

**Long-Term Care in Ohio:
A Longitudinal Perspective**

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Background

A well known principle of today's society is that change has become an expected part of life. Whether it is computers and the internet, health care technology, or social patterns surrounding retirement and work, our society is experiencing dramatic shifts in how we live and how we age. One area that has experienced a series of unanticipated changes has been long-term care. Many of the expected trends in long-term care, which we linked to an increased aging population, have been altered in unexpected ways. This report, based on an eight year longitudinal study funded by the Ohio Department of Aging and the Ohio Legislature, describes the changes and challenges associated with delivering long-term care in Ohio. Our goal is to examine current practices and trends and to discuss the implications of these for Ohio and its growing population of older people.

As a State with one of the largest aging populations in the U.S., it is no surprise that Ohio is heavily involved in the provision of long-term care services. With about one and one-half million individuals over age 65, Ohio ranks seventh nationally in the size of its older population. Such growth is certainly a positive accomplishment for a state, however, one negative side effect is an increase in the number of older people living with chronic conditions.¹

Ohio's Medicaid program alone spent over \$2.5 billion on long-term care services for aged and disabled people in 2000. Individual and family contributions are equally important and public and private long-term care expenditures together are expected to be over \$6.5 billion in

¹ Some recent research findings have indicated that rates of disability may be declining for older people (Manton, et al., 1997). Other researchers have argued that reductions are small and will not be sustainable. We assume a constant rate of growth in the rates of disability experienced by the older population.

2001 (Burwell, 2000; AARP, 2000). Nursing home expenditures continue to represent the majority of state spending in long-term care and have increased dramatically over the past two decades, rising from \$651 million in 1985, to \$1.8 billion in 1995, to \$2.2 billion in 2000. Ohio, more so than many other states, has traditionally relied on nursing homes as a care option. For example, in 2000 Ohio had about 64 beds per 1,000 persons over age 65, compared to 52 per 1,000 for the nation as a whole. During the 1980's Ohio's bed supply grew rapidly, with the number of beds increasing by 47%. Only ten other states had higher growth rates during this time period (Kane, Kane, and Ladd, 1998).

The increases in nursing home supply and costs combined with the rising older population in the state resulted in a series of legislative efforts designed to alter the delivery and financing of long-term care in Ohio. Through a continuous expansion of Ohio's participation in the Medicaid Home and Community-Based Waiver programs, the state has begun to shift some public long-term care funding from an institutional to in-home care setting. Between 1995 and 2000, Ohio more than doubled its waiver expenditures, increasing from \$195 million to over \$433 million. Ohio's Aged and Disabled Waiver, PASSPORT, increased from \$103 million in 1995 to \$202 million in 2000 and served about 24,000 disabled over that one year time period. Ohio has also expanded in-home services through a somewhat unique provision in state statute that allows counties to earmark property taxes to special services for older people. Almost half of Ohio's counties rely on this approach to supplement aging services. In some areas, such as Hamilton and Franklin counties, these levies contribute a substantial amount of funds to home care (about \$15 million in each county annually).

Accompanying the home care expansion have been state efforts to control public expenditures in nursing homes. In 1993, the State enacted a moratorium that was to prevent the construction of a new nursing home bed if it would increase the total bed supply in the state. The State also passed a requirement that beginning in 1993 all applicants to Ohio nursing homes receive a pre-admission review before entry, and Medicaid recipients who do not meet nursing home eligibility criteria are not admitted. To help control expenditures the State also altered its method of nursing home reimbursement, shifting to a prospective payment system. In combination these efforts were designed to control Medicaid expenditures and improve the long-term care system in Ohio.

How have these and other changes occurring in the long-term care arena affected the way long-term care is delivered and financed in Ohio? Has, for example, the expansion of home and community-based services affected nursing home utilization? This report, based on longitudinal data collected in Ohio between 1992 and 1999, will paint a portrait of the state's long-term care system. Our goal is to identify the long-term care policy issues associated with the almost doubling of the state's aged population in the years to come and to make recommendations accordingly (Mehdizadeh, Kunkel, and Ritchey, 2001).

Long-Term Care Services in Ohio

Ohio has an estimated 450,000 older people who experience a chronic disability, with about 160,000 of these individuals classified as severely disabled and meeting the criteria for nursing home eligibility (Mehdizadeh, Kunkel, Applebaum, 1996).² Although the nursing home

² We recognize that long-term care is a critical problem across the life span. This report focuses on services directed to individuals age 60 and above, as the group that constitutes the largest proportion of long-term care expenditures.

has been traditionally thought of as the place to receive long-term care, there are a number of settings in which such care is now provided. Older people with chronic disability receive care in their own home or the homes of friends or relatives, in congregate care housing, in continuing care retirement communities, in assisted living or other residential care facilities, in adult care homes, and in nursing homes. It should be noted that studies both nationally and in Ohio indicate that the majority of long-term care continues to be provided by family members, friends and neighbors (Stone, 2000; Mehdizadeh & Atchley, 1992).

An overview of the network of agencies providing long-term care in Ohio is presented below and includes: home health agencies, area agencies on aging, and residential care providers—nursing homes, assisted living, and other residential care facilities. One of the trends in the last decade has been a blurring of the distinction between long-term and short-term care. For example, in a recent study of nursing home entrants in Ohio we found that after three months over half of those admitted had been discharged and after six months almost two-thirds had been discharged (Mehdizadeh, Applebaum, Straker, 2000). On the other hand, home health, which was originally seen as an acute care service, is often a long-term intervention. For example, in 1988, 4% of Medicare home health users recorded more than 100 visits, while in 1996, 21% were in that category (Bishop, Kerwin, Wallack, 1999). Even the PASSPORT Administrative Agencies (PAAs), who primarily serve a population of older people with chronic disability, experience a turnover rate of enrollees of about 36% annually. Each of these settings now serves clients with both long and short term needs.

Table 1 provides a description of Medicare certified home health providers in Ohio for 1997 and 1999. Data from the Ohio Department of Health Annual Survey reported that in 1999

Table 1
Home Health Agencies in Ohio
1997/1999

Agency Type	Percent of Agencies	
	1997	1999
Proprietary Home Care	49.5	47.1
Hospital Based	23.4	27.0
SNF BASED	4.0	3.6
Private non-profit	11.2	10.5
Public/county	7.0	7.2
Visiting Nurse Association	4.9	4.6
Number of Agencies	475	333

Source: Certified Home Health Agencies Annual Data Registration Report-1997-1999, Ohio Department of Health.

there were 333 Medicare certified home health agencies. About half of these agencies are free-standing proprietary providers, about one-quarter are hospital based, about one in five are private not-for-profit or public entities and just under 4% are nursing home based. There were also an estimated 190 private home health agencies that were identified in a 1997 Scripps survey (Straker and Applebaum, 1999). However, because Ohio is one of the nine states that does not require home health agencies to be licensed, a current number is not available.

Comparing changes between 1997 and 1999 provides a good example of the effect of government changes on the home health industry. In 1998, as a result of large Medicare increases in home health and nursing home expenditures, major changes to the reimbursement system were instituted. As a result of the Balanced Budget Act of 1997, home health agencies experienced reductions in their Medicare reimbursement and a shift to a prospective payment system. The result was a major reduction in the number of home health providers in Ohio and nationally. The 475 certified home health agencies in 1997 had been reduced by 1999 by 30% to 333. Despite the

large drop in the number of agencies, there was very little change in the auspice of these providers.

A review of Medicare home health use also highlights the changes resulting from the Balanced Budget Act of 1997. In the year prior to the legislation, about 12% of Medicare recipients received home health services. In the year following enactment 7.3% of Medicare recipients received such services. For that same one year period the average number of visits in Ohio dropped from 50 to 38. Ohioans were less likely to use home health service under Medicare than the nation (7.3% vs. 8%)(AARP, 2000a, AARP, 2000b).

The Ohio Department of Aging contracts with 12 area agencies on aging, plus one not-for-profit agency to administer the PASSPORT home care program (See Table 2). These agencies perform a pre-admission review for all applicants to long-term care facilities and for in-home services under the Home and Community-Based Care waiver program. The PASSPORT administrative agencies use nurse/social work care managers to link an array of in-home services to the chronically disabled older people who met the economic and functional criteria for the program. The PASSPORT administrative agencies arrange, monitor, and fund these services through their case management and fiscal units, but all direct services are provided by an array of community agencies.

Table 2 shows the PASSPORT enrollment figures for the 13 PASSPORT administrative agencies. As we might expect, the Cleveland region with almost 21% of the state's older population, has the largest PASSPORT caseload (3,400 or 18.5% of enrollees). The Akron, Columbus, and Cincinnati regions all serve about 2,000 older people, a number commensurate with the size of the older population in their respective regions. The Rio Grande region, despite

Table 2
Distribution of Aged Population and PASSPORT Enrollees
by PASSPORT Administrative Agency
1999

PASSPORT Administrative Agency	Location	Number of PASSPORT Enrollees	Percent of PASSPORT Enrollees	Percent of Total 65+ Population
1	Cincinnati	1,844	10.1	12.3
2	Dayton	961	5.2	7.7
3	Lima	445	2.4	3.3
4	Toledo	1,400	7.6	8.2
5	Mansfield	970	5.3	4.8
6	Columbus	1,871	10.2	10.8
7	Rio Grande	2,036	11.1	3.8
8	Marietta	565	3.1	2.2
9	Cambridge	1,283	7.0	4.9
10A	Cleveland	3,372	18.5	20.6
10B	Akron	2,080	11.3	10.8
11	Youngstown	1,036	5.7	7.5
CSS	Sidney	467	2.5	2.9
Total	All Sites	18,330	100	100

Source: PASSPORT MIS system; Mehdizadeh et al. U.S. Census Bureau, Census 2000.

* PASSPORT is administered by twelve area agencies on aging and one non-profit agency (Catholic Social Services).

serving a less populated part of the state, has over 2,000 PASSPORT clients (11.1% of PASSPORT enrollees). As a rural area with 3.8% of the State's aged population, this site has been able to provide home- and community-based care to a higher proportion of its older population than the rest of the state.

In addition to the in-home service programs, Ohio has nursing homes and residential care facilities that primarily target their services to older adults (See Table 3). Based on data from the Ohio Department of Health and the Health Care Financing Administration, Ohio had 1,034 nursing facilities in operation in 1999, containing 95,701 beds. The state also licenses 27,443 residential care beds. Because of remodeling, closures, conversions, and the addition and removal of beds for business reasons the count of beds is subject to variation during the year.

Licensed nursing home beds are located in a range of facilities. Three-fourths of the beds (71,260) are located in 727 nursing homes. An additional one-fifth of the beds (20,485) are located in 218 facilities that combine nursing home and residential care. The remaining 4% of the beds are divided between 30 county homes and 59 hospital long-term care units.

Information about the characteristics of the industry is also included in Table 3. The typical nursing home in Ohio has between 90 and 100 beds. As expected hospital long-term care units are much smaller, averaging just over 30 beds. About three-quarters of the nursing facilities are proprietary in nature, although the majority of hospitals (88%) are not-for-profit. The average Medicaid cost was \$121 per day, except for the hospital units with a \$332 per day Medicaid rate. Private pay consumers paid about \$6 dollars per day more than Medicaid. Medicare rates averaged about \$220 per day, except for hospital units which were \$380. More than six of ten nursing home residents are supported by the Medicaid program.

Table 3
Long-Term Care Facilities in Ohio, 1999

	RCF	Comb NH/RCF	Nursing Homes	County Homes	Hosp. Based Long-Term Care Unit
Number of Facilities	220	218	727	30	59
Licensed Nursing Home Beds^a (Total 95,701)		20,485	71,260	2,075	1,881
Licensed RCF Beds^a (Total 27,443)	15,385	11,667	—	391	—
Mean Number of Beds					
Nursing Home	—	93	101	69	32
RCF	70	53	—	13	—
Location (percent)					
Urban	75.9	83.3	71.1	33.3	76.3
Rural	24.1	16.7	28.9	66.7	23.7
Ownership (percent)					
For Profit	75.4	59.6	76.6	0.0	1.6
Not for Profit	13.2	40.6	13.9	3.3	88.1
Government	0.0	0.0	1.8	96.7	10.2
Average Daily Charge (dollars)					
Medicaid	—	125	120	109	332
Medicare	—	218	220	187	380
NH Private Pay (self)	—	133	127	101	318
Nursing Home Resident Payment Source in 1999					
Medicaid	—	55.1	70.0	61.1	21.7
Medicare	—	7.3	6.7	2.9	58.1
Private (self and insurance)	—	35.0	21.9	27.9	17.6
Number of Residents in 1999					
Nursing Home (Total 79,194)	—	17,159	58,832	1,882	1,321
Res. Care (Total 11,448)	7,008	6,735	—	152	—

^a Number of beds available for service through the year.

Source: Annual Survey of Long-Term Care Facilities, Ohio Department of Aging and Scripps Gerontology Center; OSCAR data, 1999, HCFA.

The residential care facility licensure category includes rest homes and the newly developed assisted living facilities. Current licensing definitions do not distinguish between the two types of facilities. Ohio law does not define or recognize the term assisted living. By the end of 1999 Ohio had 438 residential care facilities containing over 27,000 beds. Half of the facilities and 56% of the beds are free-standing facilities, with the remainder linked to nursing homes. The number of beds has increased dramatically during the last four years rising from 10,711 in 1995 to 19,427 in 1997 to 27,443 in 1999 (a 156% increase). This reflects the major expansion of assisted living facilities that has occurred both nationally and in Ohio.

Tracking Nursing Home and Residential Care Use

To examine the changes in nursing home and residential care use in Ohio we have been involved in a longitudinal study in which we track admissions, discharges, and overall occupancy rates. Data for this component of the study come from the Annual Survey of Long-Term Care Facilities.

Nursing Home Admission and Discharge data are presented in Table 4 for the period 1992 to 1999. Although the supply of beds has remained relatively constant, with the 1999 bed count representing only a 5% increase from 1992, the rest of the indicators paint a picture of an industry experiencing considerable change. For example, in 1992 Ohio nursing homes recorded just under 71,000 admissions, but by 1999 the number had risen to almost 150,000 (111% increase). Discharge rates increased in a similar vein and as noted earlier the nursing home became a provider of short term care for many individuals.

During the first seven years of our study the increase in admissions was primarily fueled by increases in the number of Medicare admissions, which rose from just over 30,000 in 1992 to

Table 4
Ohio Nursing Facility Admissions, Discharges, and Occupancy Rates:
1992-1999

	1992	1993	1994	1995	1996	1997	1998	1999
Adjusted Nursing Facility Beds^a								
Total beds	91,531	93,204	94,471	96,579	97,129	99,302	97,274	95,701
Medicaid certified	80,211	82,207	84,893	82,143	85,289	88,679	90,337	93,077*
Medicare certified	37,389	36,140	38,318	34,280	33,577	34,157	40,779	47,534*
Number of Admissions								
Total	70,879	82,800	87,909	102,723	120,015	129,778	142,116	149,838
Medicaid resident	17,968	17,542	17,307	18,323	18,136	19,063	21,957	28,150
Medicare resident	30,359	41,733	49,038	60,572	77,107	80,006	83,789	78,856
Number of Discharges								
Total	68,195	79,977	84,980	100,309	115,934	126,385	139,543	148,253
Medicaid resident	23,568	25,466	25,219	26,275	27,018	27,450	30,465	36,562
Medicare resident	20,443	28,810	35,540	47,294	61,169	66,594	69,614	66,058
Occupancy Rate (Percent)^{b, c}								
Total	91.9	90.7	90.3	89.8	87.4	87.7	85.3	83.5
Medicaid resident	67.4	67.0	66.2	66.6	65.3	61.8	61.3	55.4
Medicare resident	9.9	12.4	13.6	17.3	20.4	20.9	16.9	12.8

^a Total beds include private, Medicaid and Medicare certified beds. Because over 41,000 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 in the last 5 years 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 Facilities with occupancy rate higher than 100% excluded.

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

*From OSCAR 1999.

almost 84,000 in 1998 (176% increase). These changes resulted in Medicare's share of nursing home revenues increasing from 2% to 11% in Ohio. During this same time-frame Medicaid admissions remained relatively constant. This dramatic increase in Medicare's support for nursing homes helped states control their Medicaid expenditures. However, from the federal perspective the rise in Medicare nursing home costs, reaching \$11 billion for the nation in 1998 (AARP, 2000a), was a major problem. The Balanced Budget Act of 1997 was designed to control the costs of nursing home care. By shifting to a prospective payment system for nursing homes and reducing the rate of reimbursement, the federal government was able to lower the number of providers and clients using Medicare to pay for their nursing home care. The impact of the Balanced Budget Act is demonstrated through an examination of the Medicare admissions data. The seven year (176%) increase in Medicare admissions was reversed in 1999, dropping from just under 84,000 to 79,000. Perhaps as a result of the Medicare slow down, in 1999 Medicaid recorded its largest increase in admissions of the eight years of our study. It seems likely that the increase in short-term Medicaid admissions is related to the Medicare cutbacks, and this shifting from federal to state admissions is likely to continue unless this policy change is altered.

Occupancy Rates are presented in Table 4. Between 1992 and 1999 there was a steady drop in nursing home occupancy rates statewide. In 1992, Ohio nursing homes had an occupancy rate of just under 92%, by 1999, occupancy rates had dropped to 83.5%. Medicaid rates mirrored the overall drop, going from 67.4% in 1992 to 55.4% in 1999³. As discussed earlier the Medicare

³ The reduction in Medicaid occupancy rates is in part due to an increase in the number of Medicaid certified beds.

rates increased rapidly from 1992 to 1997, doubling in size from just under 10%, to 20.9%.

Reflecting the Medicare legislative changes, Medicare occupancy rates dropped to 12.8% in 1999.

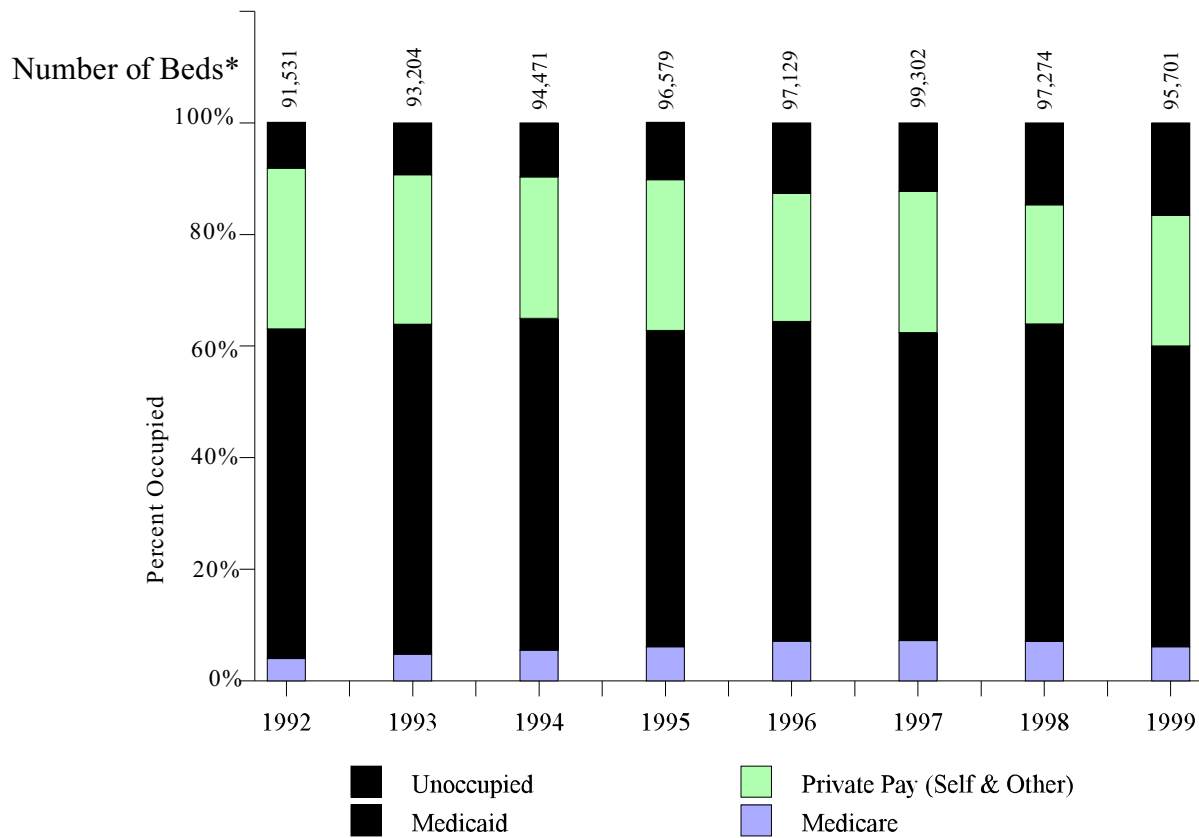
Figure 1 provides a graph of occupancy rates in the context of changes in bed supply over the time period. As discussed, because of sales, re-models, conversions, and removal of beds the actual number of beds in the state varies from year to year, although the number of licensed beds has been stable since 1993. Data presented in Figure 1 show private pay, Medicaid, and Medicare resident utilization rates for each year based on the number of beds in service. In 1992, 8.1% of all facility beds were unoccupied, 59.1% of the beds were filled with Medicaid residents, 28.8% with private paying individuals, and 4% with Medicare covered residents. By 1997, 12.3% of facility beds were unoccupied, 55.2% of beds were Medicaid residents, private paying residents had decreased to 25.3%, and Medicare use had increased to 7.2% of residents. In 1999, the proportion of unoccupied beds had risen to 16.5%, Medicaid had dropped to 53.9%, private paying residents had dropped to 23.5% and Medicare had begun to decline, dropping to 6.1%.

The decline in occupancy rates in Ohio is consistent with national trends. The expansion of in-home services, the development of alternative residential options such as assisted living, and the increased use of short-term care in nursing homes all appear to contribute to reduced occupancy rates. These declines have resulted in major financial challenges for the industry. By the end of 1999 about 10% of U.S. nursing homes had filed for bankruptcy. In that year four of the ten leading nursing home chains had sought bankruptcy protection (Provider, 2000).

Although Ohio's rates were slightly below the national average, the reduction in occupancy rates

Figure 1

Ohio Nursing Home Occupancy Rates



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

* The number of beds available does vary over the study time period due to facility changes.

has never the less had a major effect on the industry. To learn more about how occupancy rates vary across Ohio nursing homes we examined rates by type of facility and region.

Table 5 presents occupancy rates for four major facility categories. Ohio’s combined nursing home/residential care facilities, which include Ohio’s continuing care retirement communities, recorded a nursing facility occupancy rate of 87.5%, down from just over 90% in 1997. Nursing homes recorded an 82.9% rate, down from 87.1% in 1997. Hospitals, which specialize in short-term rehabilitative care reported a 72.3% rate.

Eighty percent occupancy has long been a threshold for nursing home solvency, so we examined those facilities with occupancy rates below 80% and 75%. Reflecting the lower occupancy rates we find that three in ten of Ohio nursing homes report occupancy rates of 80% or below compared to two in ten in 1997. One in five facilities were below 75% in 1999, compared to one in eight two years earlier. These data suggest that a sizeable segment of the industry is economically vulnerable. On the other hand, almost two-thirds of the combined

Table 5
Occupancy Rates For Nursing Facilities in 1999

	Less Than or Equal To 75 Percent	Less Than or Equal To 80 Percent	Greater Than 90 Percent	Overall Occupancy Rates
Nursing Home Occupancy^a				
Comb. NH/RCF (n=199)	13.1	19.1	62.3	87.5
County Home (n=17)	17.6	23.5	29.4	84.8
Hospital Unit (n=57)	54.4	64.9	17.5	72.3
Nursing Home (n=688)	20.9	31.1	40.8	82.9
Overall (n=961)	21.0	30.3	44.0	83.2

^a Occupancy rates excluding facilities with IMR payments and facilities reporting occupancy greater than 100%.

Source: Annual Survey of Long-Term Care Facilities, 1999, Ohio Department of Aging and Scripps Gerontology Center, Miami University.

facilities are operating at 90% occupancy or greater. Thus, there is considerable variability across providers, making policy solutions even more difficult to identify.

Because the supply of long-term care services varies across the state, we also examine occupancy rates for the 13 PASSPORT regions (See Table 6). The ratio of nursing home beds to the size of the older population was about 64 per 1,000 for the state, but ranged from 58 per 1,000 in Cleveland (Region 10A), to 72 per 1,000 in Lima (Region 3). The occupancy rates do show some variation as well, ranging from just over 78% in Mansfield, to 87.6% in Rio Grande. There does not seem to be a pattern between bed supply and occupancy rates. For example, Rio Grande had one of the highest supply of beds but also the highest occupancy rate in the state. Other factors such as poverty rates and the availability of caregivers and other long-term care services undoubtedly influence these results.

Residential Care Facility Use was also examined. Spurred on by the growth of the assisted living industry, there has been a large expansion in the number of residential care beds in Ohio, with more than 27,000 in 1999. The overall occupancy rate for licensed residential care facilities for that year was 54%. Because in many instances residential care facilities license for double occupancy to accommodate married couples, but never plan to serve two residents, these rates are an underestimate of occupancy rates. We did use the same method to calculate occupancy in 1997 when we reported a 62% rate. Thus, while the overall rates are an underestimate, it is evident that utilization of assisted living units has not kept pace with the industry expansion. The 1999 data also show a slow down in the growth of assisted living facilities.

Table 6
Nursing Home Bed Availability by PAA
(1999)

Area Agency on Aging	Location	Number of Active Licensed Beds	Beds per 1000 65+ Population	Occupancy Rate (percent)	65+ Population (2000)
1	Cincinnati	13,003	69.9	81.8	185,992
2	Dayton	7,380	63.9	82.7	115,451
3	Lima	3,654	72.0	81.2	50,754
4	Toledo	8,702	70.5	83.9	123,347
5	Mansfield	4,746	66.1	78.4	71,840
6	Columbus	9,902	61.0	83.5	162,413
7	Rio Grande	3,977	68.7	87.6	57,883
8	Marietta	2,147	64.9	87.0	33,093
9	Cambridge	4,890	65.7	85.2	74,452
10A	Cleveland	17,954	57.6	85.0	311,579
10B	Akron	9,488	57.9	83.9	163,941
11	Youngstown	7,130	63.1	84.5	113,061
CSS	Sidney	2,728	62.1	82.5	43,951
Total	All Sites	95,701	63.5	83.5	1,507,757

Source: Annual Survey of Long-Term Facilities, 1999, Ohio Department of Aging and Scripps Gerontology Center, Miami University.
U.S. Census Bureau, Census 2000.

In-Home Services in Ohio

One of the ways that the long-term care system in Ohio has changed over the past decade has been through the expansion of in-home services. Ohio's area agencies on aging under the direction of the Ohio Department of Aging are involved in two functions directed toward this goal: (1) the administration of Ohio's Medicaid waiver program PASSPORT and (2) a pre-admission review of all applicants to Ohio nursing homes. In this section we present an update on the activities undertaken in these areas.

PASSPORT Use

As mentioned in the overview section Ohio's PASSPORT program has expanded considerably during the 1990's. As shown in Table 7, during the year 1993 PASSPORT served around 4,500 individuals, and by 1999 that number had increased to over 18,300. To examine overall system changes we compared the PASSPORT and Medicaid nursing facility use rate in the context of Ohio's older population. Because rates vary by age group we divided Ohio's older population into three age categories. In 1993, our baseline year, there were just over 6,500 individuals between the ages of 65 and 74 who received Medicaid nursing home care (a rate of 8 per 1,000), compared to 1,383 in PASSPORT (1.7 per 1,000). In the group 85 and over 24,162 individuals were on Medicaid in nursing homes (162 per 1,000) and 1,048 individuals were in the PASSPORT program (7 per 1,000). With over 44,000 older people in nursing homes under Medicaid for an overall rate of 30.9 per 1,000 and 4,215 individuals in the PASSPORT program (2.9 per 1,000), Ohio's approach was emphasizing nursing home use.

By 1999, the long-term care system had changed in several important ways. The overall ratio had increased slightly to 34.4 per 1,000 for Medicaid nursing home residents, reflecting the

Table 7
PASSPORT and Medicaid Nursing Facility Use (per thousand)

Age	1993			1996			1999		
	Population	Nursing Facility ^a	PASSPORT	Population	Nursing Facility	PASSPORT	Population	Nursing Facility	PASSPORT
65-74	822,703	6,550	1,383	808,789	6,639	4,992	794,875	7,832	7,515
Rate per 1000		8.0	1.7		8.2	6.2		10.0	9.4
75-84	466,142	13,737	1,784	498,116	15,453	6,036	530,090	17,055	6,800
Rate per 1000		29.4	3.8		31.0	12.1		32.0	12.8
85+	148,790	24,162	1,048	160,781	25,681	3,842	172,772	26,638	4,014
Rate per 1000		162.0	7.0		159.7	23.9		154.2	23.2
Total	1,437,635	44,449	4,215	1,467,686	47,773	14,870	1,497,737	51,525	18,330
Rate per 1000		30.9	2.9		32.6	10.1		34.4	12.2

^a Medicaid nursing facility population includes all residents who had Medicaid as part or all of their payment source.

Source: Ohio's MDS+ database, PASSPORT MIS, Annual Survey of Long-Term Care Facilities, 1999. The 2000 Census data were used to estimate 1993-1999 population.

dramatic increase in the age 75 and older population, and increased four-fold for PASSPORT to 12.2 per 1,000, reflecting the increased resources allocated to in-home services. Changes across the age categories are also noteworthy. During 1999 there were an estimated 7,832 individuals using Medicaid in the 65-74 age group being served in nursing homes (10 per 1,000) compared to 7,515 in PASSPORT (9.4 per 1,000). The PASSPORT utilization increase means that for this age group the number of people served by Medicaid in home care and nursing home care is almost equal. The age group 85 and above, those most in need of long-term care, also showed some interesting changes over time. The use comparisons show a drop in the utilization rate of Medicaid nursing facilities from 162 per 1,000 in 1993, to 154.2 per 1,000 in 1999. During that same time period PASSPORT enrollment increased from 7 per 1,000 to 23.2 per 1,000. These changes mean that as Ohio's population in need of long-term care has increased, the state's approach to delivering long-term care services has been altered as well.

Characteristics of PASSPORT Clients

Questions that accompany the expansion of PASSPORT include: What do clients look like? And have the clients changed as the program has grown? A review of client characteristics in 1999 show that PASSPORT participants have a mean age of 77, are mostly women (81%), are typically not married (83%), and most often live in their own home (74%) (See Table 8).

Although there are some small differences over time, there does not seem to be any consistent or significant changes in the demographic profile of PASSPORT clients. A review of the functional characteristics show PASSPORT clients to be experiencing high levels of impairment (See Table 9). On average PASSPORT clients are impaired in three activities of daily living (ADL's) and

Table 8
Demographic Characteristics of PASSPORT Clients: 1993-2000

	Pre-June 1993 (Percentage) ^a	December 1995 (Percentage) ^a	December 1997 (Percentage) ^a	December 1999 (Percentage) ^a
Age				
60-65	9.6	10.9	11.1	11.8
66-74	27.9	27.8	29.3	29.2
75-84	39.4	38.3	36.9	37.1
85-90	15.6	15.7	15.8	15.1
91+	7.5	7.1	6.9	6.8
Average Age	75.2	77.3	77.1	76.9
Gender				
Female	82.4	79.8	80.7	80.6
Race				
White	70.3	71.6	70.8	72.6
Marital Status				
Never married	5.0	5.5	5.6	5.6
Widowed/divorced/separated	74.4	75.4	77.0	77.0
Married	20.6	19.1	17.4	17.4
Current Living Arrangement				
Own home/apartment	77.1	78.9	73.9	74.1
Relative or friend	18.0	19.9	21.2	21.7
Congregate housing/elderly	4.9	0.6	0.6	0.6
Group home	0.1	0.1	0.3	0.2
Nursing facility	0.0	0.0	2.9	2.5
Other	0.0	0.5	1.9	0.9
Population	4,552	14,661	17,690	18,330

^aPercentages are adjusted to reflect only those clients for whom information was available on each variable.

Source: PASSPORT MIS database.

Table 9
Functional Characteristics of PASSPORT Clients: 1993-1999

	Pre-June 1993 (Percentage)^a	December 1995 (Percentage)^a	December 1997 (Percentage)^a	December 1999 (Percentage)^a
Percentage with Impairment/Needing Hands-On Assistance, Activities of Daily Living (ADLs)^b				
Bathing	85.0	97.2	96.7	96.7
Dressing	58.6	69.7	66.9	63.4
Transferring	31.8	44.4	57.3	66.9
Toileting	27.3	32.8	27.3	24.5
Eating	25.9	9.6	8.6	7.6
Grooming	77.0	65.9	51.6	38.2
Number of ADL Impairments				
0	10.8	1.2	1.0	1.1
1	10.2	2.2	3.0	3.8
2	18.9	31.9	34.1	38.0
3	22.7	31.4	32.2	30.2
4 or more	37.4	33.3	29.7	26.9
Average Number of ADL Impairments^c	3.0	3.2	3.1	3.0
Percentage with Impairment in Instrumental Activities of Daily Living (IADLs)				
Phoning	27.5	29.7	26.7	24.5
Transportation	94.4	87.2	85.3	84.6
Shopping	97.2	97.5	97.7	97.8
Meal preparation	84.9	87.3	86.3	87.0
Housecleaning or laundry	97.8	97.6	98.6	98.6
Heavy chores	97.0	99.6	99.6	99.6
Legal and financial	78.3	75.6	73.2	71.5
Manage medications	52.8	36.9	48.8	46.7
Number of IADL Impairments				
0	0.4	0.0	0.0	0.0
1	0.0	0.0	0.0	0.0
2	0.6	0.3	0.2	0.3
3	2.2	2.5	2.9	3.2
4 or more	96.8	97.2	96.1	96.5
Average Number of IADL Impairments^c	6.3	6.1	6.2	6.1
Population	498*	14,661	17,690	18,330

*ADL and IADL information for June 1993 was not available in PASSPORT MIS. This information was entered by Scripps from a sample of client records. All other data represent all clients enrolled in PASSPORT.

^a Percentages are adjusted to reflect only those clients for whom information was available on each variable.

^b Impairment includes all who could not perform by themselves or could perform with mechanical aid only.

^c From list above.

Source: PASSPORT MIS database.

over six instrumental activities of daily living (IADL's). More than one-quarter are impaired in four or more tasks of daily living and 95% are impaired on two or more activities of daily living.

In Table 10, we present the functional characteristics of Ohio nursing home residents over time. Residents of Ohio nursing homes experience high levels of functional disability. Data for 1999 show 80% of residents with three or more activity of daily living impairments and on average residents were impaired in four tasks of daily living.

Table 10
Functional Characteristics of Residents of Ohio Nursing Facilities: 1993-1999.

	December 1995 (Percentage) ^a	December 1996 (Percentage) ^a	December 1997 (Percentage) ^a	1999* (Percentage) ^a
Percentage Needing Assistance in Activities of Daily Living (ADLs)^b				
Bathing	94.5	94.2	94.5	94.7
Dressing	84.4	84.5	85.1	88.0
Transferring	69.6	70.1	70.6	75.6
Toileting	76.4	77.0	77.8	80.4
Eating	38.4	37.7	37.7	52.2
Number of ADL Impairments^c				
0	4.9	5.0	4.8	5.3
1	9.2	8.9	8.5	6.9
2	8.7	8.4	8.3	7.7
3	8.5	8.6	8.7	5.3
4 or more	68.8	69.1	69.7	74.7
Average Number of ADL Impairments				
	3.6	3.6	3.7	3.9
Population^d				
	80,843	81,206	81,777	82,426

^a Percentages are adjusted to reflect only those clients for whom information was available on each variable.

^b "Needs assistance" includes limited assistance, extensive assistance, total dependence, and "activity did not occur."

^c From the list above.

^d The nursing home resident population for 1999 is based on OSCAR over an 18 month time span.

Source: MDS+ database for June 1993, December 1994, June 1996, and March 1998.

* 1999 Data comes from Online Survey and Certification and Reporting system.

Although both nursing home and PASSPORT clients experience substantial levels of disability, nursing home residents on average are more disabled functionally and cognitively. The PASSPORT sample has a lower proportion of individuals with no ADL impairments (1.1%) compared to nursing home residents (5.3%).⁴ However, a significantly higher proportion of nursing home residents have three or more ADL impairments (80% versus 57.1%). Almost three-fourths of the nursing home population have four or more ADL impairments, compared to 27% for PASSPORT. Thus, while there is considerable overlap between the populations, on average nursing home residents are more disabled.

Pre-Admission Review Activities

Beginning in 1993, Ohio required that all Medicaid applicants for long-term care services receive a pre-admission review. In 1995, private pay applicants entering a Medicaid certified facility were also required to complete the pre-admission review process. As with the admissions data presented earlier the volume of pre-admission reviews continues to increase. In 1999 over 117,000 reviews were completed by the area agencies. Because private facilities and select applicants are excluded from pre-admission review these data, although consistent, are lower than the admissions data presented earlier in Table 4. In reviewing the pre-admission data we find that about half of the applicants come from hospitals, just under one-third are from the community, and about one in five already reside in nursing homes. The referral setting is related to payment status with the majority of Medicaid applicants coming from the community (45%) or

⁴ Data on cognitive status of PASSPORT enrollees and nursing home residents was not available in 1999, but data for previous years showed that about two-thirds of the nursing home residents were cognitively impaired.

already residing in nursing homes (38%). The non-Medicaid referrals most often come from the hospital (80%) or the community (19%).

The pre-admission review program was developed during a time when researchers and policy analysts believed that some individuals were entering nursing homes inappropriately. As the long-term care system has experienced major changes, including a higher proportion of short stay residents, more competition from the assisted living industry, more individuals relying heavily on home care, and an increasing level of disability among those entering nursing facilities, these data suggest that the pre-admission review function may need to be modified. For example, if the majority of individuals entering the nursing home via the hospital stay only a short time, perhaps those admissions should be excluded from the process. We recommend that a review of the pre-admission process be undertaken by ODA and the PASSPORT administration agencies.

Summary and Conclusion

This report documents a continued shift in the way that Ohioans receive long-term care. More older people in the state are now receiving long-term support in their own homes, both through Ohio's PASSPORT program and through private insurance and out-of-pocket expenditures. The number of people living in residential care facilities, particularly assisted living residences, has also increased. The large growth in the assisted living industry is accompanied by lower than anticipated occupancy rates for assisted living facilities in Ohio, and it appears that some overbuilding has occurred in the industry. And, for the eighth year in a row occupancy rates have dropped in Ohio nursing homes. Additionally, Ohio nursing homes are

much more likely to be used for short-term care than ever before, with Ohio recording almost 150,000 admissions for its 96,000 nursing home beds in 1999.

As Ohio prepares for the baby boomers to reach old age, what might we expect the future long-term care system to look like? And what are the implications of these changes for the long-term care industry, for state policy makers, and for older Ohioans and their families? The last decade has highlighted the importance of consumer choice in long-term care. The expansion of assisted living and other housing options and increases in both publicly and privately financed in-home care services have created new options for older consumers. We expect to see a continued emphasis on services that will allow consumers to remain in their own homes for as long as possible and we expect that these in-home services and assisted living will continue to compete with the nursing homes. Our work suggests that the decline in private pay nursing home residents is related to the expansion of the assisted living and home care markets. This suggests that the occupancy challenges faced by the traditional nursing home will continue, even though the size of the disabled older population will increase. We also believe that nursing homes are likely to continue to serve the short-term resident, and in fact over time this could be a much greater part of the nursing home market. Just as competition between nursing homes and assisted living facilities has reduced the number of private pay nursing home residents, the expansion of short-term care in nursing homes could affect hospital-based rehabilitation units in the future. Despite changes in the long-term care system, the problems associated with financing of this system remain paramount.

The importance of Medicaid in the budget process, combined with continued growth in the disabled older population means that questions about who and how to pay for long-term care

will not go away. The Balanced Budget Act of 1997 represents the ongoing ping-pong game between the federal government and the states as each tries to shift long-term care costs between the Medicaid and Medicare programs. Our results suggest that cuts to Medicare under the Balanced Budget Act have now shifted costs back to the states, and Ohio's Medicaid cost pressures faced during the 2001 budget process are reflective of these federal changes. State and provider complaints have resulted in some modifications to the original act, possibly providing some future relief. Regardless, it seems clear that the tug of war between the states and the federal government on funding for long-term care will continue. Because people with chronic disabilities typically experience higher than average acute care problems as well, the lack of coordination between Medicare and Medicaid means a fragmented health and long-term care system.

The long-term care challenges faced by states such as Ohio are daunting. An increasing population of our oldest citizens combined with issues about quality, choice, and financing of long-term care present a long list of policy issues to be considered. What should the state do to make sure that Ohioans receive good quality long-term care in a financially responsible manner? Our primary recommendation in this area is for the state to enter into a system-wide planning process. Our current system of long-term care has its roots in the 1965 Medicaid legislation. At that time neither federal nor state officials were concerned about long-term care. The legislation however, created a structure for the industry in the decades to follow. Ohio policy makers were never in a position to step back and ask the major questions: What is the best way to deliver and fund long-term care services in the state? What should the continuum of long-term care look like? How many nursing homes do we need? What type of residential care options should the

state offer? What should the balance between in-home care, assisted living, and nursing homes look like?

Because each of the provider groups has their own vested interests, most of the debate at the state level involves advocacy for a specific service area, rather than a reflective look at the long-term care system as a whole. Given the challenges associated with Ohio's long-term care system today and in the future, it is essential for Ohio policy makers to take a step back and gather consensus on a state-wide long-term care strategy. Such an effort will involve bringing together policy makers, state and regional administrative staff, providers, consumers, researchers, and advocacy groups to develop a shared vision for Ohio. Although such a process would be difficult, the alternative of not planning for an aging Ohio is even more difficult for the state in the long run.

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