCH FINDINGS ON LONG-TERM CARE 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 2007 that number had increased to 201,000. The number of short-term Medicare admissions has been a major reason for this increase from 30,000 in 1992 to 126,500 in 2007.

- 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 to 11% in 2008, from 4% in 1994. Almost 15% of Medicaid nursing home residents are under age 60.

- Nursing home occupancy rates increased by 2.9% in 2007. Private pay residents increased by 5%, Medicare by 10%, and the proportion of Medicaid residents was unchanged.

- Over the past 10 years the Medicaid census in nursing homes has dropped from 54,242 in 1997 to 51,536 (5% decrease). The census for the over-60 Medicaid population has dropped by 9%, and has increased by 17% for those under age 60.

- In 2007, Medicaid nursing home reimbursements averaged $164 per day (a drop of $10 a day from 2005), private pay rates were $198 per day (up by $15 from 2005) and Medicare was $351 per day.

- In 2007, residential care facility unit occupancy rates were 77%, unchanged from 2005. The Assisted Living Waiver Program has grown to more than 1200 participants.

- Levels of disability vary among Ohio's Medicaid long-term care program participants. Nursing home residents average between four and five activity limitations, Ohio Home Care, Aging Transitions Carve-Out, and Choices waiver participants average four activity limitations, PASSPORT enrollees average three limitations, and PACE and the Assisted Living waiver participants average between two and three activity limitations.

- Medicaid costs, after participant contributions, also vary by program, ranging from $38 per day for PASSPORT to $136 for nursing homes. PACE receives a $91 daily capitated rate that covers both acute and long-term care costs under Medicaid.

- Ohio has begun to change the long-term care delivery system for older people with severe disability. In 1993, nine of ten older people supported by Medicaid were in nursing homes; by 2007, that proportion had dropped to 62%. The proportions have also changed for the under 60 population, dropping from 64% using nursing homes in 1997 to 51% in 2007.

- Although the state has expanded the number of older people receiving in-home services over the last ten years, the Medicaid utilization rate has remained relatively constant. In 1997, Medicaid had a utilization rate of 32 per 1000 persons age 60 and over and in 2007, the rate was 34 persons per 1000.

- Estimates for the 60 and over age group indicate that had Ohio not increased its waiver expenditures over the last 12 years, but simply allowed both nursing homes and home- and community-based participation to increase at the 1995 rates, 6100 fewer people would have been served. Ohio would be spending an additional $190 million on Medicaid long-term care today but would be serving 6100 fewer people.

RECOMMENDATIONS

As an aging state, Ohio has begun to respond to today's concerns, but the challenges of tomorrow generate the most important questions. Between now and 2040, when the baby boomers will be aging in full force, Ohio is going to more than double the population needing long-term services and supports. Growing the long-term care 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. Although the perfect solution does not exist, there is a general consensus among long-term care experts about the steps necessary for states to meet these unprecedented challenges. Creating a system based on the principles of consumer choice that ensure individuals can select their long-term services and support settings is the hallmark of the expert advice. Translating this principle into action requires states to ensure that there is choice in the system and thus efforts such as Ohio's Unified Budget Workgroup are critical to accomplishing these goals. The recommendations below represent ideas for Ohio as it continues to work toward long-term system reform.

(1)   We 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 begun to change how it delivers long-term services and supports to individuals with severe disability. Over the last ten years, despite the increase in the number of those age 85 and above by more than 74,000, Ohio has seen a 9% reduction in Medicaid nursing home use by individuals age 60 and older. At the same time we have experienced a 17% increase in the under 60 population using Medicaid nursing homes.

The increase in nursing home use by those under age 60 appears to be the result of several factors. First, the under 60 population has grown dramatically, as the bulk of the baby boomers are now between age 50 and 60. Second, the Ohio Home Care Waiver had a ceiling of 7600 in 2007 and had a waiting list of 3000. (Recent policy changes have resulted in an elimination of this waiting list.) Third, 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 18% of the under 60 population did not have an ADL impairment and 25% had zero or one ADL limitations. In a previous study, we had found 4.4% of Medicaid nursing home residents not meeting level of care and a majority 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.

(2)   Because of the high volume of nursing home admissions (more than 200,000); 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 less resources allocated to individuals who will clearly be discharged in less than 20 days as a result of Medicare rules and coverage. The tremendous increase in nursing home admissions and discharges and the high number of individuals that spend a short time in nursing homes suggests that the system has changed. This means that Ohio needs to alter its pre-admission review and follow-up processes in response to these changes. For example, the current pre-admission 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 mechanisms. However, the volume of admissions is so high that the state 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. We believe that some of the inappropriate admissions occur in this manner. 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.

(3)   We recommend that Ohio continue to pursue housing options for delivering "assisted living" type services. Occupancy rates in residential care facilities that meet the assisted living waiver criteria are 77%, indicating that there is excess capacity. On the other hand, Ohio's Assisted Living Waiver Program has 600 individuals waiting to enroll. Although many of those waiting do not live in counties that have assisted living facilities, that is not always the case. Continued efforts to attract assisted living facilities will be important as the state continues to build long-term capacity. It is also clear that a large proportion of Ohio counties do not have a supply of assisted living facilities. Nationally, states have attempted to incorporate assisted living into other types of available housing for older people and individuals with disability in an effort to expand this option.

(4)   We recommend that Ohio have the same measures, collected in a comparable way, across programs and settings. Level of disability and costs do vary considerably across long-term care programs and 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 impossible to understand programmatic differences in costs and utilization. Efforts to collect data in a comparable fashion would also assist Ohio in its efforts to develop a Long-Term Care Profile Tool, which was a recommendation of the Unified Long-Term Care Budget Workgroup.

(5)   We recommend that Ohio expand its options for self-directed care for adults with disability. Results from the National Cash and Counseling Demonstration and Evaluation found that individuals participating in the self-direction program were safer, had higher satisfaction,

and were less likely to use nursing home care (Brown and Dale, 2007). At this point self-direction for older people is available in about one-third of the state through the Choices program. This program has proven quite popular in rural areas, where home care provider shortages have been a challenge. The Ohio Home Care Program allows participants to hire individual workers, but the program's capacity has been limited.

Ohio has a window of opportunity to address these challenges before the demographic changes as a result of the baby boomers are upon us. Through its efforts on the Unified Budget and other reforms, Ohio has begun to respond; however, the system enhancements required to respond to the demographic and financial challenges suggest that the current reforms represent only the first steps of a longer journey. Ohio has little choice but to continue to address these issues.

Table Endnotes

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

[b] The current living arrangement reflects living arrangement at time of assessment.

[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] Because of a rule change in 1994, the ability to perform grooming activity is measured differently, and it is not included in the comparison.

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

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

[h] Between June 2001 and September 2004 the Ohio Department of Aging gradually changed to a new PASSPORT information management system designed to keep track of PASSPORT consumers' characteristics and service utilization. Not all the information presented in this report was electronically available prior to this change, therefore some analysis is limited to the PASSPORT sites that changed to the new system prior to July, 2003.

[i] "Moderately" or "severely" impaired in cognitive skills.

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