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Long-Term Care Planning Act of 2006

Long-Term Services and Supports in Maryland
Planning for 2010, 2020, and 2030



December 1, 2007

Marilyn Moon, Ph.D.
Chair

Rex W. Cowdry, M.D.
Executive Director

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The Long-Term Care Planning Act of 2006 (House Bill 1342) challenged the Maryland Health Care Commission to go beyond short-term planning and look into the future to identify, at a high level, the future demand for services, the needs of Marylanders aged 65 and older and persons with disabilities for the full range of long-term care services, the ability of the infrastructure to support those needs, and the potential cost to the State and individuals to pay for these services.

Long-term care services have traditionally been viewed as institutionally-based care, primarily in nursing homes and assisted living facilities. A sea of change occurred in the mid-'80s at the federal and state level that focused on creating and expanding capacity in the community setting to meet the needs of an increasingly greater number of individuals outside of the institutional setting.

Long-term care has for decades been an increasing financial burden to Medicaid and the State's budget. The effects of the aging baby boomers on the demand for long-term care services will increasingly challenge federal and state budgets and those of individuals who do not qualify for state or federal financial support. This is compounded by the rapid increase in the number of persons with disabilities and an economy that has diluted the availability of informal caregivers who have historically provided a significant amount of care to the elderly and disabled. A 2000 Government Accountability Office analysis shows that Medicaid accounts for 39% of long-term care spending, Medicare 17.8%, out-of-pocket 29.5%, private insurance 7.4%, and other 6.3%.

The report presented a challenge because the Act required forecasts as far out as the year 2030. There is no basis upon which to predict the stability or change in funding sources, advances in technology, or wonder drugs that could produce greater independence and reduce service demand. There are noticeable trends, however, that support the theory that there will always be a need for the institutional setting for the sickest patients, but likely for a much shorter duration and with the provision of a more intense level of service.

Although the study design did not support the creation of formal recommendations, the report does provide a blueprint from which health policy makers can look holistically at long-term care and begin the challenging effort of addressing current unmet needs, and in many cases, different future needs and support systems. The report includes findings from both the research conducted by our contractors (University of Maryland, Baltimore County and George Mason University) and the deliberations of the Commission's Long-Term Care and Community-Based Advisory Committee.

The breadth of this study was daunting. State policymakers, payers, providers and purchasers are collectively looking at ways to provide services in the most appropriate setting while improving health care quality and reducing health care costs. The Commission's mission is to provide reliable information and analysis to support this process.

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ACKNOWLEDGEMENTS

In response to the *Long-Term Care Planning Act of 2006* (House Bill 1342), the Maryland Health Care Commission (Commission) is pleased to present this report entitled *Long-Term Services and Supports in Maryland: Planning for 2010, 2020, and 2030*.

In preparing this report, the Commission relied on numerous experts, including individuals in state agencies and universities. In developing this report, staff gained a broader insight into the complexities of addressing the needs of Maryland's older adults and persons with disabilities whose lives are in transition. Transitioning is not an age-based event, but a time to view independence in a new light. It is a point in life when physical or cognitive challenges require viewing the future in terms of one's potential, not one's limitations.

To address the breadth of issues required by the *Long-Term Care Planning Act of 2006*, the Commission contracted with the Center for Health Program Development and Management at the University of Maryland, Baltimore County (UMBC), and the Center for Social Science Research at George Mason University. The Commission's Long-Term Care and Community-Based Services Advisory Committee provided diversity in expertise, purpose, and input, assuring that the myriad of long-term care stakeholders was represented. Members of the advisory committee, who represent state agencies, private organizations, and consumers, are listed in Appendix 1, along with their organizational affiliation or interest representation.

The Commission wishes to thank the members of the Advisory Committee for their commitment, dedication, and contributions. The Commission also recognizes the significant contributions of the staff at the Center for Health Program Development and Management at UMBC, as well as William J. (Jim) McAuley, Ph.D., and Megan McCutcheon of George Mason University. Commissioners Rev. Robert L. Conway and Garret A. Falcone, and former Commissioner Robert E. Nicolay served as special reviewers for the report. Finally, the Commission wishes to recognize the contributions of its own staff, including project manager Linda Cole, Carol Christmyer, and Cathy Weiss.



CENTER FOR HEALTH PROGRAM
DEVELOPMENT AND MANAGEMENT

EXECUTIVE SUMMARY

By 2030, the youngest of Maryland's baby boomers will be 66 years old and the oldest will be 84 years of age. Overall, the number of Marylanders aged 65 and older will have more than doubled, from just under 600,000 in 2005 to 1.3 million. The number of persons aged 5-64 reporting disabilities will increase as well, from 335,500 in 2000 to an estimated 385,000 in 2030. The State's existing system for the provision of long-term services and supports is likely to be overwhelmed by the aging baby boomers and anticipated trends in the prevalence and intensity of disability. Continued incremental growth in programs and services will not suffice to meet the State's needs in 2010, 2020, and 2030.

Report Purpose and Approach

The Maryland General Assembly passed the *Long-Term Care Planning Act of 2006* (House Bill 1342), which requires the Maryland Health Care Commission to conduct a study of Maryland's long-term care delivery system. The purpose of the study is to determine the types of services and programs that individuals aged 65 and older and individuals with disabilities will need in 2010, 2020, and 2030, as well to identify how the State should begin planning for future needs. This report presents the results of the study.

The report addresses the long-term care needs of aging baby boomers as well as those of children and adults with disabilities as medical advances and new technologies both extend and enrich lives. It includes an examination of demographic trends, the many factors that are driving the use of long-term services and supports, and the potential impact of these factors in future years. Presented is an extensive analysis of the utilization of and expenditures for state-funded long-term services and supports in Maryland, which culminates in projections of future use and costs to the State for institutional, in-home, community, housing/residential, and mobility/transportation services and supports, as well as for mental health services and services for persons with developmental disabilities. An examination of long-term services and supports provided by local jurisdictions follows, showing how some will face an increased burden in the future resulting from a disproportionate growth in the older adult population. Gaps in current services identified by state and local agencies are highlighted and service adequacy is addressed. Next, the report examines other states' approaches to long-term care. The report concludes with a discussion of implications for the State in beginning to plan for future long-term care needs.

To conduct the analysis presented in this report, extensive interviews with officials of state and local agencies were conducted and a comprehensive inventory of state- and locally-funded programs was assembled. Agencies consulted within the Maryland Department of Health and Mental Hygiene (DHMH) included Medicaid, the Mental Hygiene Administration, the Developmental Disabilities Administration, and the Office of Health Care Quality. Other Maryland departments were consulted as well, including the Department of Aging, the Department of Human Resources, the Department of Disabilities, the Department of Transportation, the Department of Housing and Community Development, and the State Department of Education. In addition, federal agencies such as the Centers for Medicare and Medicaid Services and the Substance Abuse and Mental Health Services Administration within

the U.S. Department of Health and Human Services provided information on federal programs that benefit Marylanders. Maryland Medicaid data available through the DHMH Medicaid Management Information System (MMIS) was analyzed, along with data made available by other state agencies, including the Maryland Health Care Commission. Provider associations contributed data on services and supports available in Maryland.

An extensive literature review on demographic and health trends that are likely to influence the future utilization of long-term care provided context for considering the long-term care needs of Marylanders and estimating future costs. Similarly, a review of long-term care programs, policies, and plans in other states provided useful background information on the range of possibilities for Maryland when planning for the future.

Historical data on long-term care utilization and costs was trended forward to estimate future costs to the State in 2010, 2020, and 2030 for each of the five service categories that are the subject of this report: institutional, in-home, community, mobility/transportation, and housing/residential. A similar methodology was used to estimate future long-term care costs for mental health services for persons with serious and persistent mental illness and services for persons with developmental disabilities. Estimation factors specific to each service were developed for use in the trending; these factors were based on well-documented trends in the literature that are expected to affect the utilization and cost of long-term care in the future.

Implications from the review of demographic and national trends and the analysis of utilization, expenditures, and future costs for each of the service categories addressed by this report are summarized below, followed by a discussion of the implications for the State of Maryland.

Study Implications

Demographic Trends

As the population ages, active life expectancy—defined as the years of life remaining without disability—is increasing at a faster rate than life expectancy. This suggests a “compression of morbidity,” meaning that illness and disability will be moved further and further toward the end of life, producing more years without disability. Most of the decline in disability that is now becoming evident is in instrumental activities of daily living (IADLs) rather than activities of daily living (ADLs), perhaps attributable to advances in assistive technologies, environmental modifications, and the detection and pharmacological treatment of diseases that lead to disability.

Economic Trends

With increasing life expectancy, Americans will need to extend the use of available assets over a longer period of time. However, baby boomers carry considerably more debt than previous generations, and studies suggest that between one-quarter and one-half of households are not saving enough for retirement. This is especially true for those with modest incomes, those with less education, and those who do not own a home. Home ownership has increased, but at

the expense of mortgage debt. Less than 10 percent of persons with disabilities own their own home. As employers move away from defined benefit pension plans toward defined contribution plans, and as many employers limit their contributions to retirement plans, there is increasing concern about whether future retirees will have sufficient financial resources to fund needed long-term services and supports.

As the cost of long-term care outpaces growth in wages, assets, savings, and pensions, more individuals will have limited financial resources for long-term care. These resources are likely to be exhausted more quickly, and more people will become financially eligible for Medicaid and other public programs. State expenditures for long-term care are expected to grow threefold to \$6.06 billion in 2030. The number of people “at the margin” who do not qualify for publicly supported services will increase as well. Uniform eligibility processes across state and local programs could help to establish parity and perhaps free up resources to provide some benefits to those “at the margin” while continuing to provide more comprehensive benefit coverage to the most needy.

Long-Term Care Needs

Many people have misconceptions about future needs and insurance coverage for long-term care. Only 15 percent of older Americans who live independently report that it is extremely or very likely that they will need assistance with ADLs as they age, a much smaller percentage than studies predict. Twenty-nine percent of older adults who live independently have the misconception that if they need long-term care, it will be covered by Medicare. Long-term care insurance is an option for many, but those with limited incomes will be unable to afford it and may ultimately depend on Medicaid unless there are adequate incentives or subsidies to encourage purchase of insurance.

Long-Term Care Workforce

Family and other sources of informal long-term care will diminish with more women in the workforce and families more geographically dispersed. This will place additional pressure on the long-term care system, especially for personal care services, adult day care, and respite services, already used by many in the public long-term care system. For example, in FY 2006, 4,604 individuals in Maryland used Medicaid personal care services at a cost of \$21 million. In that same year, state expenditures for adult day care for 7,378 persons totaled \$77 million, and respite and caregiver support services expenditures totaled \$4.3 million for a total of \$81.3 million. Future demand for long-term care workers to replace informal care providers and meet the growing demand by an aging population will strain efforts to recruit and train qualified workers and is likely to place upward pressure on wages and benefits. Agencies and providers throughout the State report that recruitment and retention of qualified service providers is a major challenge to service provision. Consumer-directed programs that permit individuals to hire friends and family members to provide personal care services have the potential to reduce some of the projected strain on recruitment and training.

The Role of Technology

Assistive technologies hold promise for reducing IADL and ADL dependence and decreasing the need for formal and informal personal care. Recent advancements range from the simple redesign of a door handle to more complex technologies to assist with mobility or communication. Although predictions of technological change are generally optimistic, cost is often an issue, and dissemination and use will be incremental at best.

Long-Term Care Trends and Costs

Institutional Services: While it may be possible to transition to the community setting many of those who would otherwise require institutional care, population growth and trends in disability point to a continued need for institutional care in the array of long-term services and supports. Maryland presently has almost 30,000 nursing home beds in 230 facilities. Shorter lengths of stay but a greater number of users resulted in a modest increase in nursing home days between 1999 and 2006. The number of nursing home residents who were under age 65 increased by 30 percent from 2000 to 2004. The number of nursing home days funded by Medicaid is expected to increase by 13 percent from 2005 to 2030, while Medicaid nursing home costs are projected to increase by 134 percent—from \$830.7 million to \$1.94 billion—during this same period. Projected cost increases are due primarily to cost inflation and growth in the population aged 65 and over.

Maryland's 567 chronic hospital beds in seven facilities serve medically complex patients with an ongoing need for hospital level of care. The number of Medicaid patients in chronic hospitals is expected to grow by two-thirds from 2005 to 2030, from 919 to 1,504 patients. Medicaid chronic hospital costs are expected to increase by 243 percent from 2005 to 2030, from \$78.6 million to \$269.5 million.

In-Home Services and Supports: In this report, in-home services and supports include personal care, home health services, durable medical equipment, and disposable medical supplies. Persons accessing the public long-term care system in the future for services such as these may desire to self-direct their care, managing their own budget and hiring their own caregivers. Reflecting consumer preferences for home- and community-based long-term care, the largest percentage increase in costs to the State will likely be for in-home services and supports (exclusive of mental health services and services for persons with developmental disabilities), from \$94.5 million to \$416 million, a 340 percent increase. However, it is projected that in-home services will represent just 7 percent of total long-term care costs in 2030.*

Community Services and Supports: Community services and supports include adult day care, respite and caregiver services, other general supports that enable individuals to remain in the community, exclusive of waivers services. From 2005 to 2030, the cost of community services and supports (exclusive of mental health services and services for persons with developmental disabilities) will almost triple to \$600.6 million.*

* These estimates do not include projected costs for services provided through Medicaid waivers; waiver services are discussed below in a separate paragraph.

Home- and Community-Based Services Waivers: The current infrastructure for in-home and community long-term services and supports cannot meet current demand, much less the anticipated future demand. For example, in FY 2006, Maryland's five Medicaid home- and community-based services waiver programs* that serve older adults and adults and children with physical disabilities (the Older Adult, Living at Home, Autism, Traumatic Brain Injury, and Model Waivers) served 4,352 persons at a cost of \$91.2 million. In that same year, the Community Pathways waiver for persons with developmental disabilities served 10,626 people at a cost of \$453.1 million. However, the waiting lists are long for these programs. The utility of enrollment caps on waiver programs might be considered within the larger context of examining optimal service delivery systems for the future.

Housing and Residential Services: The availability of affordable and accessible housing and supportive residential living arrangements will be of increasing importance in the future if older adults and those with disabilities are to remain in the community. A recent Governor's Commission on Housing Policy report indicates that in 2000, there was a shortage of 125,000 units of affordable and available rental housing in Maryland for low-income families, older adults, and individuals with disabilities. Without action, this shortage is expected to worsen, increasing to 157,000 units by 2014. Housing availability is dependent on federal as well as state programs. The State contributed \$7.9 million to housing and residential support programs in 2005; costs to the State in 2030 are projected to be \$32.2 million.

Mobility and Transportation Services: Access to transportation is critical to people with disabilities. The Maryland Department of Transportation provides a number of specialized services to assist persons who cannot drive or who have physical limitations which prevent the use of public fixed-route bus systems. However, these services are essentially limited to urban areas, and primarily Baltimore County. In 2005, state expenditures for these programs totaled \$53.7 million; by 2030, costs to the State are projected to be \$128.4 million.

Mental Health Services: Many persons—adults and children—with serious mental illness requiring long-term care can remain in the community with appropriate services and supports. For this population, state expenditures for community mental health services in the public mental health system (excluding inpatient hospital and residential treatment center services) were estimated at \$127.5 million in 2005 and are projected to increase to \$301.4 million in 2030. State expenditures for long-term mental health services for persons in state-operated institutions for mental diseases (IMDs) were estimated to be \$5.1 million in 2005 and projected to increase to \$23.5 million by 2030.

Services and Supports for Persons with Developmental Disabilities: Costs to the State for long-term services and supports for persons with developmental disabilities are expected to quadruple, from \$583 million in 2005 to \$2.3 billion by 2030. With ever-expanding need and escalating costs, services for persons with developmental disabilities are facing serious challenges. The anticipated shortage of health care workers and attendants, as well affordable and accessible housing, will only exacerbate these challenges.

* Home- and community-based services waiver programs is defined in the Glossary at the end of this report.

Implications for Maryland

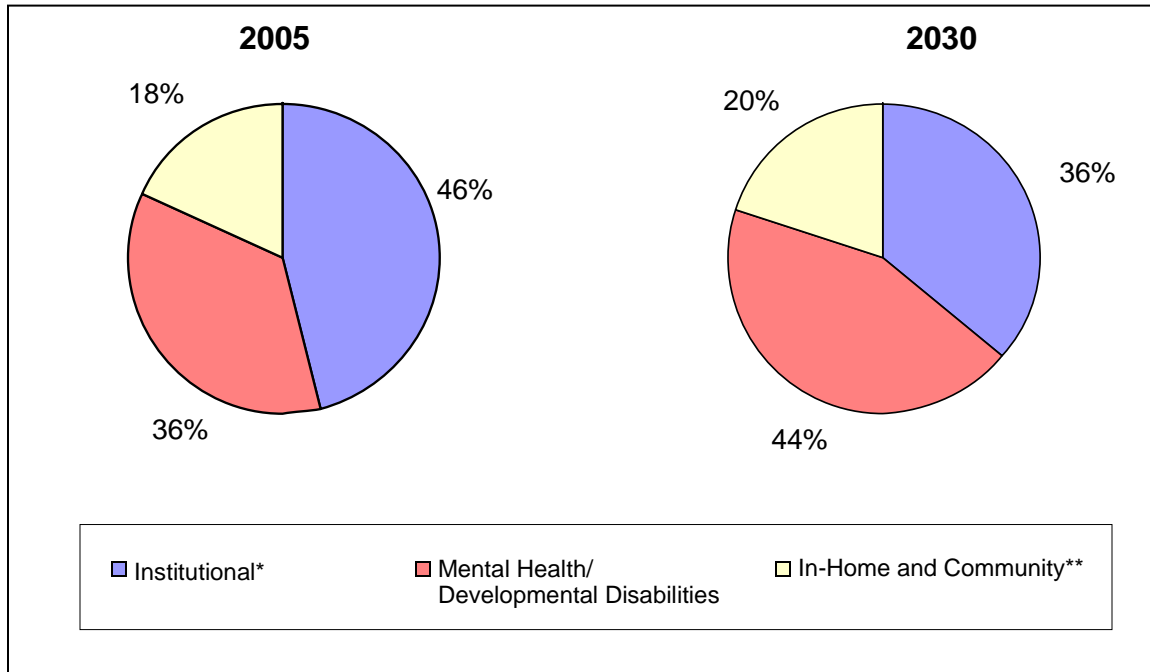
Total costs to the State for long-term services and supports is projected to increase more than threefold from 2005 to 2030, from \$1.99 billion to \$6.06 billion (Table 1). More than half of this increase (57 percent) is attributable to inflationary price increases. Population growth and changes in utilization patterns account for the balance. Figure 1 portrays the distribution of costs by consolidated categories of service in 2005 and 2030. The most dramatic shifts in costs will occur for institutional care (declining from 46 percent to 36 percent of total costs), reflecting a projected reduction in the per person use of nursing home services and a preference for home- and community-based services, and mental health services and services and supports for persons with developmental disabilities (increasing from 36 percent to 44 percent of total costs). These are conservative estimates based on historical trends in utilization and expenditures, adjusted for documented demographic and health trends.

Table 1
Actual and Projected State Costs for Long-Term Services
and Supports by Category of Service:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Percent Change 2005-2030
		2010	2020	2030	
Institutional	\$909.4	\$1,116.9	\$1,507.7	\$2,209.7	143%
In-Home	\$94.5	\$139.3	\$240.0	\$416.0	340%
Community	\$207.3	\$256.9	\$389.7	\$600.6	190%
Housing/Residential	\$7.9	\$10.2	\$18.1	\$32.2	309%
Mobility/Transportation	\$53.7	\$65.6	\$92.1	\$128.4	139%
Mental Health	\$132.6	\$159.1	\$228.8	\$324.9	145%
Developmental Disabilities	\$583.0	\$899.5	\$1,493.3	\$2,352.3	303%
Total	\$1,988.4	\$2,647.5	\$3,969.7	\$6,064.1	205%

Source: Center for Health Program Development and Management, UMBC.

Figure 1
Distribution of State Costs for Long-Term Services and Supports by Consolidated Categories of Service: Maryland, 2005 (Actual) and 2030 (Projected)



* Does not include institutional mental health services or institutional services for persons with developmental disabilities.
 ** Does not include in-home and community mental health services or services for persons with developmental disabilities. Includes housing/residential and mobility/transportation services.

Source: Center for Health Program Development and Management, UMBC.

Evident from this analysis is that it is important for the State to begin planning now, or it will soon be overwhelmed by the cost of providing long-term services and supports to the rapidly expanding population of older adults and persons with disabilities.

In Maryland, three major factors are driving the need for an improved system of long-term services and supports:

- The State’s present long-term care system is already experiencing difficulty in meeting the needs of the current population of individuals aged 65 and over and persons with disabilities. The need for more affordable housing, transportation, and other crucial community-based long-term services and supports will only be exacerbated by the aging of the population.
- Population growth and the continuously evolving physical, cognitive, and mental health status of the population—as reflected in the ability of individuals to engage in activities of daily living (ADLs) and instrumental activities of daily living (IADLs)—will require

creative new approaches to restructuring the State’s long-term care system to adequately and cost-effectively meet evolving needs.

- Agencies and programs will most likely continue to compete for public financing for long-term services and supports at the national, state, and local levels. Measures to promote optimal outcomes and efficiency in service delivery will be crucial to help ensure that future need for long-term services and supports is met.

The following guidelines may facilitate consideration by state policy makers of any systemic change, prioritization, or realignment of existing services or development of new services:

1. **Balance institutional and community care.** For the State to succeed in transitioning more individuals to community-based settings, adequate and affordable housing, transportation, and in-home and community services will have to be available. The State might consider restructuring financing systems to ensure that “money follows the person” from institutional setting to community-based setting. In addition, infrastructure development (e.g., shared eligibility systems, service facilities, workforce, affordable and accessible housing, transportation, regulatory oversight) could be encouraged, which will be crucial to the expansion of community-based programs.
2. **Encourage personal and societal responsibility.** It will be important for individuals to take charge of their health by adopting healthy lifestyles, seeking preventive health care, and actively participating in planning for their long-term care needs. Individuals should be encouraged to consider long-term care insurance as part of their long-term care planning. An organized public education effort would help to engage the public and promote personal responsibility in these areas.
3. **Encourage private sector involvement.** The private sector has a role in long-term care planning as well, including promoting universal design for housing, developing transportation systems to complement the public transit systems, supporting informal caregivers, and providing consumer education and supports to caregivers. The public and private sectors could work together to educate consumers about long-term care service and financing options.
4. **Promote cooperation and collaboration.** Federal cooperation and participation will be required to address transportation system needs and the dearth of affordable housing, as well as continued or expanded financing of publicly funded long-term services and supports. Cross-agency cooperation at the federal, state, and local level will be crucial to addressing current gaps in services, as will collaborative planning by government and the private sector to promote more efficient and effective service delivery.
5. **Encourage identification of specific goals for systemic change.** Development and adoption of statewide, cross-agency goals and objectives for realigning the State’s long-term care delivery and financing systems, along with the establishment of measurable

benchmarks for assessing progress toward those goals, may help ensure that the State is able to meet Maryland's future long-term care needs.

Involvement of stakeholders from both the public and private sectors may further enrich the planning process.

I. INTRODUCTION

Background

By the year 2030, all of the “baby boomers” (those born between 1946 and 1964) will have reached the age of 66 and many will be on the verge of entering the aged 85 and older age group. This demographic change, coupled with a long-term care system facing constraints in capacity, coordination, and efficiency, is expected to present perhaps the most significant challenges to our economy and health care system in history.

Maryland’s baby boom explosion is expected to be more modest than in most other states. For example, in 2030, Maryland is expected to rank 45th among the 50 states when comparing the percentage of the population aged 65 and over.¹ Nevertheless, this population shift will bring about dramatic changes in the need and demand for long-term services and supports. Together with these demographic changes, disability is likely to change, both in prevalence and intensity, potentially placing even more strain on a long-term care system already burdened by rapidly expanding needs. Add to this a steady deterioration in traditional informal supports and family caregiving, and the result is a system with utilization and costs spiraling out of control.

In Maryland, the aged 65 and older population is expected to more than double in size, from just under 600,000 individuals in 2000 to 1.3 million by 2030 (Table 1.1). The number of persons aged 5-64 reporting disabilities is expected to increase from about 335,500 in 2000 to an estimated 385,000 by 2030 (Table 1.2). Long-term services and supports are already consuming a significant portion of public spending in the State. In 2006, state expenditures for long-term services and supports in Maryland totaled \$2.2 billion. Local jurisdictions reported contributing an additional \$82 million during that same year. Medical Assistance, Maryland’s Medicaid program, spent an estimated \$953 million in state funds for long-term services and supports in 2006. Nationally, Medicaid accounts for 40 percent of all reimbursed long-term care services and almost half of all nursing home expenditures.²

Concerned about these trends, the Maryland General Assembly passed the *Long-Term Care Planning Act of 2006* (House Bill 1342), which requires the Maryland Health Care Commission to conduct a study of Maryland’s long-term care delivery system. The purpose of the study is to determine the types of services and programs that the **aged 65 and older populations** and **individuals with disabilities** will need in 2010, 2020, and 2030, as well to identify how the State should begin planning for future needs. Specifically, the legislation requires:

- (1) Population projections for both populations being studied;

¹ U.S. Census Bureau. (2005). *Ranking of states by projected percent of population age 65 and older: 2000, 2010 & 2030*. Washington, DC: U.S. Census Bureau, Population Division, Interim State Population Projections.

² Sommers, A., Cohen, M., & O’Malley, M. (2006, November). *Medicaid’s long-term care beneficiaries: An analysis of spending patterns*. Washington, DC: The Henry J. Kaiser Family Foundation, Kaiser Commission on Medicaid and the Uninsured Issue Paper.

- (2) Services and programs operated by the State, including services and programs related to housing, transportation, medical needs, and food subsidies, to identify:
 - (i.) Problems with the delivery of existing services or programs; and
 - (ii.) The need for additional services or programs;
- (3) The adequacy of current services and programs for the age 65 and older population and for individuals with disabilities provided by each county and region in the State and any gaps in services;
- (4) The effect that the growth of the age 65 and older population will have on current services and programs and the areas of the State that will be most affected;
- (5) The type of services and programs that will be most needed to support individuals with disabilities and to care for the age 65 and older population in 2010, 2020, and 2030;
- (6) The affordability of the types of services and programs for the age 65 and older population and for individuals with disabilities who may not qualify for federal, State, or local assistance; and
- (7) The cost to the State to provide services and programs to the age 65 and older population and individuals with disabilities.³

Data Sources

This report uses a variety of data but relies heavily on the following data sources:

- United States Census and American Community Survey (ACS) data and analysis and adjustments of that data by the Maryland Department of Planning's State Data Center;
- Published research analyzing data from the National Health Interview Survey, the National Long-Term Care Survey, and other national and state data sets;
- Maryland Medical Assistance data (information on services, cost, eligibility, providers) provided by the Department of Health and Mental Hygiene (DHMH) Medical Assistance information system (MMIS2);
- The DHMH Maryland Behavioral Risk Factor Surveillance Survey;
- Inventory of state and local long-term care programs and services conducted in the course of preparing this report;
- The State Health Plan for Facilities and Services: Nursing Home, Home Health Agency, and Hospice Services produced by the Maryland Health Care Commission; and
- Current and historical cost and usage data provided by state agencies and local jurisdictions in addition to the data collected in the inventory.

Definitions⁴

In this report, “**older adults**,” “**seniors**,” and “**the elderly**” refer to individuals aged 65 years and older. However, many analyses in this report use more detailed age cohorts within this

³ Maryland Long-Term Care Planning Act of 2006 (House Bill 1342), Section 2. See Appendix 2 for the legislation.

⁴ In this report, definitions of terms in **boldface** will be provided as the terms are introduced. In addition, a glossary can be found at the end of the report.

population as well as the under age 65 population. “**Baby boomers**” as used in the text refers to individuals born between 1946 and 1964.

“**Disability**” and “**disability counts**” are variously defined by data sources, program eligibility, disease classification, and measures of functional limitations. The broad application of the term disability has led some to conclude that the phrase “people with disabilities” is too broad to be meaningful.⁵ There is a growing consensus, as evidenced in the 2007 report by the Institute of Medicine (IOM) entitled *The Future of Disability in America*,⁶ to adopt the World Health Organization’s use of “disability” as described in the *International Classification of Functioning, Disability and Health (ICF)* released in 2001.⁷ According to the IOM, the ICF uses disability as an “umbrella” term for “physical or mental impairments, activity limitations, and participation restrictions.”

Unless otherwise noted, this report uses the broad conceptual framework of the IOM report, examining current and future use of services by the Maryland population (age five and older) with “disabilities,” including individuals with cognitive and physical disabilities, developmental disabilities, and disabilities resulting from serious and persistent mental illness. While using the IOM conceptual framework, this report more specifically defines disability using two measures that have become standard in many analyses: basic **activities of daily living (ADLs)** and **instrumental activities of daily living (IADLs)**. ADLs consist of those daily activities that are required for the maintenance of life (for example, dressing, bathing, toileting, feeding, and transferring). IADLs are activities that permit one to maintain independence (for example, shopping, taking medications, and handling money). The approach taken by this report defines disability as dependence in one or more ADLs or IADLs.

There are three reasons for using this definitional approach. First, the ability to perform ADLs and IADLs is generally used as one basis for determining need-related eligibility for most long-term care services. Second, most national estimates of disability use this definition, facilitating the comparison of Maryland to other states. Third, forecasts of disability have generally been based on trends in ADLs and IADLs and with these forecasts, more realistic estimates of future disability rates can be established.

“**Costs**” in this report generally refer to projected costs to the State or other level of government. “**Expenditures**” refer to funds actually spent. “**Affordability**” refers to the ability of persons who are not eligible for state- or federally-funded programs to pay for needed services or supports.

⁵ Iezzoni, L. (2002). Using administrative data to study persons with disabilities. *The Milbank Quarterly*. 80(2).

⁶ Field, M.J., & Jette, A. (eds.). (2007, April 24). *The future of disability in America*. Washington, DC: Institute of Medicine, Committee on Disability in America.

⁷ World Health Organization. (2007). International Classification of Functioning, Disability and Health (ICF). <http://www.who.int/classifications/icf/site/icftemplate.cfm?myurl=introduction.html%20&mytitle=Introduction> .

Population Projections

This report uses population projections from the Maryland Department of Planning in estimating future use and costs of long-term services and supports. Table 1.1 shows population projections for 2010, 2020, and 2030.

Table 1.1
Projected Population by Age Group:
Maryland, 2000 – 2030

Age Group	2000 Total Population	2010 Projected Total Population	Percent Change 2000 - 2010	2020 Projected Total Population	Percent Change 2010 - 2020	2030 Projected Total Population	Percent Change 2020 - 2030
5-14	783,453	782,637	-0.1%	813,457	3.9%	868,383	6.8%
15-64	3,560,333	4,012,493	12.7%	4,107,467	2.4%	4,128,405	0.5%
65-74	321,285	392,188	22.1%	592,495	51.1%	722,513	21.9%
75-84	211,120	223,988	6.1%	278,956	24.5%	426,387	52.9%
85+	66,902	112,875	68.7%	131,996	16.9%	164,975	25.0%
Total 5 and Older	4,943,093	5,524,181	11.8%	5,924,371	7.2%	6,310,663	6.5%
Total 65 and Older	599,307	729,051	21.7%	1,003,447	38.0%	1,313,875	30.9%

Source: Maryland Department of Planning. (2006). Total population projections by age, sex and race.

Table 1.2 provides estimates of the number of persons with disabilities in Maryland. For purposes of this report, the physical, self-care, and go-outside-the-home disability types reported on the U.S. Census were thought to be most representative of ADLs and IADLs and therefore the need for long-term care. Hence, disability counts for Maryland were based on these disability types.

Table 1.2
Actual and Projected Non-Institutionalized Residents with a
Physical, Self-Care, or Going-Outside-the-Home Disability:
Maryland, 2000 – 2030

Age Group	2000 Non-Institutional Population	2000 Disability Counts (Actual)	Percent with a Physical, Self-Care or Going-Outside Disability, 2000	2010 Disability Counts (Projected)	2020 Disability Counts (Projected)	2030 Disability Counts (Projected)	Percent Change 2000-2030
5-64	4,241,924	335,543	7.91%	369,928	379,510	385,073	15%
65+	567,652	198,648	34.99%	239,833	331,890	433,366	118%
Total 5 and Older	4,809,576	534,191	11.11%	609,761	711,399	818,439	53%

Sources: Maryland Department of Planning. (October 2006). Total population projections by age, sex, and race, 2006. 2000 U.S. Census. (2000). PUMS five percent data file. http://ftp2.census.gov/census_2000/datasets/PUMS/FivePercent/Maryland.

Estimation Methods

To estimate future service costs in 2010, 2020, and 2033, the intent was to use historical data on utilization of and expenditures for state-funded long-term services and supports in each of the five service categories that are the subject of this report (institutional, in-home, community, mobility/transportation, and housing/residential), as well as for mental health services and services for persons with developmental disabilities. For most services, data from 2001 to 2006 was available and used in the analysis. Where data from 2001 to 2006 was not available, it is noted in the report. Historical data, along with estimation factors specific to each service, was used to develop a regression equation for each service that was determined to best approximate anticipated future trends for that particular service. A logarithmic “best fit” regression line was the basis for calculating rates of change for estimating future use and costs. For a limited number of services, historical data was not available. For these services, projections were based on the most recent usage and expenditure data, trended forward using the best information available on anticipated future population change, utilization, and costs.⁸

Estimated costs were calculated for each service as follows:

- *Number of users of the service*: the projected population multiplied by the percentage of the population expected to use the service.
- *Units of service*: The number of users of the service multiplied by the units of service used by each user.
- *Total costs*: Units of service used by the entire population multiplied by the expected cost per unit of service.

For each service, costs were calculated for each of eight age groupings (age 5-14, 15-29, 30-39, 40-49, 50-64, 65-74, 75-84, and 85+). Each factor (population, percentage using the service, units used per user, and cost per unit) was trended separately. Estimated costs for each service for each of the seven age groupings were aggregated into two groups: under age 65 and aged 65 and over. Finally, estimated costs for all the services in a category were summed to obtain final cost projections.

Estimation factors specific to each service were developed to use in the regression analysis and trending. These were based on well-documented trends in the literature that are expected to affect the utilization and cost of long-term care in the future. Two types of estimation factors were used: (1) disability-related (e.g., documented declines in ADLs and IADLs) and (2) other trends, such as changes in family composition and choice of care setting. The estimation factors used in this analysis reasonably reflect future trends while being conservative. See the Technical Notes in Appendix 3 for more detail on estimation methods. These factors were not applied to mental health services or services for persons with developmental disabilities, as explained in the discussion in Chapter III.

It is important to note that estimates are not inevitabilities. Planning and the introduction by the State of new or improved interventions, especially in the early years, can significantly

⁸ See Technical Notes in Appendix 3 for more information on estimation methods. See Appendix 6 for information on the availability of historical data.

alter outcomes in 2020 and 2030. Introducing a more precise system for targeting services in the next five years, for example, will likely change the use pattern well into the future and have a significant future economic impact. Similarly, failure to maintain current preventive health efforts and outcomes will likely increase future use and costs for all age groups in 2030. This report portrays expected resource consumption in 2010, 2020, and 2030 based on historical trends, expected demographic changes in service use patterns, and the effects of inflation in general and on publicly supported long-term services in particular.

All estimates for future service use and costs in Maryland are premised on certain assumptions. The report does not account for such factors as:

- National health system financing changes, which would significantly increase or decrease the level of state responsibility for health care supports and services;
- Mortality or morbidity changes that would significantly alter the anticipated age distribution and life expectancy of Marylanders (e.g., pandemics);
- Significant unanticipated change in the economic status of Marylanders;
- Policy changes at the local, state, or federal level; and
- Technological advancements permitting persons with disabilities who are mobility dependent to become mobility independent.

Organization of the Report

Chapter II of this report, entitled *Trends in Demographics and Long-Term Services and Supports*, examines the multiple factors that are driving current use of long-term services and supports and analyzes the impact of these factors in future years. The analysis and conclusions in Chapter II establish the general framework and chart the course for many of the trend factors used in Chapter III, entitled *Long-Term Services and Supports in Maryland: Current Utilization and Costs and Future Trends*. These two sections establish the estimates of future use and costs to the State for the broad service/support categories previously noted (institutional, in-home, community, mobility/transportation, and housing/residential), as well as for mental health services and services for persons with developmental disabilities.

The estimates of costs to the State are aggregated, further explained, and summarized in Chapter IV, entitled *Economic Impact to the State*. Local jurisdictions contribute to the long-term services and supports system as well, and some will face an increased burden in the future resulting from a disproportionate growth in the older adult population. Hence, Chapter V examines services currently available in Maryland's local jurisdictions and the adequacy of those services. Chapter V includes a discussion of food subsidies, as does the section on in-home services in Chapter III, as required by the *Long-Term Care Planning Act of 2006*.

Chapter VI examines long-term care programs, policies, and plans in other states as background for future planning in Maryland. The report concludes with a summary of findings in Chapter VII, as well as potential implications for the State in beginning to plan for future long-term care needs.

A glossary of terms can be found at the end of the report, followed by appendices that include technical notes and more information on the inventory of state and local services conducted for this report.

II. TRENDS IN DEMOGRAPHICS AND LONG-TERM SERVICES AND SUPPORTS

This chapter presents information on some demographic and health trends that have influenced the utilization of long-term care in the past and that will likely continue to have an impact on long-term care in the future. Because of the paucity of Maryland-specific information, most of the information in this chapter reflects national trends. However, when information specific to Maryland is available, this is noted. Information presented here served as the basis for the development of estimation factors for the projections of service use and costs presented in Chapter III.

Disability-Related Factors Influencing Future Long-Term Care Use

Trends in Disability for the Aged 65 and Older Population

There has been a general downward trend in disability for the aged 65 and older population.⁹ From 1997 to 2006, the age-adjusted percentage of civilian noninstitutionalized persons aged 65 and older who needed help with personal care from other persons declined from 6.6 percent to 6.1 percent, based on the National Health Interview Survey.¹⁰ Manton and colleagues have presented the most optimistic estimates of disability declines. They calculated that from 1982 to 1999, there was an average annual decline in chronic disability among older people of 1.7 percent, with a decline of 2.6 percent toward the end of this period. Across this period, **active life expectancy** (years of life remaining without disability) increased at a faster rate than life expectancy, suggesting a **compression of morbidity** (the theory that illness and disability will be moved further and further toward the end of life, producing more years without disability).¹¹ In the aged 65 and older age group, there have been age-related differences in activities of daily living (ADLs) and instrumental activities of daily living (IADLs) over time (Table 2.1). Manton and colleagues suggested that the consistent declines in IADL disability and in one to two ADLs among community residents may be due to the availability and use of assistive devices, environmental modifications, and earlier detection of and better treatment for diseases leading to disability.¹² A recent effort to decompose the factors associated with declines in disability in older adults suggests that the declines in disability continued through 2004 and

⁹ Waidmann, T. A., K. Liu. (2000). Disability trends among elderly persons and implications for the future. *Journals of Gerontology*. 55B(5), S298 - S307.

Freedman, V. A., R.F. Schoni, et al. (2007). Chronic conditions and the decline of late-life disability. *Demography*. 44, 459-477.

¹⁰ Centers for Disease Control and Prevention. (2007). *Early release of selected estimates based on data from the 2006 National Health Interview Survey*. http://www.cdc.gov/nchs/data/nhis/earlyrelease/200706_12.pdf.

¹¹ Manton, K. G., X. Gu. (2001). Changes in the prevalence of chronic disability in the United States black and nonblack population above age 65 from 1982 to 1999. *Proceedings of the National Academy of Sciences of the United States of America*. 98(11), 6354-6359.

Manton, K. G., V.L. Lamb. (2005). U.S. mortality, life expectancy, and active life expectancy at advanced ages: Trends and forecasts.

Manton, K. G., X. Gu, et al. (2006). Change in chronic disability from 1982 to 2004/2005 as measured by long-term changes in function and health in the U.S. elderly population. *Proceedings of the National Academy of Sciences of the United States of America*. 103(48), 18374-18379.

Cai, L., J. Lubitz. (2007). Was there compression of morbidity for older Americans from 1992 to 2003? *Demography*. 44, 479-495.

¹² Manton, K. G., X. Gu, et al. (2006). Change in chronic disability from 1982 to 2004/2005 as measured by long-term changes in function and health in the U.S. elderly population. *Proceedings of the National Academy of Sciences of the United States of America*. 103(48), 18374-18379.

that declines in heart and circulatory conditions and in vision limitations are linked to the disability declines.¹³

Table 2.1
Percent with Various Levels of Disability for Community Residents
and Percent in Institutions Among Persons Aged 65 and Older,
1982 and 2004-2005

	1982	2004-2005
Total Age 65+	Percent	Percent
Nondisabled	73.5	81.0
IADL only	5.7	2.4
1-2 ADLs	6.8	5.6
3-4 ADLs	2.9	3.8
5-6 ADLs	3.5	3.2
Institution	7.5	4.0
Age 65-74		
Nondisabled	85.8	91.1
IADL only	4.3	1.8
1-2 ADLs	4.1	3.1
3-4 ADLs	1.8	1.6
5-6 ADLs	2.0	1.5
Institution	2.0	0.9
Age 75-84		
Nondisabled	69.3	78.1
IADL only	7.0	2.5
1-2 ADLs	8.2	6.7
3-4 ADLs	3.4	4.5
5-6 ADLs	3.9	4.0
Institution	8.1	4.1
Age 85+		
Nondisabled	37.9	50.3
IADL only	7.5	4.2
1-2 ADLs	13.3	12.1
3-4 ADLs	6.2	10.2
5-6 ADLs	7.8	7.6
Institution	27.2	15.6

Source: Manton, K. G., Gu, X., et al. (2006). Change in chronic disability from 1982 to 2004/2005 as measured by long-term changes in function and health in the U.S. elderly population. *Proceedings of the National Academy of Sciences of the United States of America*. 103(48), 18374-18379.

¹³ Freedman, V. A., R.F. Schoni, et al. (2007). Chronic conditions and the decline of late-life disability. *Demography*. 44, 459-477.

Use of different data sources and differing definitions of disability and analytical procedures can lead to different results regarding change in disability in the aged 65 and older age group.¹⁴ However, the evidence is strong that disability in the older population has declined and that most of the past decline has been in IADLs rather than ADLs.

There are important gender differences in the disability of the older population. A man who turns 65 years old without a disability has a 44 percent probability of becoming disabled, versus a 72 percent probability for women.¹⁵ Further, because women have longer **life expectancies** (average years of life remaining, based on age-specific death rates), they tend to be disabled for a longer time than men¹⁶ and are more likely to be institutionalized for a disability.¹⁷ On an age-adjusted basis, in 2005, 8 percent of noninstitutionalized older women required assistance with personal and routine care needs, versus 5 percent of men.¹⁸

Age-Related Trends in Disability

Information from the National Health Interview Survey (community residents only) provides age-related trends in persons requiring help with personal care needs over time (Table 2.2). Personal care is a relatively good measure of the types of care associated with ADLs. The non-elderly population exhibits different changes in requirements for personal care assistance between 1997 and 2005 than does the older population.¹⁹ Reasons for these age-related differences are unclear.²⁰

¹⁴ Spillman, B. C. (2003). *Changes in elderly disability rates and the implications for health care utilization and cost*. Washington, DC: The Urban Institute.

Wolf, D. A., K. Hunt, et al. (2005). Perspectives on the Recent Decline in Disability at Older Ages. *The Milbank Quarterly*. 83, 365-395.

Parker, M. G., M. Thorslund. (2007). Health trends in the elderly population: Getting better and getting worse. *The Gerontologist*. 47(2), 150-158.

¹⁵ Cohen, M., M. Weinrobe, et al. (2005). *Becoming disabled after age 65: The expected lifetime costs of independent living*. Washington, DC: AARP.

Dunlop, D. D., S.L. Hughes, et al. (1997). Disability in activities of daily living: Patterns of change and a hierarchy of disability. *American Journal of Public Health*. 87(3), 378-383.

¹⁶ Fried, L. P., J.M. Guralnik. (1997). Disability in older adults: Evidence regarding significance, etiology, and risk. *Journal of the American Geriatrics Society*. 45, 92-100.

¹⁷ Manton, K. G., K.C. Land. (2000). Multidimensional disability/mortality trajectories at ages 65 and over: The impact of state dependence. *Social Indicator Research*. 51(2), 193-221.

¹⁸ Robinson, K. (2007). *Trends in health status and health care use among older women*. Washington, DC: U.S. Department of Health and Human Services, National Center for Health Statistics.

¹⁹ Centers for Disease Control. (2007). *Trends in health and aging*. Washington, DC: National Center for Health Statistics.

²⁰ Institute of Medicine. (2007). *The future of disability in America*. Washington, DC, The National Academy Press.

Table 2.2
Percent of Community Residents Requiring
Assistance with Personal Care,
1997 and 2005

Age	1997	2005
18-24	0.4	0.6
25-44	0.5	0.5
45-64	1.1	1.4
65-74	3.4	3.3
75-84	7.9	6.8
85+	21.3	19.1

Source: Centers for Disease Control. (2007). *Trends in health and aging*. Washington, DC, National Center for Health Statistics.

Recent tabulations completed for the Institute of Medicine, based on the National Health Interview Survey, address disability in the younger age group (Table 2.3). Rather than clarifying disability change in the non-elderly population, these statistics point to the difficulty in understanding the nature and extent of change in disability among those below the age of 65. In particular, there are substantial year-to-year variations, which suggest that there are problems with measurement in the younger age groups.

Table 2.3
Percent of Children Aged 5-17 with
Activity Limitations, by Type of Limitation,
1997 and 2004

	1997	2004
Needs Help with ADL	0.55	0.65*
Has difficulty walking	0.25	0.29

*There is substantial year-to-year variation in this variable (for example, 2003 was 0.46), so the 1997-2004 change should be considered with extreme caution.

Source: Institute of Medicine. (2007). *The future of disability in America*. Washington, DC, The National Academy Press.

The rates of chronic diseases that are often associated with disability differ by age group, with some increases and some declines, but the majority reflect an overall increase in the prevalence of chronic diseases (Table 2.4).

Table 2.4
Prevalence of Chronic Diseases that Are Associated with Disability in the U.S.
Non-Institutionalized Population by Age and Year,
1997-1998 and 2004-2005

Disease/Age	1997-1998	2004-2005
Diabetes		
Age 18-24	0.7%	1.5%
Age 25-44	1.8%	3.5%
Age 45-64	9.4%	11.1%
65+	13.2%	15.8%
Stroke		
Age 18-24	--	0.3%
Age 25-44	0.4%	0.8%
Age 45-64	3.0%	2.8%
65+	8.1%	8.4%
Kidney disease		
Age 18-24	0.6%	0.6%
Age 25-44	0.9%	1.1%
Age 45-64	2.1%	1.9%
65+	3.3%	3.9%
Heart disease		
Age 18-24	3.2%	3.7%
Age 25-44	5.0%	6.2%
Age 45-64	15.4%	14.9%
65+	31.8%	28.9%

Source: Centers for Disease Control and Prevention (2007). *Trends in health and aging*. National Center for Health Statistics. <http://209.217.72.34/aging/TableViewer/tableView.aspx>.

Future Disability

Persons with more education and higher incomes tend to experience lower levels of disability.²¹ Analyses of past trends suggest that education has had an especially strong impact on the disability declines,²² although the improvements are primarily experienced by those with a college education.²³ The education-and-disability association bodes well for reduced disability rates in the future, because level of educational attainment is increasing in the older population.

²¹ Alecxih, L. (2006). *Nursing home use by "oldest old" sharply declines*. Falls Church, VA: The Lewin Center for Long-Term Care. Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century. (2002). *A quiet crisis in America: A report to Congress*. Washington, DC: Superintendent of Documents.
 Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A Report to the Nation on Independent Living and Disability*. Washington DC: AARP Public Policy Institute.
 Waidmann, T. A., K. Liu. (2000). Disability trends among elderly persons and implications for the future. *Journals of Gerontology*. 55B(5), S298-S307.

²² Waidmann, T. A., K. Liu. (2000). Disability trends among elderly persons and implications for the future. *Journals of Gerontology*. 55B(5), S298-S307.

²³ Freedman, V. A., Schoni, R. F., et al. (2007). Chronic conditions and the decline of late-life disability. *Demography*. 44, 459-477.

Some investigators have suggested that there may be an increase in the disability of the older population, or at least a leveling off in 2020, due to identified increases in obesity among persons aged 30 to 49 and other factors.²⁴ Obesity is a factor in the early onset of severe disability among community-dwelling impaired older adults.²⁵ However, other research has indicated that the impact of obesity on disability has decreased in the last three decades.²⁶ Therefore, while obesity may continue to be a serious problem, its impact on diabetes and disability may be less than was initially anticipated. A recent analysis of the factors leading to over-time disability change among older adults found that obesity was associated with a very small (less than one fifth of a percent), though statistically significant, increase in disability.²⁷ Two mediating factors are that medications and other treatments have led to decreases in the percentage of obese persons who experience Type II diabetes, and persons who develop Type II diabetes currently manage their blood sugar better than in earlier periods.

Implications Regarding Disability Trends

The best evidence suggests that there will be a continuation of the declines in disability among older people. For the most part, these trends will represent improvements in IADL impairment more than ADL improvements.²⁸ It would appear that the “**technology of self-care,**” (those assistive devices that allow individuals to manage their daily activities on their own without human intervention, in spite of disabilities) has grown at a much faster rate than the population and will continue to do so into the future.²⁹

- Improvements in the disability of older people will have a major effect on those services that are more oriented toward supporting IADL needs.
- On the other hand, pushing IADL disability into later ages should also mean (in more distant future years, and to a lesser degree) that ADL impairment will also be pushed into older ages, which should ultimately influence services supporting ADLs.

²⁴ Lakdawalla, D. N., D. P. Goldman, et al. (2005). The health and cost consequences of obesity among the future elderly. *Health Affairs*. (Web Exclusive): W5, R30-41.

Olshansky, S. J., D. J. Passaro, et al. (2005). A potential decline in life expectancy in the United States in the 21st century. *The New England Journal of Medicine*. 352(11), 1138-1145.

Bhattacharya, J., B. Shang, et al. (2005). Technological advances in cancer and future spending by the elderly. *Health Affairs*. (Web Exclusive): W5, R53-66.

²⁵ Wu, Y., H. Huang, et al. (2007). Age distribution and risk factors for the onset of severe disability among community-dwelling older adults with functional limitations. *Journal of Applied Gerontology*. 26(3), 258-273.

²⁶ Flegal, K. M., B. I. Graubard, et al. (2005). Excess deaths associated with underweight, overweight, and obesity. *Journal of the American Medical Association*. 293, 1861-1867.

Soldo, B. J., O. S. Mitchell, et al. (2006). *Cross-cohort differences in health on the verge of retirement*. Working Paper. Cambridge, MA: National Bureau of Economic Research.

²⁷ Freedman, V. A., Schoni, R. F., et al. (2007). Chronic conditions and the decline of late-life disability. *Demography*, 44, 459-477.

²⁸ Miller, E. A., W. G. Weissert. (2000). Predicting elderly people's risk for nursing home placement, hospitalization, functional impairment, and mortality: A synthesis. *Medical Care Research and Review*. 57, 259-297.

Waidmann, T. A., K. Liu. (2000). Disability trends among elderly persons and implications for the future. *Journals of Gerontology*. 55B(5), S298-S307.

²⁹ Russell, J. N., G. E. Hendershot, et al. (1997). *Trends and differential use of assistive technology devices: United States, 1994*. Washington, DC: U.S. Department of Health and Human Services, National Center for Health Statistics.

- There is little to suggest that the downward trend in disability of those aged 65 and older will change dramatically between 2010 and 2030.
- Given the very limited and inconsistent available information regarding the population below age 65, it not feasible to project a disability-related rate of change for this group.

Family and Informal Sources of Care

Family and other sources of informal care are the backbone of long-term care in the community. Estimates of the value of donated informal care vary from \$218 billion to \$350 billion per year.³⁰ Family members are currently caring for people who are more disabled than they were in the past. Among persons receiving care from family members, 72.4 percent received assistance with one or more ADLs in 1999, versus 60.6 percent in 1989. Those receiving family care for five or six ADLs increased from 17.5 percent to 25.6 percent during the same period.³¹

The stress associated with family caregiving is a significant factor in the institutionalization of older disabled persons and young persons with developmental disabilities.³² However, family caregiving does not end with institutionalization. Approximately one-third of nursing home residents who have private long-term care insurance continue to receive some level of family support for ADLs and IADLs. The specific amount of family support provided to these institutionalized individuals was not determined.³³

In spite of the importance of family caregiving, family and other informal care has been declining in recent years relative to formal care,³⁴ and there are numerous reasons to assume that these declines will continue into the future, thereby generating an increasing demand for formal long-term care services and supports of all types. Family size fell from 3.8 members in 1940 to 3.1 in 2000 and is expected to be 2.8 by 2040.³⁵ The civilian labor force participation of women is expected to increase from 51.5 percent in 1980 to 62.2 percent in 2010, and it has been suggested that in the future, women may be less willing to sacrifice their careers by reducing their work time to provide long-term care.³⁶ Because women tend to be the primary informal

³⁰ AARP Public Policy Institute (2007). Valuing the invaluable: A new look at state estimates of the economic value of family caregiving. *Data Digest*. Washington, DC: AARP Public policy Institute.

Holtz-Eakin, D. (2005). *The cost and financing of long-term care services*. Washington, DC: U.S. Congressional Budget Office.

³¹ Wolff, J. L., J. D. Kasper. (2006). Caregivers of frail elders: updating a national profile. *The Gerontologist*. 46(3), 344-56.

³² Spillman, B., S. Long. (2007). *Does high caregiver stress lead to nursing home entry?* Washington, DC: Department of Health and Human Services, Office of Disability, Aging and Long-Term Care Policy.

Sherman, B. R., J. J. Coccozza. (1984). Stress in families of the developmentally disabled: A review of factors affecting the decision to seek out-of-home placements. *Family Relations*, 33(1), 95-103.

³³ Cohen, M. A., J. S. Miller, et al. (2006). *Service use and transitions: Decisions, choices, and care management among an admissions cohort of privately insured disabled elders*. Washington, DC: Office of Disability, Aging, and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation, & U.S. Department of Health and Human Services.

³⁴ Liu, K., K. G. Manton, et al. (2000). Changes in Home Care use by disabled elderly persons: 1982 - 1994. *Journals of Gerontology*. 55B(4), S245-S253.

³⁵ Congressional Budget Office. (2004). *Financing long-term care for the elderly*. Washington, DC: U.S. Congressional Budget Office.

³⁶ Burwell, B. O., B. Jackson. (1994). *The disabled elderly and their use of long-term care*. Washington, DC: U.S. Department of Health and Human Services.

caregivers, their availability as unpaid caregivers will likely increase the demand for paid long-term care. Furthermore, there will be higher percentages of older people living alone in the future.³⁷ Nationally, the percentage of persons living alone has increased for men and women aged 50-64 and especially for women aged 65 and older (Table 2.5). The divorce rates in 2000 were higher than in 1980 across all age groups within the 45 and older cohort (Table 2.6).³⁸ Because divorce disrupts established relationships and responsibilities, it can lead to unmet need for long-term care services when disability occurs. Widowhood rates remain higher for women than men, chiefly because men are more likely to re-marry and to marry younger women. A high percentage of widowed women live in poverty, and poverty is associated with higher rates of long-term care disability.³⁹ **Poverty** is a set of financial thresholds defined by the federal government based on pre-tax income, family size, and age of family members. In some cases (for example, women in the paid labor market) a portion of the demand generated for long-term care through reduced family care can be met through the direct purchase of formal services (through out-of-pocket and insurance sources) by those who are relatively well off financially. However, in other cases (for example, widowhood and divorce) the demand will likely increase the need and eligibility for Medicaid and other state-funded services. Johnson and colleagues have estimated that unpaid help from children for older disabled people will decline from 28 percent in 2000 to 24 percent in 2040. This reduction in unpaid help will chiefly be due to changes in family arrangements and in women's employment circumstances, with the effect of increasing the demand for formal services, especially for personal care.⁴⁰

Table 2.5
Percent of One-Person Households by Age and Sex,
1980 and 2000

Age	Men		Women	
	1980	2000	1980	2000
Under 65	5.6%	9.4%	5.5%	8.1%
65+	1.4%	2.4%	5.6%	7.3%

Source: Hobbs, F. and N. Stoops (2002). *Demographic trends in the 20th Century. Census 2000 Special report CENSR-4*. Washington, DC, U.S. Department of Commerce, Economics and Statistics Administration.

³⁷ Hobbs, F. and N. Stoops. (2002). *Demographic trends in the 20th century. Census 2000 Special Report CENSR-4*. Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration.

³⁸ Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the Nation on independent living and disability*. Washington, DC: AARP Public Policy Institute.

³⁹ Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century. (2002). *A quiet crisis in America: A report to Congress*. Washington, DC: Superintendent of Documents.
Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the Nation on independent living and disability*. Washington DC: AARP Public Policy Institute.
Karamcheva, N., A. H. Munnell. (2007). *Why are widows so poor?* Boston, MA: Boston College Center for Retirement Research.

⁴⁰ Johnson, R. W., D. Toohey, et al. (2007). *Meeting the long-term care needs of Baby Boomers: How changing families will affect paid helpers and institutions*. Washington, DC: Urban Institute.

Table 2.6
Percent of Divorced or Separated Individuals by Age,
1980 and 2000

Age	Men		Women	
	1980	2000	1980	2000
45-54	8%	17%	13%	21%
55-64	9%	15%	9%	19%
65-74	5%	10%	6%	11%
75-84	4%	6%	4%	6%
85+	3%	5%	2%	4%

Source: Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the nation on independent living and disability*. Washington DC, AARP Public Policy Institute.

Implications Regarding Family and Informal Sources of Long-Term Care

Changes in family and other sources of informal care will significantly influence the nature of long-term care services and supports in the future.

- The family and other sources of informal long-term care will diminish as a resource.
- In many cases, the reduction in family support will place greater dependence on formal long-term care, both private and public, especially personal care.
- In some cases, such as the greater labor force participation of women, the reductions in family caregiving may be associated with increased financial resources to purchase the long-term care required.
- Many of the declines in family caregiving will result in more demand for public services.

Long-Term Care Preferences

Seventy-four percent of persons aged 50 and older and 86 percent of persons aged 75 and older strongly agree that they would like to stay in their current homes for as long as possible.⁴¹ Similar information is not available for younger populations. In a survey of 1,503 persons aged 40-70, only 10 percent rated receiving care as a resident of a nursing home as a very agreeable setting for long-term care, while 30.1 percent rated an assisted living center as a very agreeable setting.⁴² Recent surveys in Arkansas of residents aged 40 and older and in New York of people aged 50 and older express very strong desires to receive long-term care in the home.⁴³ The popularity of **consumer-directed care** (a model of service delivery designed to increase the role

⁴¹ Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the Nation on independent living and disability*. Washington DC: AARP Public Policy Institute.

⁴² Eckert, J. K., L. A. Morgan, et al. (2004). Preferences for receipt of care among community-dwelling adults. *Journal of Aging & Social Policy*. 16(2), 49-65.

⁴³ Binette, J. (2007). *Long-term care choices: A survey of Arkansas residents age 40+*. Research Report. Washington, DC: AARP.
 Burton, C. and K. Bridges (2007). *Long-term care: An AARP survey of New York residents age 50+*. Washington, DC: AARP Knowledge Management.

of consumers in identifying, purchasing, and monitoring their services) in states that have implemented such programs also demonstrates the interest in living in the community and exercising control over who provides care. The satisfaction level of persons in these programs is quite high.⁴⁴

The desirability of choosing among a variety of alternative long-term care settings is further demonstrated by the fact that individuals who have long-term care insurance and have not yet filed a claim gave the following as their intended care setting: home (88 percent), assisted living facility (9 percent), nursing home (1 percent), and other (2 percent). Among the private insurance long-term care recipients who were receiving care in their homes, 93 percent were receiving care in their first-choice location. Among those receiving care in assisted living facilities, 75 percent said it was their first-choice location. Among those receiving care in nursing homes, 65 percent felt it was their first-choice location.⁴⁵

As noted above, assisted living is viewed as a more desirable setting for long-term care than nursing homes. Assisted living tends to be privately financed through direct out-of-pocket and/or insurance sources, although there have been federal Medicaid waiver programs that reimburse for assisted living for residents who meet the basic nursing home eligibility criteria. There has been a change in the nature of people who enter and utilize assisted living, with more assisted living residents having ADL disability, in addition to IADL disability. The utilization of assisted living therefore probably reduces the utilization of traditional home and community care and, perhaps to a larger degree, nursing home care. The length of stay in assisted living averages between 2.5 and 3 years. Assisted living residents who leave the facility generally move to a nursing home because of increased care needs.⁴⁶ The estimated growth of assisted living nationally is from 507,414 units in 1999 to 712,707 in 2020.⁴⁷ Although assisted living remains less expensive than nursing home care, the costs are rising. Thus, it is very likely that some individuals who would otherwise opt for assisted living will find the costs prohibitive.⁴⁸

Implications Regarding Preferences for Long-Term Care

In general, the public has very limited interest in nursing home care and is most interested in the forms of long-term care that permit them to remain in less institutional settings. There is also a strong preference toward self-directed, not agency-directed, services.

⁴⁴ Robert Wood Johnson Foundation. (2006). *Choosing independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ: Robert Wood Johnson Foundation.

⁴⁵ Cohen, M. A., J. S. Miller, et al. (2006). *Service use and transitions: Decisions, choices, and care management among an admissions cohort of privately insured disabled elders*. Washington, DC: Office of Disability, Aging, and Long-Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation, & U.S. Department of Health and Human Services.

⁴⁶ Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the Nation on independent living and disability*. Washington DC: AARP Public Policy Institute.

⁴⁷ Commission on Affordable Housing and Health Facility Needs for Seniors in the 21st Century. (2002). *A quiet crisis in America: A report to Congress*. Washington, DC: Superintendent of Documents.

⁴⁸ Hawes, C., M. Rose, et al. (1999). *A national study of assisted living for the frail elderly: Results of a national survey of facilities*. Beachwood, OH: Myers Research Institute.

- Nursing home care will continue to be used more by those who have the most difficult health problems, those with no informal support, and those who cannot afford community alternatives.
- Assisted living will continue to grow to the extent that it remains an affordable alternative.
- Any effort to promote consumer-directed care is likely to be highly popular, and it would be important to carefully structure eligibility requirements and to take advantage of the potential for reduced overhead expenses.
- Because people tend to want to receive their long-term care in their own homes, there will be an increasing emphasis on in-home and community services that support remaining in the home.

Affordability of Long-Term Care Services and Supports

With increasing life expectancy, elderly people will need to be able to extend the use of their available assets over a longer period than in the past. The ability to purchase long-term care services and supports in the future will depend on several interrelated trends. This section presents some of the major factors that will influence the affordability of long-term care services and supports.

Work and Income

For many decades, there has been a trend toward retiring at earlier ages. However, recent data suggest that this trend has flattened.⁴⁹ From 1998 to 2005, the labor force participation of men aged 65 and older increased by 20 percent and of women by 34 percent.⁵⁰ A 2004 Roper survey of baby boomers (defined as those born between 1946 and 1964) found that 79 percent planned to work for pay after retirement.⁵¹ Although the financial need to continue working is one very likely factor in the expectations of working into older ages, another potential explanation is declines in disability.⁵² The employment rates of persons aged 25 to 64 with disabilities is well below those without disabilities. According to National Health Information Survey Disability Supplement, 83.8 percent of persons 25 to 61 years of age who were without a disability were employed, versus 53.8 percent of those in the same age group with a disability. In addition, the incomes of persons aged 25 to 61 with disabilities are far more limited than those in the same age group who do not have a disability. In 1995 (the most recent year available) the family-size adjusted median annual income for persons with a disability was \$16,200, versus \$23,900 for persons without disabilities.⁵³

⁴⁹ Friedberg, L. (2007). *The recent trend towards later retirement. An issue in brief*. Chestnut Hill, MA: Center for Retirement Research at Boston College.

⁵⁰ Government Accountability Office. (2006). *Baby Boom generation: Retirement of Baby Boomers is unlikely to precipitate dramatic decline in market returns, but broader risks threaten retirement security*. Washington, DC: Government Accountability Office.

⁵¹ AARP. (2004). *Baby Boomers envision retirement II: Survey of Baby Boomers' expectations for retirement*. Washington, DC: AARP.

⁵² Munnell, A. H., J. Libby. (2007). *Will people be healthy enough to work longer?* Chestnut Hill, MA: Boston College Center for Retirement Research.

⁵³ Magg, E. (2006). *A guide to disability statistics from the National Health Interview Survey-Disability Supplement*. Washington, DC: The Urban Institute.

One reason that disabled persons tend to have lower incomes is that those who experience a health problem that limits ADLs tend to leave the labor force. Among those who retire relatively early (ages 55-59), 35 percent report that poor health is a very important factor in their decision.⁵⁴ Health events lead to lost income and increased medical expenses, so that the cumulative impact of these two factors results in a total income loss of \$49,000 among those who experience a major health event such as onset of cancer, heart disease, stroke, or lung disease. The lost income is generally never regained in later years, which results in a significant loss of wealth.⁵⁵ On the other hand, those elderly people who continue to work generate more financial resources. Working persons aged 77-79 have bequeathable assets of \$226,500, versus \$112,300 for those who no longer work.⁵⁶

Given the movement among employers away from defined retirement benefits toward defined contribution plans (Table 2.7), there is increasing concern about whether future seniors will have sufficient financial resources to support their long-term care needs. Poterba, Venti, and Wise developed estimates of future 401(k) resources, based upon current contributions and various rates of return. **401(k) plans** are tax-deferred defined contribution savings plans, sponsored by employers. Assuming recent historical rates of return, the average 401(k) assets of persons attaining age 65 will increase from \$29,700 in 2000, to \$137,000 in 2020, to \$452,000 by 2040 (in 2000 dollars). Assuming a more realistic rate of return of historical rates less 3 percent, the average 401(k) assets would be \$269,000 in 2040. These researchers concluded that the future pension assets of retirees will be considerably greater than current retiree assets. Although their estimates offer a positive picture, they do not address the percentages of retirees who will have no or limited assets. Furthermore, home- and community-based services and institutional long-term care expenses can quickly deplete the estimated assets.⁵⁷

⁵⁴ National Institute on Aging. (2007). *Growing old in America: The Health and Retirement Study*. Washington, DC: U.S. Department of Health and Human Services, national Institute on Aging.

⁵⁵ Smith, J. P. (2003). *Consequences and predictors of new health events: Working paper 10063*. Cambridge, MA: National Bureau of Economic Research.

⁵⁶ Haider, S., D. Loughran (2001). *Elderly labor supply: Work or play? RAND Working Paper Series*. Santa Monica, CA: RAND.

⁵⁷ Poterba, J., S. Venti, et al. (2007). *New estimates of the future path of 401(k) assets*. Cambridge, MA: National Bureau of Economic Research.

Table 2.7
Pension Plans of Workers in Different Birth Cohorts

Birth period	Defined benefit only	Defined contribution only	Both defined benefit and defined contribution
1956-1964	16.8%	21.6%	22.1%
1946-1955	23.5%	18.6%	22.2%
1936-1945	34.1%	10.7%	16.5%

Source: Government Accountability Office. (2006). *Baby Boom Generation: Retirement of baby boomers is unlikely to precipitate dramatic decline in market returns, but broader risks threaten retirement security*. Washington, DC, Government Accountability Office.

NOTE: **Defined benefit** refers to a retirement plan that guarantees a specific benefit based upon several factors, including years of service and wages. **Defined contribution** refers to a retirement plan in which the employer guarantees that a specified amount of funds and/or stocks will be placed in an employee's retirement savings account.

Debt and Bankruptcy

Boomers carry considerably more debt than prior generations. The U.S. Government Accountability Office's (GAO's) analysis of the Federal Reserve's Survey of Consumer Finances suggests that the debt-to-asset ratio (comprising all debt and all assets) of persons aged 52 to 58 increased from 24.5 percent in 1992 to 70.9 percent in 2004.⁵⁸ These figures suggest that many boomers will be paying off debt well into old age, which may be one reason they plan to work after retirement. Entering old age with debt may also limit their access to funds for purchasing long-term care services.

The share of Americans aged 45 and older who filed for bankruptcy increased from 27 percent of all filers in 1994 to 39 percent in 2002. This is a higher rate of growth in bankruptcies than any age group and is a faster growth rate than the population growth of this age group. Among the reasons offered for these increased bankruptcies are growing mortgage debt and rising health care costs.⁵⁹

Financial Assets and Savings

Returns on financial assets (stocks, bonds, Individual Retirement Accounts, Keogh accounts, and assets in annuities and trusts) are an important element of the overall financial well-being of many older Americans. In 2004, over half of persons aged 65 and older received some income from financial assets, and income from financial assets accounted for approximately 12.5 percent of the total income of older persons. According to the GAO, 10 percent of the baby boomer cohort owns two-thirds of the cohort's total financial assets (which amounted to \$7.63 trillion in 2004), excluding assets held in defined benefit plans. This

⁵⁸ AARP. (2004). *Baby Boomers envision retirement II: Survey of Baby Boomers' expectations for retirement*. Washington, DC: AARP.

⁵⁹ Golmant, J., T. Ulrich. (2007). Aging and bankruptcy: The Baby Boomers meet up at bankruptcy court. *American Bankruptcy Institute Journal*, 15(1), 25-27, 53-54.

wealthiest 10 percent of boomers holds, on average, \$1.2 million in financial assets, and an additional \$2 million in other assets, including housing. Baby boomers in the lower 90 percent of total wealth had median financial assets of \$45,900 in 2004. Thirty-three percent of the baby boomer cohort owns no financial assets.⁶⁰ Disabled persons, in general, have limited income, which should influence their ability to build assets. Among persons aged 25 to 61, the percentage of persons with a disability with incomes below the poverty level is more than twice that of persons without a disability.⁶¹ Workers with disabilities often have inconsistent work histories and shorter job histories, which limit their incomes.⁶²

One way of measuring the ability of future cohorts to pay for long-term care is through calculation of their risk of falling more than 10 percent short of a target retirement income that is determined to maintain their pre-retirement lifestyle. Those whose retirement income is expected to fall below this level are considered to be financially “at risk.” Among people aged 51-61, approximately 20 percent fell below this standard in 1992, versus 32 percent in 2004.⁶³ Summaries of studies of retirement savings generally suggest that a relatively high percentage—between one-quarter and one-half—of households are not saving enough for retirement. This is especially true of those with modest incomes, those with less education, and those who do not own a home.⁶⁴

Some individuals have warned that the spending down of financial assets of the baby boomer cohort upon retirement will lead to disruptions in the financial markets, which could ultimately influence the boomers’ financial status. A GAO analysis suggests that the spend-down will occur gradually and over a relatively long time frame, which will allow the markets to absorb the transfers of funds. The GAO determined that the impact of the spend-down of boomer assets would lead to a 1 percent or smaller reduction in annual returns below what would otherwise be anticipated.⁶⁵

Housing as an Asset

More than 75 percent of baby boomers own their housing, and a large proportion of all of the boomers’ assets is tied into their housing. On the other hand, less than 10 percent of adults with disabilities own their homes.⁶⁶ In Maryland, 32.5 percent of persons aged 50 and older

⁶⁰ Government Accountability Office. (2006). *Baby Boom generation: Retirement of Baby Boomers is unlikely to precipitate dramatic decline in market returns, but broader risks threaten retirement security*. Washington, DC: Government Accountability Office.

⁶¹ Magg, E. (2006). *A guide to disability statistics from the National Health Interview Survey-Disability Supplement*. Washington, DC: The Urban Institute.

⁶² Kaye, H. S. (2001). *Disability watch: Volume 2; the status of people with disabilities in the United States*. San Francisco: University of California Disability Statistics Center.

⁶³ Munnell, A. H., A. Webb, et al. (2007). *Is there really a retirement savings crisis? An NRRI analysis*. Boston, MA: Center for Retirement Research.

⁶⁴ Congressional Budget Office. (2004). *The retirement prospects of Baby Boomers*. Washington, DC: U.S. Congressional Budget Office. Congressional Budget Office. (2003). *Baby Boomers' retirement prospects: An overview*. Washington, DC: U.S. Congressional Budget Office. Gale, W. G., M. Iwry, et al. (2004). *Retirement saving and long-term care needs: An overview*. Washington, DC: The George Washington University Retirement Security Project.

⁶⁵ Government Accountability Office. (2006). *Baby Boom generation: Retirement of Baby Boomers is unlikely to precipitate dramatic decline in market returns, but broader risks threaten retirement security*. Washington, DC: Government Accountability Office.

⁶⁶ White House. (2006). New Freedom Initiative. <http://www.whitehouse.gov/news/freedominitiative/freedominitiative.html>.

owned their homes free and clear in 2003/04, versus 40.7 percent in 1990. The percentage who had a mortgage was 47.6 percent in 2003/04, versus 35.7 percent in 1990. Thus, while home ownership among persons aged 50 and older in Maryland has increased from 76.4 percent to 79.9 percent, this ownership trend has been accompanied by higher percentages with mortgage debt.⁶⁷

Long-Term Care and Health Expenditures

According to some experts, long-term care expenses are a leading cause of catastrophic out-of-pocket expenses for frail older people and their families.⁶⁸ Disability and poverty are positively correlated. At all ages, those who are disabled tend to have higher poverty rates than those who are not disabled (Table 2.8).

It is important to note that a poverty income does not assure Medicaid eligibility. For example, data from the 2002 Health and Retirement Study indicates that nationally in 2002, only 42.9 percent of all older non-institutionalized people with incomes below the poverty level were covered by Medicaid. Furthermore, in the same year, 39 percent of those without disabilities were covered, versus a Medicaid coverage rate of 49.1 percent of those with a disability.⁶⁹

Table 2.8
Poverty Rates Among Persons With and Without a Disability,
by Age Cohort, 2000

Disability Status	Age 5-15	Age 16-64	Age 65+
With disability	25.0%	18.8%	13.2%
Without disability	15.7%	9.6%	7.4%

Source: U.S. Census Bureau. *Census 2000 summary file 3.*

Johnson and Penner have developed financial forecasts suggesting that between 2000 and 2030, expenditures for health-related spending will be a much larger share of after-tax income of older people than is the case today, and that the increased financial burden for health care will be especially great for those who will not be eligible for Medicaid under current rules.⁷⁰ Out-of-

⁶⁷ Kochera, A. (2006). *State housing profiles: A special analysis of the Census Bureau's American Community Survey*. Washington, DC: AARP Public Policy Institute.

⁶⁸ Lee, J., H. Kim. (2003). An examination of the impact of health on wealth depletion in elderly individuals. *Journal of Gerontology: Social Sciences*. 58(2), S120-S126.

Johnson, R., J. M. Weiner. (2006). *A profile of frail older Americans and their caregivers. The retirement Project, Occasional paper No. 8.* Washington, DC: Urban Institute.

⁶⁹ Johnson, R., J. M. Weiner. (2006). *A profile of frail older Americans and their caregivers. The retirement Project, Occasional paper No. 8.* Washington, DC: Urban Institute.

⁷⁰ Johnson, R. W., R. G. Penner. (2004). *Will health care costs erode retirement security? An Issue in Brief*. Washington, DC: Center for Retirement Research at Boston College.

pocket spending accounted for approximately one-third of all long-term care expenditures in 2004.⁷¹

The Congressional Budget Office (CBO) estimated that in 2004, the average total annual cost of long-term care for all older people with a functional impairment was \$24,000 per person. The out-of-pocket costs averaged \$5,000. This figure includes impaired individuals who reside in the community as well as those in nursing facilities. CBO estimated that 38.6 percent of institutional long-term care and 19.5 percent of all non-institutional home-based long-term care was paid out-of-pocket.⁷²

Although assisted living remains a less expensive alternative long-term setting for those who are in a position to use it, nearly all assisted living is private pay. Costs of assisted living have risen substantially and may be expected to continue to increase as assisted living facilities accommodate people who are more disabled and as staff shortages lead to wage increases. Although monthly rates vary considerably across regions of the nation, the national average base rate in 2006 was \$2,968 for a private room with a private bath, versus \$2,524 for a similar room in 2004, an increase of 17.6 percent in two years. Extra monthly charges for individuals with dementia ranged from \$750 to \$2,200.⁷³

Knowledge/Expectations

Only 27 percent of older people report that they have sufficient income and assets to manage a \$150,000 long-term care expense over a three-year period without impoverishment.⁷⁴ A recent survey of New York residents aged 50 and older found that more than 60 percent were very or somewhat worried about being able to pay for long-term care services.⁷⁵ Forty-four percent of persons aged 55-59 are concerned that they will have insufficient funds to live comfortably past age 85, and 18 percent expect that when they stop working they will have no access to retirement benefits, such as employer retirement, 401(k), or SEP (simplified employee pension) plans. **SEP** plans are retirement plans for self-employed people or owners of small companies that allow them to accrue tax-deferred savings for retirement. It is of considerable concern that 59 percent of those aged 55-59 with total assets of \$150,000 to \$250,000 are highly confident that they will live comfortably in a long retirement.⁷⁶

A National Institute on Aging study merged data from the Health and Retirement Survey with information from the Social Security Administration and from company pension plans for

⁷¹ Congressional Budget Office. (2004). *Financing long-term care for the elderly*. Washington, DC: U.S. Congressional Budget Office.

⁷² Holtz-Eakin, D. (2005). *Testimony before the Subcommittee on Health*. Washington, DC: House Committee on Ways and Means.

⁷³ MetLife Mature Market Institute. (2006). *The MetLife market survey of assisted living costs*. New York, NY: MetLife Mature Market Institute.

⁷⁴ Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the Nation on independent living and disability*. Washington DC: AARP Public Policy Institute.

⁷⁵ Burton, C., K. Bridges. (2007). *Long-term care: An AARP survey of New York residents age 50+*. Washington, DC: AARP Knowledge Management.

⁷⁶ MetLife Mature Market Institute. (2006). *Living longer, working longer: The changing landscape of the aging workforce - A MetLife study*. New York, NY: MetLife Mature Market Institute.

respondents in order to determine how much people know about their retirement benefits. Fewer than half of those studied correctly identified their pension plan type, and fewer than half correctly identified, within one year, their age of eligibility for full retirement. People who were within three years of retirement were only slightly more likely to provide correct responses to these basic retirement planning questions.⁷⁷

A very telling research result is that among older Americans who live independently, only 15 percent report that it is extremely or very likely that they will need assistance with ADLs as they age. Further, 25 percent of individuals in this position indicate that they have long-term care insurance, a reported purchase rate far higher than the 10 percent reported by experts.⁷⁸ Also, 29 percent of older Americans who live independently believe that if they need long-term care, it will be covered by Medicare. Therefore, many older people believe that they will not need long-term care or that they are prepared financially for it, and these individuals may well become impoverished when they do require long-term care support. Seventy-five percent of baby boomers do not know the cost of long-term care insurance, with a majority overestimating the cost by more than 300 percent.⁷⁹

In any discussion of future ability to pay for long-term care, it is reasonable to consider future Social Security and Medicare benefits since these provide direct financial benefits to retirees through income or reduced health care costs. In 2004, approximately one-half of retirees received at least half of their total income from Social Security. Recent estimates suggest that by 2017, Social Security payouts will exceed payroll taxes.⁸⁰ At this point, Trust Fund reserves will be required, which could influence market forces. In addition, the Medicare Hospital Insurance Trust Fund will be exhausted in 2018, with possible impacts on market forces and on the financial status of retirees.⁸¹

Long-Term Care Insurance

The number of long-term care insurance policies written each year grew from 300,000 in 1988 to 900,000 in 2002. Approximately 9.2 million policies were sold during this period, and 72 percent were still in effect as of 2004.⁸² In 2003, approximately 11 percent of older adults owned a long-term care insurance policy.⁸³ This increase is beginning to be felt in total

⁷⁷ National Institute on Aging. (2007). *Growing old in America: The Health and Retirement Study*. Washington, DC: U.S. Department of Health and Human Services, national Institute on Aging.

⁷⁸ Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the Nation on independent living and disability*. Washington DC: AARP Public Policy Institute.

⁷⁹ Senior Journal.Com *Baby Boomers get an 'F' in planning for old age*. <http://seniorjournal.com/NEWS/Retirement/07-02-1BoomerF.htm>.

⁸⁰ Reno, V. P., J. Gray. (2007). *Social Security finances: Findings of the 2007 Trustees report; Social Security Issue Brief No. 24*. Washington, DC: National Academy of Social Insurance.

⁸¹ Government Accountability Office. (2006). *Baby Boom Generation: Retirement of Baby Boomers is unlikely to precipitate dramatic decline in market returns, but broader risks threaten retirement security*. Washington, DC: Government Accountability Office.
American Academy of Actuaries. (2007). *Medicare's financial condition: Beyond actuarial balance. Issue Brief*. Washington, DC: American Academy of Actuaries.

⁸² Holtz-Eakin, D. (2005). *The cost and financing of long-term care services*. Washington, DC: U.S. Congressional Budget Office.

⁸³ Alecxih, L. (2006). *Nursing home use by "oldest old" sharply declines*. Falls Church, VA: The Lewin Center for Long-Term Care.

expenditures for long-term care. The percent of total nursing home expenditures paid through private insurance (all types) was less than 1 percent in 1970, 5 percent in 1997, and approximately 11 percent in 2003.⁸⁴ Similarly, 4 percent of all expenditures for home- and community-based long-term care services were paid through private insurance (all types) in 1970, versus 9 percent in 1997.⁸⁵ CBO estimates that by 2020, approximately 17 percent of all long-term care spending will be paid through long-term care insurance.⁸⁶

Though there has been an increase in long-term care policies purchased, several factors serve to limit their continued growth. The availability of Medicaid funding for long-term care is one such factor. Having a relatively free long-term care safety net may deter people from purchasing long-term care insurance. Because the current purchase rates are relatively low, the premiums are relatively high. In addition, policies do not generally provide the level of payment needed to cover all long-term care expenses and may not offer the flexibility to choose the long-term care arrangement that is most desirable to the individual. Furthermore, long-term care insurance policies may not adequately cover the future types and costs of long-term care. Although inflation protection is now an alternative for some long-term care insurance policies,⁸⁷ this is a relatively expensive option and may not cover the rate of increase in the cost of privately purchased long-term care services.⁸⁸

It has been noted that long-term care insurance is not appropriate for everyone. Controlling wealth depletion, lessening dependence on families, and greater choice of long-term care alternatives are among the major motivations for purchasing long-term care insurance.⁸⁹ Those who are very well off will be able to self-insure and pay out-of-pocket for their long-term care needs if and when they arise. Those with few assets to protect and little income to pay the premiums will ultimately depend on Medicaid to pay for their future long-term care needs. Those who are between these extremes may well be able to afford the long-term care insurance premiums and may also benefit from the choice that policies can provide, as well as the potential for maintaining some assets for distribution through inheritance.⁹⁰ Evidence suggests that persons with better education and persons with higher incomes and assets are more likely than others to purchase long-term care insurance.⁹¹ Only 3 percent of older adults with annual

⁸⁴ Gibson, M. J., M. Freiman, et al. (2003). *Beyond 50.03: A report to the Nation on independent living and disability*. Washington DC: AARP Public Policy Institute.

McCall, N. (2001). *Long term care: Definition, demand, cost, and financing. Who will pay for long term care: Insights from the Partnership Program*. Chicago, IL: Health Administration Press.

⁸⁵ McCall, N. (2001). *Long term care: Definition, demand, cost, and financing. Who will pay for long term care: Insights from the Partnership Program*. Chicago, IL: Health Administration Press.

⁸⁶ Holtz-Eakin, D. (2005). *The cost and financing of long-term care services*. Washington, DC: U.S. Congressional Budget Office.

⁸⁷ Insurance and Financial Advisor. (2007). *LIFE: More options for LTC insurance*. IFAwebnews.com. <http://www.insuranceandfinancialadvisor.com/articles/2007/08/01/news/products/doc46af143eaae1e345772747.txt>.

⁸⁸ Congressional Budget Office. (2004). *Financing long-term care for the elderly*. Washington, DC: U.S. Congressional Budget Office.

⁸⁹ Cohen, M. A. (2003). Private long-term care insurance: A look ahead. *Journal of Aging and Health*. 15(1), 74-98.

⁹⁰ Desonia, R. A. (2004). *The promise and the reality of long-term care insurance, NHPF background paper*. Washington, DC: The George Washington University National Health Policy Forum.

⁹¹ Cramer, A. T., G. A. Jensen. (2006). Why don't people buy long-term care insurance? *Journal of Gerontology: Social Sciences*. 61B(4), S185-S193.

Cohen, M. A. (2003). Private long-term care insurance: A look ahead. *Journal of Aging and Health*. 15(1), 74-98.

incomes below \$20,000 had long-term care insurance coverage in 2002, in comparison to 14 percent of older adults with incomes above \$50,000 and 18 percent of those with incomes above \$100,000.⁹²

Cost of policies is another factor in the limited use of long-term care insurance. The average annual cost of a typical policy⁹³ was \$2,447 in 2005 for purchasers who initially bought a policy at age 50 and \$6,178 for purchasers who initially bought at age 70. Because the number of policies in force is relatively low, the effect of adverse selection may significantly impact the affordability of long-term care insurance. Those who anticipate need for long-term care are more likely to purchase insurance,⁹⁴ which leads to higher premiums. It was estimated that 21 percent of the population aged 60-79 could afford a mid-range long-term care insurance policy in 1998,⁹⁵ the most recent year with available data.

An area of potential growth of long-term care insurance is the employer-sponsored market. Employers can provide information on the risk of long-term care and can offer group rates. In 2002, more than 280,000 new long-term care insurance policies were purchased through employers, which is nearly one-third of all new policies purchased in that year.⁹⁶ More than 5,600 employers offered a long-term care insurance plan in 2003. The average age of persons purchasing individual long-term care policies in 2002 was 60; the average age of persons purchasing employee-sponsored policies was 45.⁹⁷

Medicaid Eligibility and Spend-Down Experiences of Nursing Home Residents

One way of understanding the current financial status of individuals who require institutional care is an examination of Medicaid nursing home applications. The GAO recently completed such an audit of 540 applications in three states (Maryland, Pennsylvania, and South Carolina). At the time of application for Medicaid, over 90 percent had non-housing financial resources of \$30,000 or less, and 85 percent had non-housing resources of \$20,000 or less. Approximately one quarter owned homes, which had a median value of \$53,954. Of the 540 applicants, 408 were approved for Medicaid coverage of their nursing home stay at the point of their first application. Of the 122 applicants who were denied at the first application, 56 were denied for having income or resources exceeding eligibility requirements. Forty-one of these

⁹² Johnson, R. W., C. E. Uccello. (2005). *Is private long-term care insurance the answer? An issue in brief*. Boston, MA: Center for Retirement Research.

⁹³ The typical policy provides \$150 per day in benefits, five years of coverage, with a 90-day elimination period (the initial time in which the person is otherwise eligible for payments but is not covered) and inflation protection.

⁹⁴ Cramer, A. T. and G. A. Jensen. (2006). Why don't people buy long-term care insurance? *Journal of Gerontology: Social Sciences*. 61B(4), S185-S193.

⁹⁵ Feder, J., H. L. Komisar, et al. (2007). *Long-term care financing: Policy options for the future*. Washington, DC: Georgetown University Long-term Care Financing project.

⁹⁶ Mulvey, J. (2005). The importance of LTC insurance for the retirement security of the baby boomers. *Benefits Quarterly*. 21(4), 48-55.

⁹⁷ America's Health insurance Plans. (2004). *Research findings: Long-term care insurance in 2002*. Washington, DC: America's Health Insurance plans.

individuals re-submitted and were eventually approved. Their approval was based primarily on the reduction in the value of their non-housing financial assets. For at least one-third of those who were eventually approved, spending on nursing home and medical care was responsible for spending down to eligibility.

The GAO examined whether any assets were transferred for less than fair market value, and 47 individuals were determined to have transferred assets at less than fair market value during the “look-back” period. The average penalty for these individuals was six months, and only two of them experienced a delay in Medicaid approval, because most had already been in the facility for sufficient time for the penalties to expire. Among the Maryland cases, 95.5 percent of the assets transferred at less than fair market value consisted of cash or stocks.⁹⁸ Of course, it is possible that assets were transferred prior to the Medicaid “look-back” period. Although there is not much information regarding the transfer of assets, the available evidence suggests that such transfers are modest when compared to the cost of nursing home care and tend not to be undertaken in order to qualify for Medicaid long-term care. Persons who have relatively modest assets and are therefore most likely to become eligible for Medicaid nursing home care tend to preserve their assets to meet their future financial needs.⁹⁹

The purchase of long-term care insurance appears to reduce the likelihood that individuals will spend down to Medicaid eligibility. One investigation of the potential impact of long-term care insurance on Medicaid use suggests that purchasers of policies are less likely to require Medicaid support than they would if they had the same assets and incomes but no policy. The researchers estimated that while 3 percent of policyholders in institutions would spend down to Medicaid eligibility, approximately 9 percent would spend down if they did not have a long-term care policy.¹⁰⁰ The Partnership for Long-Term Care was originally sponsored by the Robert Wood Johnson Foundation, but is now operational in many states.¹⁰¹ Maryland is now implementing the Partnership. Partnership long-term care insurance policies are quite similar to typical policies, but with the important exception of permitting retention of more assets while becoming eligible for Medicaid long-term care. The program remains relatively small in spite of this asset-protection advantage, because the costs tend to be higher than the cost of conventional policies.

Implications Regarding Ability to Pay for Long-Term Care

Taken together, these factors suggest that as the population continues to age, there will be three groups of elders who need long-term care beyond that provided by informal sources. One group will have sufficient financial resources to purchase the type of long-term care in the location that they choose for as long as necessary. Another group will have sufficient financial

⁹⁸ Government Accountability Office. (2007). *Medicaid long-term care: Few transferred assets before applying for nursing home coverage; Impact of Deficit Reduction Act on eligibility is uncertain*. Washington, DC: U.S. Government Accountability Office.

⁹⁹ O'Brien, E. (2005). *Medicaid's coverage of nursing home costs: Asset shelter for the wealthy or essential safety net?* Washington, DC: Georgetown University Long-term Care Financing Project.

¹⁰⁰ Cohen, M. A. (2003). Private long-term care insurance: A look ahead. *Journal of Aging and Health*. 15(1), 74-98.

¹⁰¹ Congressional Budget Office (2004). *Financing long-term care for the elderly*. Washington, DC: U.S. Congress Congressional Budget Office.

resources, including insurance, to give them choices for at least a period of time before their savings or benefits are exhausted. Many, though not all, of these individuals may die before they become eligible for state/Medicaid long-term care. A third group will be those who are eligible for Medicaid at the time they require formal long-term care.

- A large portion of individuals who will require long-term care services will have limited financial resources and will exhaust those resources relatively quickly.
- It would appear that in the future, relatively more individuals will be at financial eligibility for state/Medicaid services, or very near it, so that spend-down occurs more rapidly.
- Long-term care insurance may serve to limit the number of people who spend down to Medicaid eligibility or reduce the time that an individual receives Medicaid for long-term care, thereby reducing future costs to states.
- Programs aimed at increasing the knowledge of the risks of long-term care, the importance of retirement planning, and the costs and benefits of long-term care insurance may help assure that more people will have the resources to pay for their future long-term care needs.

Workforce Issues

Long-term care is a labor-intensive industry. Future workforce shortages will be great in all areas of long-term care, but especially among paraprofessionals.¹⁰² Nursing and CNA (Certified Nursing Assistant) turnover in some areas of long-term care approaches 100 percent. Tyler and colleagues studied 1,146 employees of 20 Massachusetts long-term care facilities. Nurse satisfaction was related to resident feedback, but nurses spent much of their time coordinating patient care, rather than in direct care. CNAs had higher job satisfaction than nurses and their satisfaction was related to task identity, autonomy, and resident feedback. Nurses described lack of interaction with residents as the worst part of their jobs, along with burden of paperwork.¹⁰³

The Population Reference Bureau (PRB) has identified a new kind of “generation gap” in the United States population. While the majority of the United States population over age 60 are non-Hispanic Whites, a very large and growing component of children and young adults are from racial/ethnic minorities. Although not specifically discussed by the PRB, this generation gap issue does point to potential problems with ethnically appropriate care, when many care recipients are White English speakers, and many of the caregivers have limited English communication skills.¹⁰⁴

¹⁰² Stone, R. (2004). The direct care worker: A key dimension of home care policy. *Home Health Care Management & Practice*. 16(5), 339-349.
Stone, R. L. (2000). *Long-term care for the elderly with disabilities: Current policy, emergent trends, and implications for the twenty-first Century*. New York, NY: Milbank Memorial Fund.
Seavey, D., V. Salter. (2006). *Paying for quality care: State and local strategies for improving wages and benefits for personal care assistants, No2006-18*. Washington, DC: AARP Public Policy Institute.

¹⁰³ Tyler, D. A., V. A. Parler, et al. (2006). An exploration of job design in long-term care facilities and its effect on nursing employee satisfaction. *Health Care Management Review*. 31, 137-144.

¹⁰⁴ Mather, M. (2007). *The new generation gap*. <http://www.prb.org/Articles/2007/NewGenerationGap.aspx>.

Implications Regarding Workforce Issues

The future demand for long-term care workers of all types is likely to lead to wage benefits that will result in cost increases for both public and private long-term care services.

- Workforce development and retention will be an increasing issue in long-term care.
- Market forces will likely lead to higher costs of care.
- In the near term, cultural competency in long-term care may be exacerbated by the fact that English is not the first language of many paraprofessional workers.

Technology in Long-Term Care

Assistive Technology

Assistive technology refers to the tools (equipment, devices, software, procedures, and systems) that can enhance independence, limit dependence on direct human assistance, or facilitate and support the delivery of required human assistance. There has been an increase in the percentage of persons using assistive technology over time. Much of the increase is associated with the aging of the population, although wider availability of and greater awareness about assistive technologies have also been factors in their increased use.¹⁰⁵ Between 14 percent and 18 percent of older people use some form of assistive technology,¹⁰⁶ while approximately 45 percent of non-elderly adults with a physical disability use at least one form of assistive technology.¹⁰⁷ However, the major growth and the most common use has been in simple, less expensive technologies, such as canes, crutches, wheelchairs, and hearing aids.¹⁰⁸

Assistive devices have certain advantages over personal assistance. They can be tailored to the specific needs and characteristics of the individual, they are available at any time that they are needed, and they support self-sufficiency. One study of personal versus equipment assistance for individuals experiencing difficulty performing ADLs found that assistive equipment is often used without any personal assistance. This was the case even among those with severe ADL disability.¹⁰⁹

¹⁰⁵ Russell, J. N., G. E. Hendershot, et al. (1997). *Trends and differential use of assistive technology devices: United States, 1994*. Washington, DC: U.S. Department of Health and Human Services, National Center for Health Statistics.

Roelands, M., P. V. Oost, et al. (2002). A social-cognitive model to predict the use of assistive devices for mobility and self-care in elderly people. *The Gerontologist*. 42(1), 39-50.

Carlson, D., N. Ehrlich. (2005). *Assistive technology and information technology use and need by persons with disabilities in the United States, 2001*. Washington, DC: U.S. Department of Education & National Institute on Disability and Rehabilitation Research.

Freedman, V. A., E. M. Agree, et al. (2006). Trends in the Use of Assistive Technology and Personal Care for Late-Life Disability, 1992-2001. *The Gerontologist*. 46(1), 124-127.

¹⁰⁶ Cornman, J. C., V. A. Freedman, et al. (2005). Measurement of Assistive Device Use: Implications for Estimates of Device Use and Disability in Late Life. *The Gerontologist*. 45, 347-358.

¹⁰⁷ Hanson, K. W., P. Neuman, et al. (2003). Uncovering the health challenges facing people with disabilities: the role of health insurance. *Health Affairs Supplement Web Exclusives*. W3, R552-565.

¹⁰⁸ Carlson, D. and N. Ehrlich. (2005). *Assistive technology and information technology use and need by persons with disabilities in the United States, 2001*. Washington, DC: U.S. Department of Education & National Institute on Disability and Rehabilitation Research.

¹⁰⁹ Verburrge, L. M., P. Sevak. (2002). Use, type, and efficacy of assistance for disability. *Journal of Gerontology: Social Sciences*. 57B(6), S366-S379.

Numerous investigations of the impact of assistive technologies have demonstrated that they can reduce ADL dependence, lower formal and informal personal care use, reduce depression, and lower cost of formal services used.¹¹⁰ Not surprisingly, research on older adults suggests that assistive technologies tend to be most beneficial for those older adults with ADL impairments who are unmarried, better educated, and have better cognitive ability. Furthermore, intention to use assistive devices is associated with peoples' sense of how the device is related to their personal self-efficacy, as well as positive attitudes about them.¹¹¹ Assistive devices can also benefit those with developmental disabilities, including those with physical and with learning disabilities.¹¹²

Simple technologies for the home that are currently available can make it possible for those with a disability to manage their daily activities with no or limited human interventions. These technologies include wide doors and ramps for wheelchairs, levers on doors, support rails/grab bars, long-handled sponges and brushes, wash mitts, tubs and showers with seats, hospital beds and wing mattresses, hand-held shower wands, special eating utensils, anchored lamps and other room accessories, lever faucets, showers without lips, slip-resistant and softer floor and bath surfaces, portable lifts, supportive commodes, hip protectors, and kitchen counters and sinks that facilitate use by those in wheel chairs.¹¹³ In one investigation of persons with disabilities, 64 percent used an assistive technology, and the most commonly used assistive technologies in the home were a cane or walking stick, wheelchair, walker, and hearing aid.¹¹⁴

Powered mobility chairs can aid movement within and outside the home and enhance the independence of disabled individuals of all but the youngest ages. Persons as young as two years of age can be trained to use these devices.¹¹⁵

The integration of long-term care related components into smart home technology offers the potential to maintain independence for longer periods. Among the examples of assistive technologies (some of which are currently available) that could be included in **smart homes** (housing designed to integrate computer and communications technologies that simplify various aspects of living and can support those with disabilities) are environmental monitors; automatic

¹¹⁰ Allen, S. M., A. Foster, et al. (2001). Receiving help at home: The interplay of human and technological assistance. *Journal of Gerontology: Social Sciences*. 56B(6), S374-S382.

Horowitz, A., M. Brennan, et al. (2006). The impact of assistive device use on disability and depression among older adults with age-related vision impairments. *Journal of Gerontology: Psychological Sciences*. 61(5), S274-S280.

Agree, E. M., V. A. Freedman (2003). A comparison of assistive technology and personal care in alleviating disability and unmet need. *The Gerontologist*. 43(3), 335-244.

¹¹¹ Roelands, M., P. V. Oost, et al. (2002). A social-cognitive model to predict the use of assistive devices for mobility and self-care in elderly people. *The Gerontologist*. 42(1), 39-50.

¹¹² Kaye, H. S. (2001). *Disability watch: Volume 2; the status of people with disabilities in the United States*. San Francisco: University of California Disability Statistics Center.

Administration on Disabilities. (2004). *The American dream belongs to everyone: A report to Congress, the President, and the National Council on Disability*. Washington, DC: Administration on Disabilities, U.S. Department of Health and Human Services.

¹¹³ Dementia Design Info. (2007). [http://www.dementiadesigninfo.org/Technology for Long-term Care](http://www.dementiadesigninfo.org/Technology%20for%20Long-term%20Care) (2007). <http://www.techforlrc.org/lrc.cfm>.

¹¹⁴ Carlson, D., N. Ehrlich. (2005). *Assistive technology and information technology use and need by persons with disabilities in the United States, 2001*. Washington, DC: U.S. Department of Education & National Institute on Disability and Rehabilitation Research.

¹¹⁵ Wiart, L., J. Darrach, et al. (2003). Evaluation of powered mobility use in home and community environments. *Physical and Occupational Therapy in Pediatrics*. 23(2), 59-75.

cut-off devices for stoves and kitchen heat sensors to prevent fires; wearable body sensors; emergency sensors and alerts; walkers that support people who become disoriented; and two-way, real-time video cameras connected to computers that track and support daily activities. Interactive systems that remind persons with a cognitive impairment of important tasks and events automatically or through queries are currently available. Talking thermometers and blood pressure monitors make it possible for persons with vision problems to self-monitor. Automatic medication dispensers are becoming more sophisticated and can monitor use and alert others when a potential medication error is made.¹¹⁶ Voiding reminders, visual locators, elopement monitors, and tracking devices can help those with incontinence or with cognitive or physical disabilities to remain more independent.¹¹⁷

Universal design refers to housing and other environmental design features that accommodate people with a wide range of abilities.¹¹⁸ Universal design holds much promise for maintaining the highest level of independence for people and for managing changes in disability within the same setting. However, universal design has not been widely accepted by builders or the general public.¹¹⁹ There has also been some movement toward housing design features that enhance the visitability of housing. **Visitability** refers to having features that make the home easier for people with mobility impairments to live in and visit.¹²⁰

Tele-home health technology consists of a package of technologies that make it possible to monitor patient condition and to complete personal communication between the patient and a health provider—often with real-time video. This technological arrangement has been studied in a randomized trial of persons diagnosed with chronic disease such as cancer, wound care, congestive heart failure, diabetes, and chronic obstructive pulmonary disease. There were no control/intervention group differences in quality indicators. The total costs of home care were higher in the tele-home health group because the intervention group had both in-home care and 24-hour access to nurses through the tele-home health system. However, the total costs of care excluding home care were lower for the intervention than the control group.¹²¹

On the more distant horizon, Kusuda¹²² has noted that “personal care robots” could be mass produced to meet the needs of older people and the disabled and has described successes and failures in bringing robotics to scale in Japan. Robots are currently cleaning floors in Japan. The robots can use elevators to move from floor to floor.¹²³ Humanoid robots are given a great

¹¹⁶ Cheek, P., L. Nikpour, et al. (2005). Aging well with smart technology. *Nursing Administration Quarterly*. 29(4), 329-338.

¹¹⁷ Technology for Long-term Care. (2007). <http://www.techforltc.org/ltc.cfm>.

¹¹⁸ Institute of Medicine. (2007). *The future of disability in America*. Washington, DC: The National Academy Press.

¹¹⁹ Institute of Medicine. (2007). *The future of disability in America*. Washington, DC: The National Academy Press.

¹²⁰ The Center for an Accessible Society. (2007, July). <http://www.accessiblesociety.org/topics/housing/visitability.html>.

¹²¹ Johnston, B., L. Wheeler, et al. (2007). Outcomes of the Kaiser Permanente Tele-Home health research project. *Archives of Family Medicine*. 9, 40-45.

¹²² Kusuda, Y. (2005). Japanese robotics - where to go? *Industrial Robot: An International Journal*. 32(6), 472-476.

¹²³ Kitano, M. (2007). Japan eyes robots to support older population. *Washingtonpost.com*. <http://www.washingtonpost.com/wp-dyn/content/article/2007/09/11/AR2007091101983.html>.

deal of press in Japan and have received considerable public enthusiasm there. Thus far, the major efforts have been to develop robotic technologies to support work in nursing homes and hospitals, which could reduce labor needs in these settings. Virk and colleagues summarized research indicating that older people would be accepting of robots that support their daily needs. Their assessment was that people (average ages were 47.8 for women and 48.2 for men) see value in robots that could assist with daily activities, although women are generally less accepting than men of such robotic support.¹²⁴

An important issue regarding assistive technologies and disability is that a percentage of individuals who use an assistive technology do not report any difficulty in managing the task associated with the device.¹²⁵ This results in people no longer defining themselves as “disabled.” This finding points to potential flaws in surveys that “select out” those individuals who report no difficulty with a task when attempting to determine the total number or percentage of people who experience a disability. Due to the potential impact of assistive technology on one’s personal perception of disability, it is possible that some of the decline that has been experienced in disability is actually due to individuals who would otherwise consider themselves to have a functional impairment using assistive devices.¹²⁶ It has been estimated that as much as half of the decline in personal care dependence between 1992 and 2002 is due to increases in the use of assistive devices.¹²⁷

Medical Technology

Medical technology consists of those “tools” (e.g., medicines, rehabilitation strategies, and surgery) that might delay, prevent, cure, or promote recovery from chronic disease that leads to disability. Although many medical technologies are under development, we focus on only two examples here: technologies for diabetes and Alzheimer’s disease. These diseases are relatively widespread and tend to increase with age. The technologies described for these diseases either delay or better control the disease, thereby reducing morbidity and complications leading to disability and reducing need for LTC services. Similar technologies can be applied to a wide variety of diseases and conditions that would otherwise increase the need for long-term care.

The delay or control of diabetes offers significant potential for reducing the number of people who require long-term care or for reducing the level of care required. Diabetes is an important chronic disease to control because the trend in percentages of adults who report a diagnosis of diabetes has been increasing.¹²⁸ The prevalence of diabetes rose from 4.9 percent in 1990 to 6.5 percent in 1998. Upward movement in diabetes has been experienced in both sexes,

¹²⁴ Virk, G. C. Sjoström. (2006). *Ethics of Human Interaction with Robotic, Bionic, and AI Systems: Concepts and Policies*. Ethicbots Workshop. <http://ethicbots.na.infn.it/meetings/firstworkshop/abstracts/virk.htm>.

¹²⁵ Cornman, J. C., V. A. Freedman, et al. (2005). Measurement of Assistive Device Use: Implications for Estimates of Device Use and Disability in Late Life. *The Gerontologist*. 45, 347-358.

¹²⁶ Agree, E. M. (1999). The influence of personal care and assistive devices on the measurement of disability. *Social Science & Medicine*. 48(4), 427-443.

¹²⁷ Freedman, V. A., E. M. Agree, et al. (2006). Trends in the Use of Assistive Technology and Personal Care for Late-Life Disability, 1992-2001. *The Gerontologist*. 46(1), 124-127.

¹²⁸ Mokdad, A. H., E. S. Ford, et al. (2000). Diabetes trends in the U.S.: 1990 - 1998. *Diabetes Care*. 23(9), 1278-1283.

all ages (refer to Table 2.4), all ethnic groups, all education levels, and nearly all states. Some pharmaceuticals that are designed to prevent or delay the occurrence of diabetes among high-risk people have been successful in limiting the development of Type II diabetes by 33 percent.¹²⁹ It is estimated that continuous blood sugar monitors will be accurate enough to be used by approximately 40 percent of persons with diabetes by 2010. This can lead to substantial increases in health-related quality of life and reductions in the need for long-term care.¹³⁰ Talking glucose monitors make it possible for those with vision problems to self-monitor.¹³¹ The delivery of insulin by means of pumps and inhalers is also becoming a reality.¹³² These delivery mechanisms have the promise of better regulation of blood glucose, thus limiting the progression of the disease to the point of requiring long-term care.

New Alzheimer's drugs currently under development are aimed at stopping the growth of or actually reducing amyloid plaque formations that are thought to be the cause of Alzheimer's disease.¹³³ At least one company is about to begin stage three trials of such a drug. There are now five drugs approved by the U.S. Food and Drug Administration for the treatment of Alzheimer's disease: Razadyne, Aricept, Cognex, Exelon, and Namenda.¹³⁴ Cognex, however, is no longer actively marketed. Namenda (memantin), Razadyne (galantamine), and Aricept (donepezil) have been associated with reduced need for caregiving or delayed nursing home admissions.¹³⁵ Although there are currently Alzheimer's drugs on the market, and these have been shown to limit use of formal and informal care, their effect is generally short-lived. Delaying Alzheimer's disease an average of five years would reduce the projected number of persons with Alzheimer's disease by 50 percent,¹³⁶ while delaying admission of Alzheimer's patients to nursing homes could save as much as \$1.12 billion a year in total nursing home costs.¹³⁷ None of the currently available drugs stop the disease, although they can slow the progression.¹³⁸ Recent findings about adult neural stem cells may ultimately lead to genetic therapy for Parkinson's and Alzheimer's diseases.¹³⁹

¹²⁹ National Institute of Diabetes and Digestive and Kidney Diseases. (2007). *National Diabetes Information Clearinghouse*. <http://diabetes.niddk.nih.gov/>.

¹³⁰ Spurgeon, S. A., R. S. Nocon, et al. (2005). *Continuous glucose monitoring: Innovation in the management of diabetes*. NEHI Innovation Series. Cambridge, MA: New England Health institute.

¹³¹ Cheek, P., L. Nikipour, et al. (2005). Aging well with smart technology. *Nursing Administration Quarterly*. 29(4), 329-338.

¹³² Diabetes Mall. (2007). *Diabetes technology*. 2007. http://www.diabetesnet.com/diabetes_technology/insulinpumps.php.

¹³³ Pogatchink, S. (2007). *Elan, Wythe plan advanced trials for anti-Alzheimer's drug*. Associated Press New Jersey.

¹³⁴ National Institute on Aging. (2007). *Alzheimer's medications fact sheet*. <http://www.nia.nih.gov/Alzheimers/Publications/adfact.htm>.

¹³⁵ Caro, J., D. Getsios, et al. (2003). Rational Choice of Cholinesterase Inhibitor for the Treatment of Alzheimer's Disease in Canada: A comparative economic analysis. *BMC Geriatrics* 3. <http://www.biomedcentral.com/content/pdf/1471-2318-3-6.pdf>.

Reisberg, B., R. Doody, et al. (2003). Memantine in moderate-to-severe Alzheimer's Disease. *New England Journal of Medicine*. 348, 1333-1341.

¹³⁶ Brookmeyer, R., S. M. Gray, et al. (1998). Alzheimer's Disease in the United States and the public health impact of delaying disease onset. *American Journal of Public Health*. 88(9), 1337-1342.

¹³⁷ Leon, J., C. K. Cheng, et al. (1998). Alzheimer's disease care: costs and potential savings. *Health Affairs*. 17(6), 206-16.

¹³⁸ National Institute on Aging. (2007). *Alzheimer's medications fact sheet*. <http://www.nia.nih.gov/Alzheimers/Publications/adfact.htm>.

¹³⁹ Merkle, F. T., Z. Mirzadeh, et al. (2007). *Mosaic Organization of Neural Stem Cells in the Adult Brain*. Published online 5 July 2007 [DOI: 10.1126/science.1144914] (in Science Express Reports).

Implications Regarding Technology

Our nation has benefited tremendously from the development and dissemination of both assistive and medical technology. These improvements have enhanced the independence of individuals of all ages who would have otherwise been defined as disabled. An important caveat in addressing the potential future impact of technology on the use and cost of long-term care is that although predictions of technological change are generally optimistic, dissemination and use is frequently incremental at best, cost is often an issue, and the full impact is often experienced over a very long time frame.

- Past trends in long-term care services and supports have occurred in an environment in which technological change has already played a significant role. Therefore, technological innovation and utilization rates must continue at the same pace as in the past in order for the trends in long-term care to continue at the same pace as previously.
- It is certainly possible that one or more technological “miracles” will occur in the near future that will have a positive consequence for long-term care. However, technology takes time to be developed, marketed, and accepted by the public, and it often results in unforeseen negative consequences. Therefore, it is not reasonable to assume that a technological fix will occur that will lead to changes in the need for long-term care services and supports beyond those trends that have been recently experienced.
- The distribution and dissemination of information about assistive technology to encourage its use could reduce the need for long-term care services and supports.
- Regular monitoring of both assistive and medical technologies will facilitate the assessment of their impact on the need for future long-term care services and supports.
- Technological improvements in some areas may lead to increased life expectancies, with the possibility of developing other disease-related disabilities.¹⁴⁰

¹⁴⁰ Goldman, D. P., B. Shang, et al. (2005). Consequences of health trends and medical innovation for the future elderly. *Health Affairs*. 24, W5, R5-17.

III. LONG-TERM SERVICES AND SUPPORTS IN MARYLAND: CURRENT UTILIZATION AND COSTS AND FUTURE TRENDS

Overview

Long-term services and supports in Maryland for individuals aged 65 and older and persons with disabilities consist of a vast informal caregiving network of families and others, as well as a complex web of formal services offered by a variety of federal, state, and local programs and private providers. Eligibility requirements vary considerably from program to program, as does the availability of services from one region of the state to the next. Services are financed through many sources: Medicare, Medicaid, private insurance, federal and state appropriations and grants, and out-of-pocket payments by consumers.

This chapter examines long-term services and supports in Maryland that are funded, either partly or entirely, with state funds. Included are Medicaid-funded services (with the federal government contributing 50 percent of the costs¹⁴¹), as well as other services and programs funded through agencies and programs of state government. In some instances, to provide a more comprehensive picture of the availability and financing of certain types of services, the discussion provides an overview of long-term services and supports funded through Medicare and other federal programs, as well as private sources. However, the analysis focuses on state-funded long-term services and supports consistent with the requirements of the *Long-Term Care Planning Act of 2006*.

In the pages that follow, state-funded long-term services and supports are identified and examined by category of service, with an accompanying analysis of funding sources, trends in service use and costs, the factors driving these trends (e.g., changing demographics, promotion of home- and community-based care) and, to put the discussion in a larger context, regional and national trends. Much of the analysis in this chapter is based on findings from an in-depth inventory of long-term services and supports funded by state agencies that was conducted in the course of preparing this report.¹⁴²

Agencies consulted within the Maryland Department of Health and Mental Hygiene (DHMH) included Medicaid, the Mental Hygiene Administration, the Developmental Disabilities Administration, and the Office of Health Care Quality. Other Maryland departments were consulted as well, including the Department of Aging, the Department of Human Resources, the Department of Disabilities, the Department of Transportation, the Department of Housing and Community Development, and the State Department of Education. In addition, federal agencies such as the Centers for Medicare and Medicaid Services and the Substance Abuse and Mental Health Services Administration within the U.S. Department of Health and Human Services provided information on federal programs that benefit Marylanders. Maryland

¹⁴¹ The rate at which the federal government reimburses states for spending on Medicaid is called the Federal Medicaid Assistance Percentage (FMAP). Maryland's FMAP is 50 percent.

¹⁴² See Technical Notes in Appendix 3 for a description of the service inventory conducted for this report. The State Inventory Form can be found in Appendix 4.

Medicaid data available through the DHMH Medicaid Management Information System (MMIS) was analyzed, along with data made available by other state agencies, including the Maryland Health Care Commission. Provider associations contributed data on services and supports available in Maryland.

Current gaps in services identified by state agencies are discussed in the report, as well as the adequacy of current services. Projections for the use of and costs for state-funded long-term services and supports in Maryland in 2010, 2020, and 2030 are presented by service category. The projections are based on historical trends adjusted for inflation and anticipated changes in demographics and service use.¹⁴³ In Chapter IV, *Economic Impact to the State*, the cost projections for individual service categories are “rolled up” into projections of the overall cost to the State.

The *Long-Term Care Planning Act of 2006* requires a review of “services and programs related to housing, transportation, medical needs, and food subsidies.” To address this requirement, this chapter presents services under the following categories: institutional, in-home, community, housing/residential, and mobility/transportation. A discussion of mental health services and services for persons with developmental disabilities is also included. “Food subsidies” are discussed in the in-home and community services sections of this chapter, as well as in Chapter V. Chapter III is organized into seven sections as follows:

- **Institutional services**, which includes nursing homes and chronic hospitals.
- **In-home services and supports**, which includes personal care and other in-home services offered under the Medicaid state plan, as well as other state-funded in-home services.
- **Community services and supports**, which includes adult day care, home- and community-based waiver services, caregiver services, and other community-based services.
- **Housing and residential services**, which examines housing availability, affordability, supportive residential arrangements, and accessibility challenges at the state and local levels.
- **Mobility and transportation services**, which includes a discussion of public transit programs operated by state and local agencies.
- **Mental health services**, which examines institutional services and community-based programs for persons with serious and persistent mental illness using long-term services and supports provided through the public mental health system.
- **Services and supports for persons with developmental disabilities**, which reviews institutional services and home- and community-based waiver services.

Many home- and community-based services for individuals aged 65 and over and persons with disabilities are provided by the Maryland Medicaid program through federal waiver programs authorized under Section 1915(c) of the Social Security Act. **Home- and community-based services waiver programs** permit a state to “waive certain Medicaid requirements in order to furnish an array of home- and community-based services that promote community living

¹⁴³ See Technical Notes in Appendix 3 for a detailed description of the methodology used for cost projections.

for Medicaid beneficiaries and, thereby, avoid institutionalization.”¹⁴⁴ Even though many waiver services are provided in the home, data on the cost and use of waiver services for individuals aged 65 and over and persons with physical disabilities are presented in their entirety in the section of this chapter entitled *Community Services and Supports*, recognizing the comprehensive nature of waiver programs. Waiver programs for persons with developmental disabilities are discussed in the section entitled *Services and Supports for Persons with Developmental Disabilities*.

Service use and costs estimates are presented at the end of each section in this chapter. The method for estimating future costs to the State was summarized in Chapter I; more detail can be found in the Technical Notes in Appendix 3. Estimation factors specific to each service were used to project future costs, and these are presented as part of the discussion of projected use and costs. Estimation factors are based on well-documented trends in the literature that are expected to affect the utilization and cost of the specific service such as those discussed in Chapter II. In presenting each set of service use and cost estimates, three exhibits are provided:

- **Table showing projected costs.** This table shows actual 2005 state expenditures, along with projected state costs for 2010, 2020, and 2030.
- **Variance analysis.** The methodology used to project future costs incorporates four factors: 1) growth in the population using the service, 2) the increase/decrease in the percentage of the population using the service, 3) the increase/decrease in the average number of units of service used by individuals accessing the service (e.g., number of hours, days), and 4) the change in the average cost of a unit of service. Whereas the first table shows projected total costs to the State, the variance analysis illustrates the extent to which each of these four factors contributes to the overall increase/decrease in costs.
- **Graph of projected costs.** This graph illustrates the trend in projected costs to the State from 2005 through 2030, as well as the portion of projected costs attributable to individuals under age 65 versus those aged 65 and over.

In Chapter IV, projected costs presented for each of the service categories in Chapter III are aggregated to arrive at total estimated costs to the State in 2010, 2020, and 2030.

¹⁴⁴ Centers for Medicare and Medicaid Services (November 2006). Application for a §1915(c) home- and community-based waiver [Version 3.4]: Instructions, technical guide, and review criteria. Baltimore, MD, Centers for Medicare and Medicaid Services.

Institutional Services

In Maryland, nursing homes and chronic hospitals provide institutional long-term care services to individuals aged 65 and older and persons with disabilities. This chapter separately addresses service usage, the cost of providing care, and projections of use and costs in 2010, 2020, and 2030 for nursing homes and chronic care hospitals.

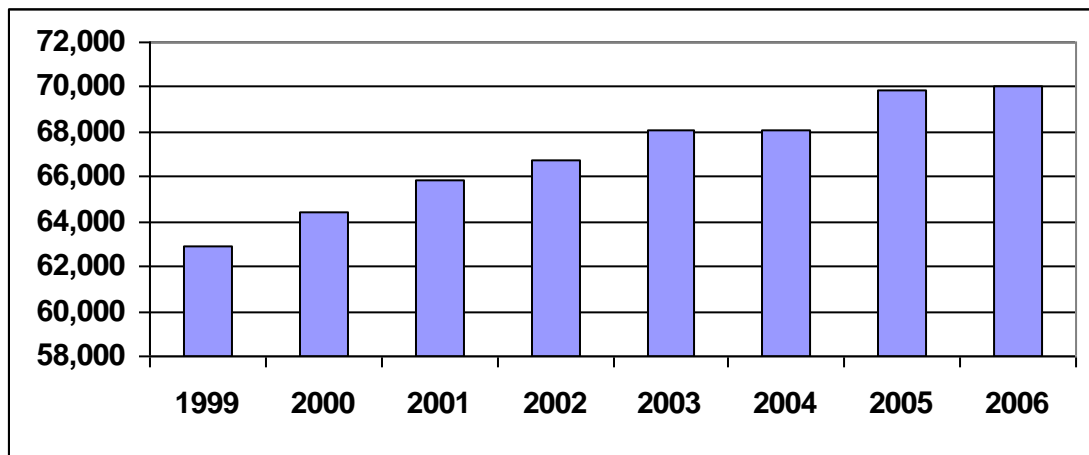
Long-term care services provided to persons with developmental disabilities in Intermediate Care Facilities for the Mentally Retarded (ICF/MRs) are described in the section of this chapter entitled *Services and Supports for Persons with Developmental Disabilities*.

A. Nursing Homes

Use and Costs

Maryland has almost 30,000 nursing home beds in 230 facilities, with beds located in each of the state's 23 counties and the city of Baltimore (see Table 5.10 in Chapter V for a listing by jurisdiction). The occupancy rate for these beds has been generally constant, averaging 88 percent from 2000 to 2003.¹⁴⁵ Although the total number of Marylanders using nursing homes each year continues to grow (Figure 3.1), the length of stay for nursing home residents continues to decline, resulting in more people entering nursing homes but staying for shorter periods. This declining average length of stay holds true for younger age groups, older adults, and those over 85 years of age (Figure 3.2). The combination of shorter lengths of stay but higher numbers of users has resulted in only a modest increase in the total number of nursing home days logged for all nursing home residents over the last seven years.

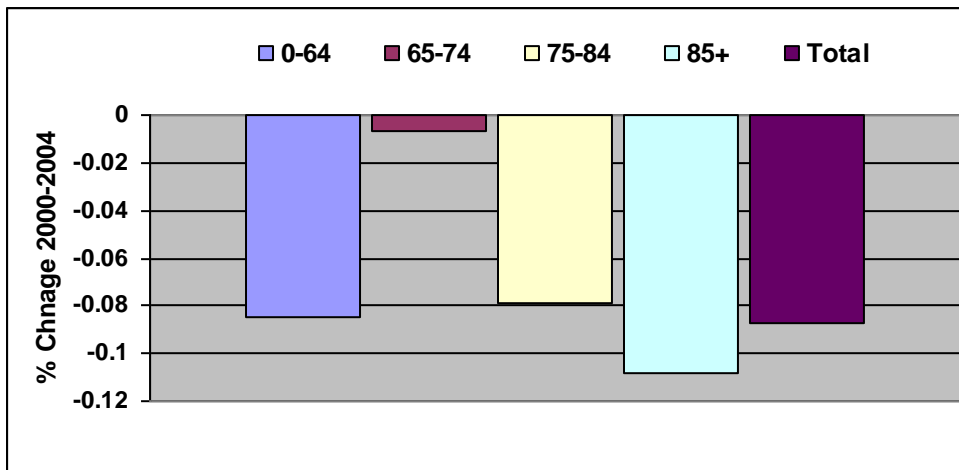
Figure 3.1
Total Nursing Home Population:
Maryland, 1999 – 2006



Maryland Health Care Commission, *2007 State health plan for facilities and services: Nursing home, home health agency and hospice services*, Statistical data tables.

¹⁴⁵ Maryland Health Care Commission, *2007 State health plan for facilities and services: Nursing home, home health agency and hospice services*, Statistical data tables, pp. 3-5.

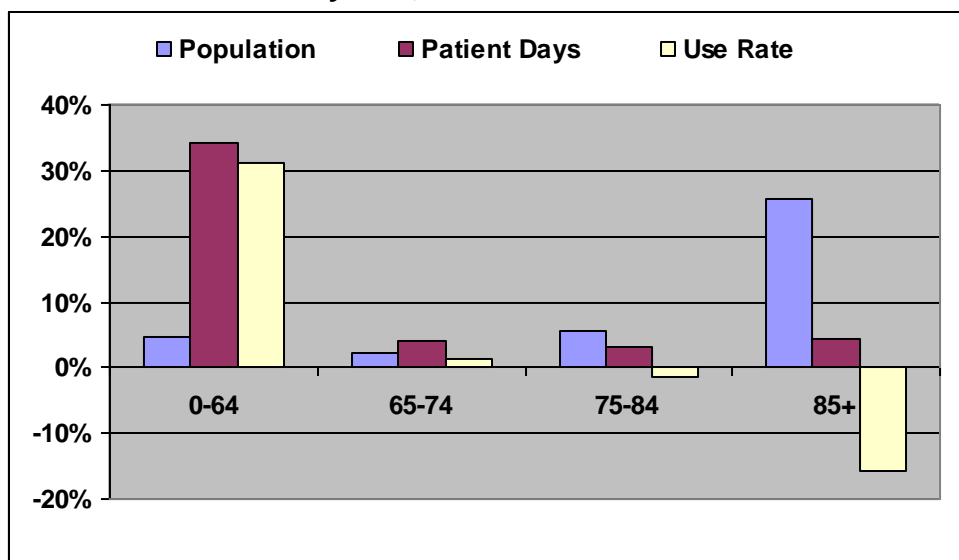
Figure 3.2
Percentage Change in Nursing Home Average Length of Stay (in Days) by Age Group:
Maryland, CY 2000 – CY 2004



Source: Maryland Health Care Commission, 2007 State health plan for facilities and services: Nursing home, home health agency and hospice services, Statistical data tables.

While the average *length of stay* has declined for all age groups, the *percentage of users* by age group is not uniform. The percentage of adults over age 75 living in nursing homes has declined, while users of nursing homes under 65 years of age increased by over 30 percent from 2000 to 2004 (Figure 3.3). It should be noted that length of stay data includes both short-term subacute stays as well as longer-term traditional nursing home stays.

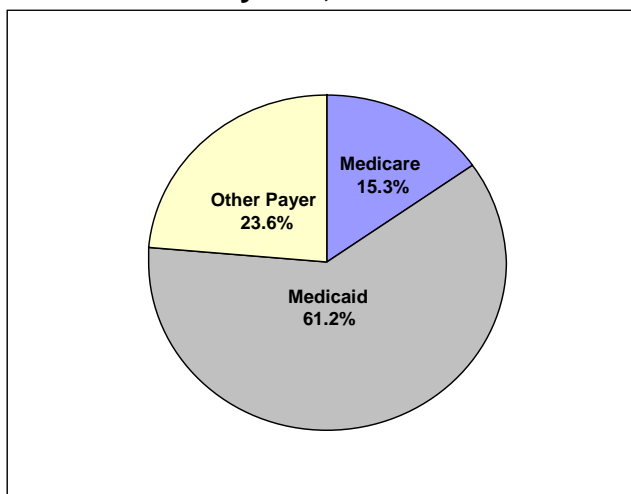
Figure 3.3
Percent Change in Nursing Home Population, Patient Days, and Usage:
Maryland, CY 2000 – 2004



Source: Maryland Health Care Commission, 2007 State health plan for facilities and services: Nursing home, home health agency and hospice services, Statistical data tables.

Maryland Medical Assistance (Medicaid) is the primary payment source for nursing home care, both nationally and in the state, responsible for over 60 percent of nursing home payments (Figure 3.4). The percentage of total nursing home days paid by Medicaid has declined in the past 10 years from 67 percent in 1997 to 61 percent in 2006.¹⁴⁶ The percentage of patient days paid for by Medicare rose from 7.52 percent in 1996 to 12.82 percent in 2003. Medicare pays for many post-acute short stays in nursing homes.¹⁴⁷ It is anticipated that private long-term care insurance will increasingly assume a larger role as a payer of nursing home services in future years.¹⁴⁸

Figure 3.4
Nursing Facility Payments by Payer:
Maryland, CY 2006



Source: American Health Care Association. (December 2006). Nursing facility patients by payer.

In Maryland, total Medicaid payments to nursing homes have increased from \$486 million in 1996 to \$932 million in 2006, an increase of 92 percent. However, there has been a decline in the *rate of growth* of Medicaid nursing home expenditures in both Maryland and the United States since 2001 (Figure 3.5). DHMH has initiated a number of cost containment initiatives intended to constrain the rate of increase in nursing home rates, but this decline in the growth of expenditures is also due to the reduction in the length of stays by the Medicaid population and the decline in the percentage of the population using nursing homes. The variation in nursing home patient days and use rate by different age groups (Figure 3.3) is also reflected in the utilization patterns of Medicaid beneficiaries as well. Older adults account for most Medicaid nursing home days (70 percent), but the percentage of older adult Medicaid beneficiaries using nursing homes has declined, especially for the age 85+ population. The

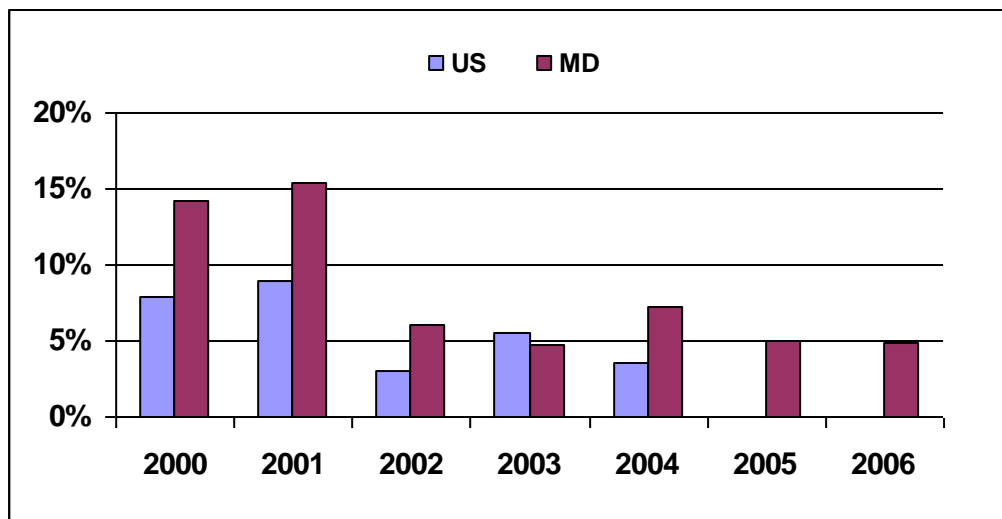
¹⁴⁶ Maryland Health Care Commission. (2007). *State health plan for facilities and services: Nursing home, home health agency and hospice services*, Statistical data tables, p.7.

¹⁴⁷ Maryland Health Care Commission. (December 2005). *Nursing home occupancy rates and utilization by payment source*.

¹⁴⁸ See the section on “Long-Term Care Insurance” in Chapter II of this report for a more detailed analysis of recent and future take-up rates for private long-term care insurance.

opposite trend emerges for Medicaid beneficiaries under age 65, who experienced a 16 percent increase in nursing home days from 2003 to 2006.¹⁴⁹

Figure 3.5
Annual Percentage Change in Medicaid Nursing Home Expenditures:
Maryland and the United States, FY 2000 – FY 2006



Note: 2005-2006 data for Maryland derived from Maryland Department of Health and Mental Hygiene, Decision Support System, Long-Term Care Recipients Age 5 Years or Older in Nursing Facilities. National data unavailable for 2005-2006.

Sources: Centers for Medicare and Medicaid Services, Office of the Actuary, National Health Statistics Group; U.S. Bureau of the Census; Maryland Department of Health and Mental Hygiene, Decision Support System.

Regional and National Context

The decrease in the use of nursing homes by older adults in Maryland and the increase in use by younger adults (however, all age groups show a decrease in length of stay as shown in Figure 3.2) parallels similar trends nationally. The decline among older adults assumes significance since older adult patient days far outstrip (by a ratio of approximately 7:1) younger adult nursing home days. The decline in older adult patient days has been attributed to a variety of factors, including improved health status of older Americans, increased availability of residential alternatives (e.g., assisted living) and assistive technologies, growth in long-term care insurance coverage, and expansion of Medicaid home- and community-based waiver programs (see Chapter II for an examination of these factors). Nationally, the percentage adults aged 65 and older in nursing homes has declined from 4.2 percent in 1985 to 3.6 percent in 2004, and the decline appears to continue.¹⁵⁰

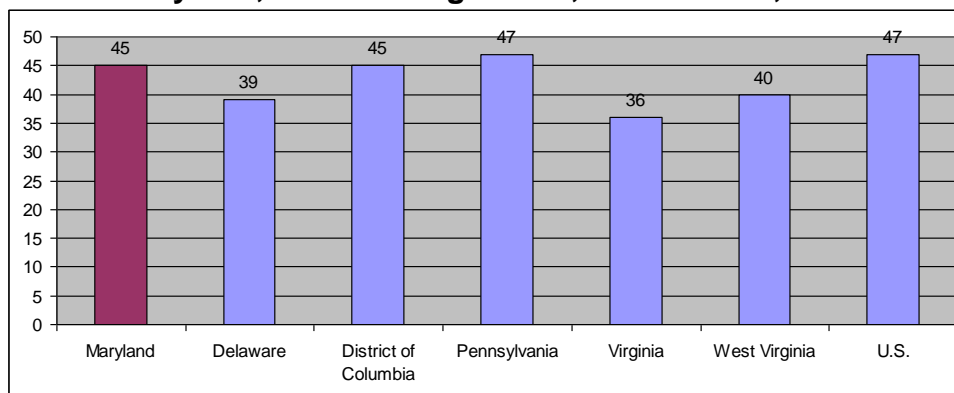
¹⁴⁹ Center for Health Program Development and Management, UMBC. (June 2007). Data from Maryland Department of Health and Mental Hygiene, MMIS2.

¹⁵⁰ Alecxih, L. *Nursing home use by 'oldest old' sharply declines*. The Lewin Group, November 2006.

It is less clear whether and to what extent the self-reported decrease in aggregate age-adjusted disability among older Americans has directly contributed to the reduced use of nursing homes by older adults. While there may be a direct relationship between declining disability and nursing home usage and costs, researchers are still trying to explain the causes of late-life disability declines and determine whether past patterns are likely to continue.¹⁵¹

The number of nursing home *beds* in relation to the population aged 65 and older is sometimes used as an indicator of reliance on institutional care. Nursing home beds per 1,000 population for individuals aged 65 and older in Maryland (45) is slightly lower than the United States' average (47) and higher than most surrounding jurisdictions (Figure 3.6). However, the number of nursing home *residents* per 100 individuals over age 65 in 2005 indicates that Maryland is close to the national average of 4.0 nursing home residents per 100 individuals.¹⁵² The percentage of nursing home residents in Maryland with Medicaid as the payment source (61 percent) is slightly less than the national rate (65 percent) and equal to or less than most of the surrounding states and the District of Columbia (Figure 3.7).

Figure 3.6
Nursing Home Beds per 1,000 Population Aged 65+:
Maryland, Surrounding States, and the U.S., 2005



Source: AARP. *Across the States 2006: Profiles of Long-Term Care and Independent Living*, January 2007.

Addressing Service Gaps

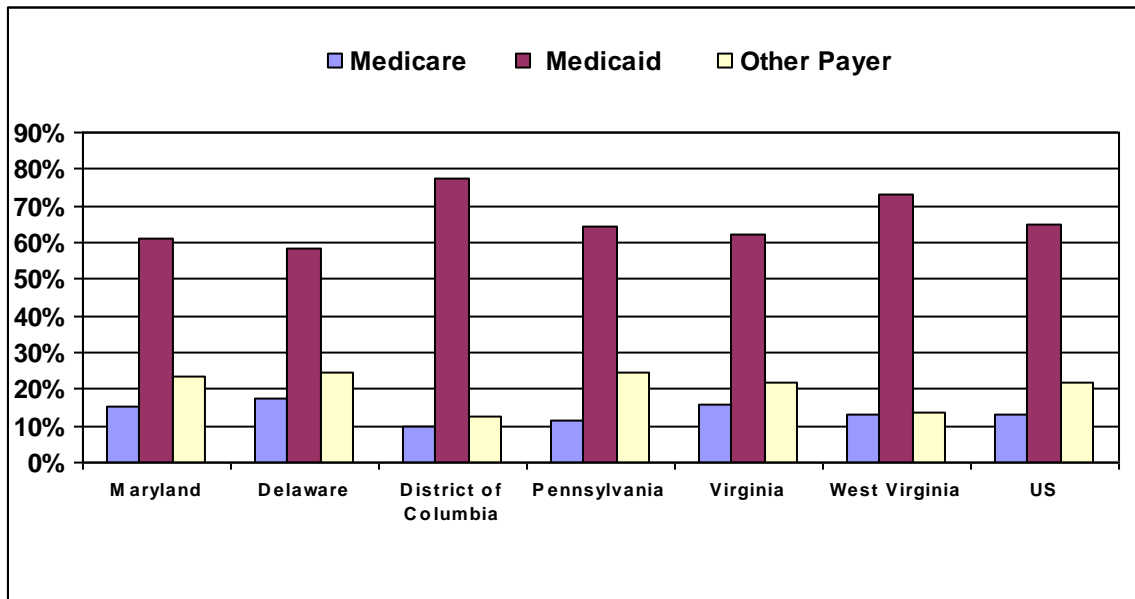
There are no significant gaps in nursing home services as such. The Maryland Health Care Commission has estimated the need for 318 additional nursing home beds through the year 2011.¹⁵³ This need represents an increase of only one percent of total beds. The Southern Maryland region is projected to need a majority of these additional beds (see Table 5.10 in Chapter V).

¹⁵¹ Institute of Medicine. (February 2007). *The future of disability in America*. Washington, DC: The National Academies Press (pre-publication copy), p. 3-25.

¹⁵² AARP. (December 2006). *Across the states 2006: Profiles of long-term care and independent living*. pp. 21-328.

¹⁵³ Maryland Health Care Commission. (2007). *State health plan for facilities and services: Nursing home, home health agency and hospice services*, Statistical data tables.

Figure 3.7
Percentage of Nursing Home Patients by Payer:
Maryland, Surrounding States, and the U.S., 2006



Sources: American Health Care Association. (December 2006). Nursing facility patients by payer. CMS. (December 2006). OSCAR Data Current Surveys.

Projected Use and Costs in 2010, 2020, 2030

Estimation Factors:

Baseline nursing home utilization projections for the population aged 65 and over were adjusted to reflect a net 1.5 percent annual decline in utilization rates from 2005 until 2020; thereafter, utilization rates were adjusted by a net 1.0 percent annual decline. No adjustments were made for the population under age 65.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

Medicaid nursing home days in Maryland are projected to increase by 13 percent from 2005 to 2030 (Table 3.1). Nursing home costs are projected to increase 134 percent to \$1.9 billion during this same period (Table 3.2).

As shown in the variance analysis in Table 3.3, most of the projected increase in nursing home costs is attributable to the impact of inflation on the cost of a nursing home day (\$940.4 million). Changing demographics makes a significant contribution to the increase in costs as well (\$253.7 million), more than offsetting the moderating effect of the decrease in costs associated with the average number of units per user (-\$92.1 million).

Projected Medicaid costs for nursing homes in Maryland for the age 65 and over population and the under age 65 population in 2010, 2020, and 2030 is illustrated graphically in Figure 3.8.

Table 3.1
Actual and Projected Medicaid Nursing Home Days:
Maryland, 2000 – 2030

	Actual		Projected		
	2000	2005	2010	2020	2030
Under 65	759,065	956,262	1,254,806	1,371,403	1,382,552
Age 65 and Over	5,375,552	4,945,502	4,777,896	4,660,145	5,313,030
Total	6,134,617	5,901,764	6,032,702	6,031,549	6,695,582

Source: Center for Health Program Development and Management, UMBC. (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

Table 3.2
Actual and Projected Medicaid Nursing Home Costs:
Maryland, 2005 – 2030
(\$ Millions)

	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Under Age 65	\$140.5	\$222.2	\$321.2	\$432.6	\$292.1	208%
Age 65 and Over	\$690.2	\$778.3	\$1,003.8	\$1,507.6	\$817.4	118%
Total	\$830.7	\$1,000.5	\$1,325.0	\$1,940.2	\$1,109.5	134%

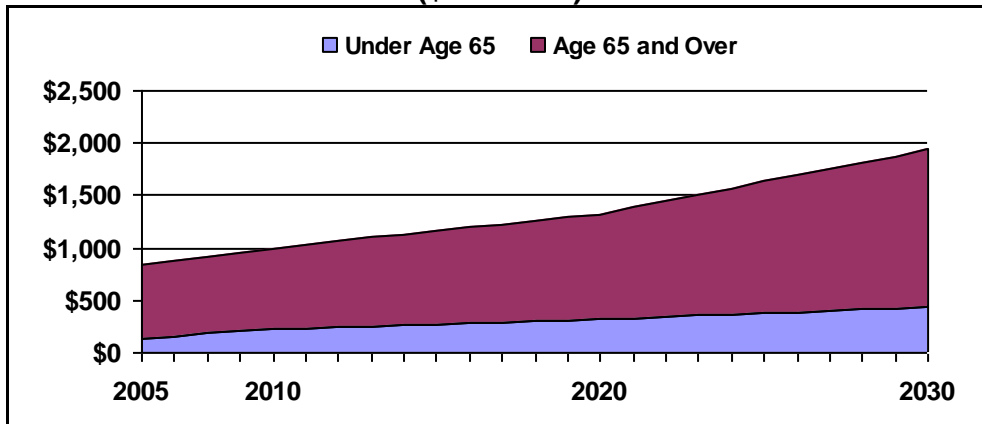
Source: Center for Health Program Development and Management, UMBC. (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

Table 3.3
Variance Analysis
Actual and Projected Medicaid Nursing Home Costs:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Nursing Homes	\$830.7	\$253.7	\$7.5	(\$92.1)	\$940.4	\$1,940.2	134%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.8
Actual and Projected Medicaid Nursing Home Costs:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

B. Chronic Hospitals

Use and Costs

Maryland’s **chronic hospitals** provide care to medically complex patients who have an ongoing need for hospital level of care and require constant medical or nursing care. The chronic hospital is a setting in which care is provided over a more extended period of time than in the typical acute care hospital. The leading principal/primary diagnosis¹⁵⁴ for chronic hospital patients is “respiratory conditions,” which includes respirator-dependent individuals with acute or chronic respiratory failure. Maryland has 567 chronic hospital beds in seven facilities: five private and two state-operated (Table 3.4). Elsewhere in the United States, similar facilities are often called long-term acute care hospitals.

¹⁵⁴ Principal or primary diagnosis is the condition established after study to be chiefly responsible for occasioning the admission to the facility.

Table 3.4
Private and Public Chronic Hospitals:
Maryland, 2006

Private	No. of Beds	Public	No. of Beds
Johns Hopkins Bayview Center	69	Deer's Head Hospital Center	66
James Lawrence Kernan Hospital	40	Western Maryland Hospital Center	60
Levindale Hebrew Geriatric Center and Hospital	100	Total	126
University Specialty Hospital	180		
Gladys Spellman Specialty Hospital and Nursing Center	52		
Total	441		

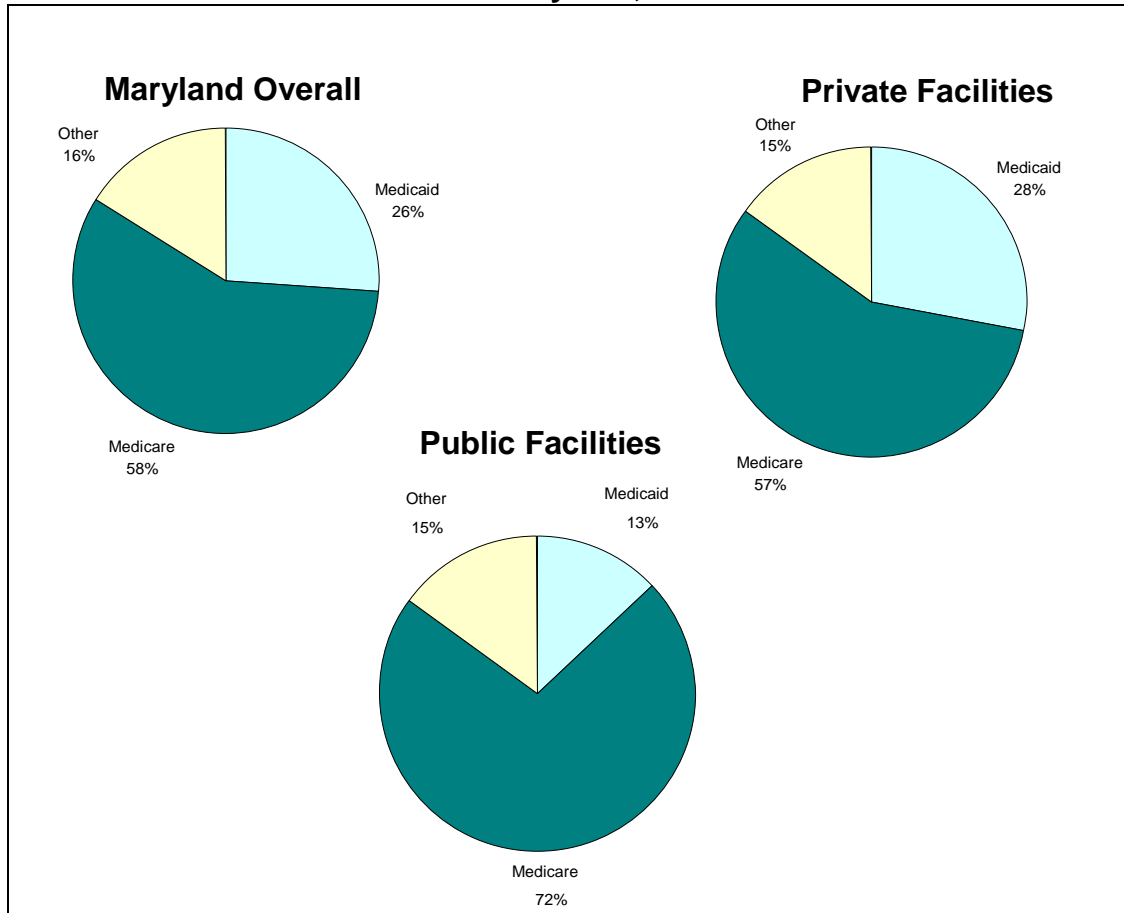
Source: Maryland Health Care Commission. (2006). Chronic hospital occupancy report, FY 2005.

The majority of chronic hospital patients in Maryland are covered by Medicare as their primary payer. This is the case for both public and private chronic hospitals (Figure 3.9). Maryland chronic hospitals are reimbursed by two separate Medicare payment systems. The CMS Long-Term Care Hospital Prospective Payment System (LTCH PPS) based on diagnosis-related groups (DRGs) reimburses public chronic hospitals under rules established by CMS.¹⁵⁵ In Maryland, a cost-based reimbursement system with rates established by the Maryland Health Services Cost Review Commission reimburses the five private chronic hospitals under a Medicare waiver. In Maryland, approximately one-third of chronic hospital patients are dually eligible for Medicare and Medicaid.¹⁵⁶

¹⁵⁵ CMS requires an average length of stay of 25 days for LTCH and has special payment provisions for “short stay outliers,” “interrupted stays,” and “high cost outliers.”

¹⁵⁶ Center for Health Program Development and Management, UMBC. (2007). Analysis using Maryland Department of Health and Mental Hygiene MMIS2 and Maryland BUY-IN files, 2006.

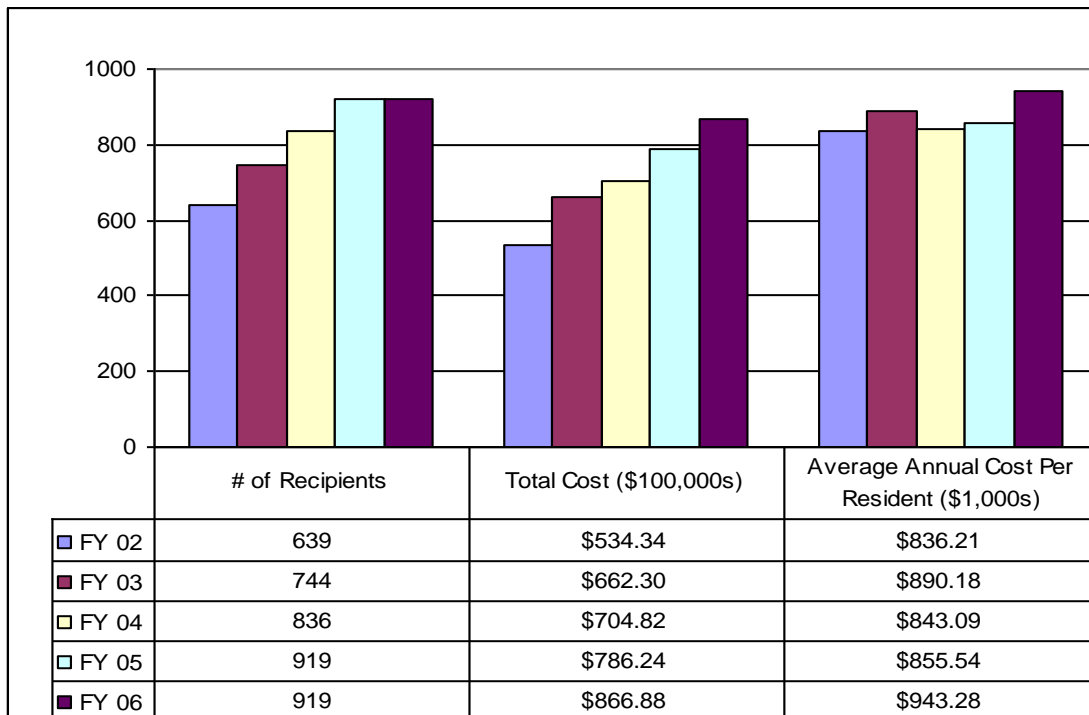
**Figure 3.9
Chronic Hospital Discharges by Payer:
Maryland, 2001**



Source: Maryland Health Care Commission. (2003). *Emerging trends in selected post-acute care settings in Maryland.*

Seventy-seven percent of 2006 chronic hospital patients who are Maryland Medical Assistance (Medicaid) beneficiaries are adults between the ages of 16 and 64. Older adults aged 65 and older constitute 23 percent of chronic hospital users. The number of Medicaid beneficiaries using chronic hospitals increased by 44 percent from 2002 to 2006, from 639 patients to 919 patients. Over this same period, costs increased by 62 percent, from \$53.4 million in 2002 to \$86.7 million in 2006.

Figure 3.10
Growth in Medicaid's Chronic Hospital Population and Medicaid Costs:
Maryland, FY 2002 – FY 2006

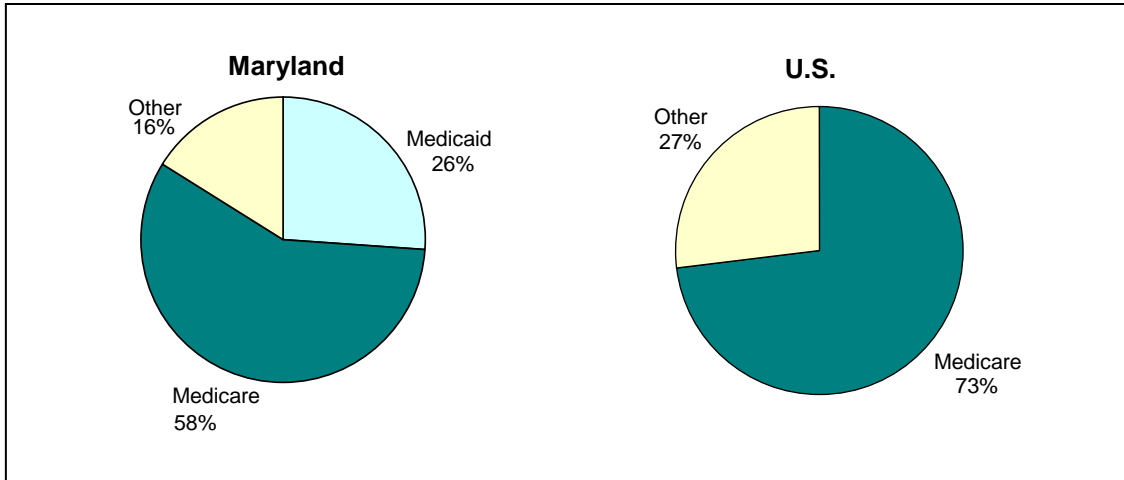


Source: Center for Health Program Development and Management, UMBC. Maryland Department of Health and Mental Hygiene, MMIS2.

Regional and National Comparison

As shown in Figure 3.11, Medicaid beneficiaries in Maryland use chronic hospitals at a comparatively higher rate than Medicaid beneficiaries nationally (as measured by discharges by payer). An analysis of 35 states and the District of Columbia found that Maryland ranks higher on the number of beds per 100,000 adults than 27 other states (Table 3.5).

Figure 3.11
Chronic Hospital Discharges by Payer:
Maryland (2001) and the U.S. (2004)



Sources:
 Maryland: Maryland Health Care Commission. (2003). Emerging trends in selected post-acute care settings in Maryland. Maryland data is for CY 2001.
 United States: Statement of Mark E. Miller, Ph.D., (March 15, 2006) Medicare Payment Advisory Commission, before the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, Washington, D.C. U.S. data is for 2004.

Table 3.5
Chronic Hospital Beds per 100,000 Population
Aged 18 Years and Older:
Maryland and Other Selected States, 2000

Beds per 100,000 Adults ≥18 Years Old	36 States			
	0-5	Arizona California Colorado Connecticut Florida	Georgia Hawaii Illinois Kentucky Michigan	New Jersey New Mexico North Carolina Pennsylvania South Carolina
6-10	Massachusetts Arkansas	Minnesota Kansas	Ohio Indiana	Missouri Montana
11-20	Louisiana Maryland	Mississippi Nevada	New York Oklahoma	Texas
≥21	District of Columbia	Rhode Island		

Source: Center for Health Program Development and Management, UMBC. Data from U.S. Census 2000 and U.S. News and World Report/American Hospital Association, 2006.

Addressing Service Gaps

The geographic distribution of chronic hospitals shows that four of the five private chronic hospitals, with a total of 389 beds (88 percent of private chronic hospital beds), are located in Baltimore City. The remaining private chronic hospital is located in Prince George’s County (52 beds). The two state-operated chronic hospitals are located in more remote geographic locations: one public chronic hospital is located in Washington County (60 beds) and the other is located in Wicomico County (66 beds). A chronic hospital is a licensed specialty hospital and is generally recognized as a regional resource. Even though there is a concentration of chronic hospitals in Baltimore City, the various regions of Maryland have access to chronic hospitals: Western, Eastern Shore, and Central Regions of the state. As such, there is no significant gap in services provided by chronic hospitals. However, in the near future, Maryland, like many other states, is facing a shortage of health care workers in long-term care facilities (see “Workforce Issues” in Chapter II).

Projected Use and Costs in 2010, 2020, 2030

Estimation Factors:

Historical utilization trend data was used to estimate future utilization; no further adjustments were made.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

From 2005 to 2030, the number of Medicaid chronic hospital patients in Maryland can be expected to increase by 64 percent (Table 3.6). As a result, Medicaid chronic hospital costs are expected to increase 243 percent, from \$78.6 million in 2005 to \$269.5 million in 2030 (Table 3.7). While each of the variance factors contributes to the increase in Medicaid chronic hospital costs, most of the increase is attributable to inflation’s impact on the cost of a chronic care hospital day (\$104 million) and to the continuing rise in the percentage of the adult Medicaid population under age 65 using chronic hospitals (\$48 million). See Table 3.8 and Figure 3.12.

Figure 3.12 illustrates graphically the projected increase in costs by age group (under age 65 and aged 65 and over).

Table 3.6
Actual and Projected Medicaid Chronic Hospital Patients:
Maryland, 2000 – 2030

	Actual		Projected		
	2000	2005	2010	2020	2030
Under 65	380	687	881	1,028	1,118
Age 65 and Over	193	232	251	318	386
Total	573	919	1,132	1,346	1,504

Source: Center for Health Program Development and Management, UMBC (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

Table 3.7
Actual and Projected Medicaid Chronic Hospital Costs
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Under Age 65	\$54.1	\$82.5	\$126.7	\$176.4	\$122.4	226%
Age 65 and Over	\$24.5	\$33.9	\$56.0	\$93.0	\$68.5	279%
Total	\$78.6	\$116.4	\$182.7	\$269.5	\$190.8	243%

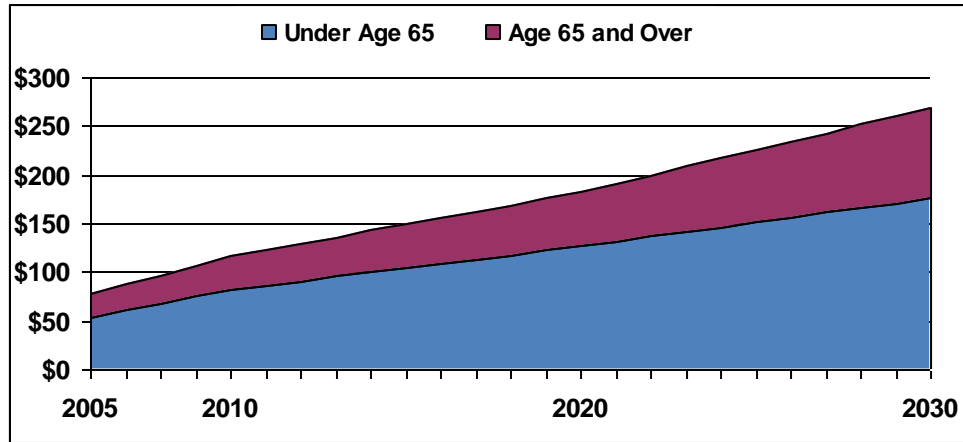
Source: Center for Health Program Development and Management, UMBC (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

Table 3.8
Variance Analysis
Actual and Projected Medicaid Chronic Hospital Costs:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Chronic Hospitals	\$78.6	\$30.0	\$48.0	\$8.7	\$104.0	\$269.5	243%

Source: Center for Health Program Development and Management, UMBC (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

Figure 3.12
Actual and Projected Medicaid Chronic Hospital Costs:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

In-Home Services and Supports

In-home services and supports include personal care and other skilled and non-skilled nursing services provided in the home to individuals aged 65 and older and persons with disabilities. For purposes of this report, this includes (a) services provided to Medicaid-eligible individuals under the Maryland Medicaid state plan, referred to as “state plan services,” (b) services that are funded solely by the State (and/or by grants) for individuals who are not eligible for Medicaid, or (c) services that are not covered by Medicaid.

Maryland’s federal waiver programs for home- and community-based services include certain in-home services. In-home services provided through waiver programs are discussed in detail in the section entitled *Community Services and Supports* in order to provide a discussion of waiver services in their totality.

Use and Costs

Maryland Medicaid In-Home State Plan Services

In consultation with the Maryland Medicaid agency, the following Medicaid state plan services were selected for inclusion in the “in-home” category:

- Personal Care
- Home Health Services
 - Private Duty Nursing
 - Skilled Nursing Services
 - Shift Home Health Aide
 - Home Health Aide
- Durable Medical Equipment
- Disposable Medical Supplies¹⁵⁷

These services were selected because they (a) most likely serve the target population, (b) are most directly related to enabling individuals with long-term care needs to remain successfully in the home setting, and (c) are more discretely describable in terms of applicability to the types of services that are the subject of this report.¹⁵⁸

Since Medicaid beneficiaries who are not aged 65 and older or disabled use some of these Medicaid services (e.g., short-term home health care following an acute care hospital stay), the data analysis of the use of and expenditures for these services was confined to those individuals in the Medicaid eligibility file whose eligibility status is “aged, blind or disabled (ABD)” for

¹⁵⁷ The “medical” in the terms **durable medical equipment** and **disposable medical supplies** implies that these are not long-term care services. However, ABD Medicaid beneficiaries consume significant amounts of these services in their homes and these services contribute greatly to successful community living, so including these as long-term care services is justified. Durable medical equipment includes mobility aides such as motorized wheelchairs and assistive technology devices. Disposable medical supplies include items such as diabetes management supplies. Durable medical equipment and supplies are also provided by Medicare for dually-eligible individuals within the home health benefit, offsetting some Medicaid costs for this population.

¹⁵⁸ Consideration was given to adding “optional state plan rehabilitation services.” However, this category includes a variety of services that may or may not relate to this report, the services are likely to be of shorter duration, and the services may or may not occur in the home. Consequently, these services were excluded.

ages 5 and older. Thus, all user counts and associated expenditures are for the ABD subset of the larger Medicaid population. All Medicaid expenditure figures are for total Medicaid expenditures (both the federal and state share). The state’s share of Medicaid expenditures is 50 percent.

The use of and expenditures for Medicaid in-home state plan services increased dramatically from FY 2000 to FY 2006, from 7,535 duplicated users¹⁵⁹ at a cost of \$22.4 million to 19,326 users (again, duplicated counts) at a cost of \$86.2 million, respectively. This represents a 157 percent increase in the number of users of services and a 286 percent increase in costs (Table 3.9).¹⁶⁰

Table 3.9
Use of and Expenditures for Medicaid In-Home State Plan Services:
Maryland, FY 2000 – FY 2006

Fiscal Year	Users (Duplicated)		Expenditures	
	Number	Percent Change	Dollars	Percent Change
2000	7,535	---	\$22,349,581	---
2001	9,636	27.9	\$27,353,253	22.4
2002	13,045	35.4	\$33,573,247	22.7
2003	16,059	23.1	\$37,177,239	10.7
2004	16,994	5.8	\$56,628,310	52.3
2005	18,483	8.8	\$79,600,295	40.6
2006	19,326	4.6	\$86,238,792	8.3

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2. Includes Aged/Blind/Disabled (ABD) Medicaid Beneficiaries.

To illustrate where the greatest expenditures and highest utilization occurs, Table 3.10 shows the number of users of each component service of in-home state plan services, as well as expenditures for each of these services in FY 2005 and FY 2006. Personal care services are used by ten times more ABD Medicaid beneficiaries than private duty nursing, but private duty nursing is significantly more costly than any other in-home service at over \$90,000 per year, on average, per user.

¹⁵⁹ “In-home state plan services” encompasses a number of discrete services. A unique individual is likely to use more than one service during a fiscal year, resulting in a count of duplicated users for the broader service category.

¹⁶⁰ See Technical Notes in Appendix 3 for a discussion of unduplication of duplicated tallies.

Table 3.10
Use of and Expenditures for Medicaid In-Home State Plan Services
by Service Category:
Maryland, FY 2005 and FY 2006

Service	FY 2005		FY 2006		Percent State Funds
	Users* (Duplicated)	Expenditures	Users* (Duplicated)	Expenditures	
Personal Care	4,812	\$20,157,801	4,604	\$21,055,779	50%
Private Duty Nursing	372	\$33,246,284	413	\$37,622,231	50%
Skilled Nursing Services	736	\$886,324	739	\$951,251	50%
Shift Home Health Aide	63	\$1,064,328	59	\$1,329,781	50%
Home Health Aide	389	\$ 478,873	161	\$171,021	50%
Durable Medical Equipment	3,713	\$6,457,485	3,789	\$5,719,597	50%
Disposable Medical Supplies	8,398	\$17,309,200	9,561	\$19,389,133	50%
Total		\$79,600,295		\$86,238,792	50%

* While the counts within each service category are unduplicated, the column is headed "duplicated" because an individual may use services from multiple service categories.

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2. Includes Aged/Blind/Disabled (ABD) Medicaid Beneficiaries.

**The Medicare Home Health Care Benefit:
Relationship to Medicaid Personal Care and Home Health Services**

It is important to note that virtually all of the age 65 and over aged, blind, and disabled (ABD) population in Maryland are Medicare beneficiaries. In addition, many in the under age 65 ABD cohort are Medicare beneficiaries as well. In CY 2006, of the 70,921 full benefit dual eligibles in Maryland, 27,522 (39 percent) were under age 65.¹⁶¹ Medicare pays for the home health needs of many of these dually eligible beneficiaries if the home health care is attendant to a skilled nursing need. Medicare home health is "limited to reasonable and necessary part-time or intermittent skilled nursing care and home health aide services,¹⁶² and physical therapy, occupational therapy, and speech-language pathology ordered by [a] doctor and provided by a Medicare-certified home health agency ... [Medicare home health] also includes ... durable medical equipment (such as wheelchairs, hospital beds, oxygen, and walkers) and medical supplies for use at home."¹⁶³ Medicare does not pay for home health aide (e.g., personal care) services that are not attendant to skilled nursing care. While Medicare's definition of "home health" services is more encompassing than the Medicaid definition, it is this Medicare service category that most directly affects Medicaid in terms of long-term care services.¹⁶⁴

In CY 2005 (the last year full data was available), Medicare expenditures for home health care services in Maryland totaled \$152,317,579, with 48,207 Medicare beneficiaries receiving one or more home health service, or 817,823 visits, at an average cost of \$3,160 per year per beneficiary.¹⁶⁵ Of course, not all of these beneficiaries are also Medicaid-eligible, but the data does show the significant role that Medicare plays in providing in-home services to Maryland Medicare beneficiaries. Thus, while this report is focused on long-term care costs for Maryland state and local governments, Medicare, as primary payer for home health care services for dually-eligible individuals, reduces the direct effect on Medicaid and therefore state costs for these services. The availability of home health aide services (analogous to Medicaid personal care) attendant to a skilled nursing need is an example of a direct relationship to Medicaid. As long as the Medicare home health aide is providing services to a dually eligible individual, Medicaid personal care services are not required or are needed only to fill gaps not covered by Medicare.

¹⁶¹ Some Medicaid beneficiaries 65 years of age and older are not eligible for Medicare because they did not work or did not pay enough Medicare taxes when they did work, and are not eligible for Medicare "buy-in" by Medicaid. Some Medicaid-eligible individuals under the age of 65 are eligible for Medicare based on a qualifying disability. See www.medicare.gov. Data from Center for Health Program Development and Management, UMBC, Medicare/Medicaid file, extracted September 2007.

¹⁶² "Medicare home health aide" is essentially the same service as Medicaid personal care.

¹⁶³ Centers for Medicare and Medicaid Services. (2007). *Medicare and you*. <http://www.medicare.gov/publications/pubs/pdf/10050.pdf>.

¹⁶⁴ The reverse is true for Medicare skilled nursing home services; limited to 100 days of coverage per spell of illness, the Medicare benefit often expires and Medicaid becomes the long-term payer for nursing home services for dual-eligible beneficiaries.

¹⁶⁵ Centers for Medicare and Medicaid Services. (2007). Medicare home health statistics. <http://www.cms.hhs.gov/MedicareFeeforSvcPartsAB/Downloads/HHAst05.pdf>.

Maryland Medicaid Personal Care State Plan Services

As shown in Table 3.11, in FY 2006, personal care services were used by 4,604 unduplicated Medicaid beneficiaries at a cost of \$21 million. In-home personal care is by far the most important in-home service that people use to help them stay in their home, often deflecting or deferring institutional placement. For this reason, Medicaid personal care state plan services are discussed separately here.

Personal care is provided not only through Medicaid personal care state plan services, but also the Medicaid Older Adult Waiver, the Medicaid Living at Home Waiver,¹⁶⁶ and the Medicare home health benefit. To qualify for Medicaid personal care state plan services in Maryland, the individual does not have to meet an institutional level of care—unlike the functional eligibility requirement for the Medicaid waivers—so personal care services are available to community-dwelling individuals who are not yet so impaired that they qualify for institutional placement.

Both the number of unduplicated users of and expenditures for Medicaid personal care state plan services have shown modest growth since FY 2002 (Table 3.11).

Table 3.11
Use of and Expenditures for Medicaid Personal Care State Plan Services:
Maryland, FY 2000 – FY 2006

Fiscal Year	Users (Unduplicated)		Expenditures	
	Number	Percent Change	Dollars	Percent Change
2000	3,751	--	\$16,024,129	--
2001	4,221	12.5	\$18,520,004	15.6
2002	4,783	13.3	\$20,616,532	11.3
2003	4,855	1.5	\$20,284,011	(1.6)
2004	4,732	(2.5)	\$20,061,735	(1.1)
2005	4,812	1.7	\$20,157,801	4.8
2006	4,604	(4.3)	\$21,055,779	4.5

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2. Includes Aged/Blind/Disabled (ABD) Medicaid Beneficiaries.

Personal care state plan services are used more by persons aged 65 and older than by persons under age 65. In FY 2005, 62 percent of the users of personal care services were aged 65 or older, and 62 percent of the expenditures were associated with the aged 65 and older cohort. Table 3.12 illustrates this view of the split between utilization by the aged 65 and older group and the under age 65 group from FY 2000 to FY 2006.

¹⁶⁶ See the following section entitled *Community Services and Supports* for a discussion of Maryland's Medicaid home- and community-based waivers. Community-dwelling individuals who qualify for an institutional level of care may receive personal care services through the waiver programs.

Table 3.12
Use of and Expenditures for Medicaid Personal Care
State Plan Services by Age Group:
Maryland, FY 2000 – FY 2006
(Unduplicated Users)

Fiscal Year	Total Users	Age 65 and Over				Under Age 65			
		Users	Expenditures (\$ millions)	Percent Users	Percent Costs	Users	Expenditures (\$ millions)	Percent Users	Percent Costs
2000	3,751	2,282	\$9.3	61%	58%	1,469	\$6.8	39%	42%
2001	4,221	2,594	\$11.2	61%	61%	1,627	\$7.3	39%	39%
2002	4,783	2,967	\$12.7	62%	62%	1,816	\$7.9	38%	38%
2003	4,855	3,022	\$12.6	62%	62%	1,833	\$7.7	38%	38%
2004	4,732	2,938	\$12.4	62%	62%	1,794	\$7.7	38%	38%
2005	4,812	2,977	\$12.6	62%	62%	1,835	\$7.6	38%	38%
2006	4,604	2,817	\$12.9	61%	61%	1,787	\$8.1	39%	39%

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2. Includes Aged/Blind/Disabled (ABD) Medicaid Beneficiaries.

Non-Medicaid In-Home Services

The Maryland Departments of Aging, Disabilities, and Human Resources finance three additional in-home aide services programs with 100 percent state dollars: Senior Care, Attendant Care Program, and In-Home Service Aide Services. In addition, the State provides funding for two non-Medicaid programs that receive federal matching funds: Meals or food subsidies (23 percent state funds) and Assistive Technology (14 percent state funds). These programs depend on annual state appropriations for their continued availability. Table 3.13 shows the number of duplicated users of and expenditures for these programs in FY 2006. Together these programs contributed \$15.5 million (including \$11.9 million in state funds) to non-Medicaid in-home services for Maryland's aged and disabled populations in FY 2006.

Table 3.13
Use of and Expenditures for Non-Medicaid
Publicly Funded In-Home Services:
Maryland, FY 2006

Sponsoring Maryland Department	Program	Expenditures	Participants (Duplicated)*	Percent State Funds
Aging	Senior Care	\$6,478,773	3,932	100%
Disabilities	Attendant Care Program	\$1,252,000	120	100%
Human Resources	In-Home Service Aide	\$3,144,125	3,305	100%
Aging	Meals	\$3,539,756	7,982	23%
Disabilities	Assistive Technology	\$1,000,000	202	14%
Total Funds		\$15,414,654		
State Funds		\$11,829,042		76.7%

* While the counts within each service are unduplicated, the column is headed "duplicated" because an individual may use multiple services.

Source: Center for Health Program Development and Management, UMBC. (2007). Data from service inventory of state agencies.

Addressing Service Gaps

As shown in Table 3.14, state agencies providing in-home services (Maryland Departments of Health and Mental Hygiene, Aging, Disabilities, and Human Resources) identified a lack of funding and a lack of qualified service providers as challenges to in-home service provision. Additional funding and service providers are needed to serve persons on waiting lists and to develop and implement a more coordinated service delivery system among public program providers (e.g., developing a single point of entry for all state personal care, attendant care, and respite care programs). The recruitment and retention of qualified service providers was identified as a major challenge to service provision.

Also discussed in the section of this chapter entitled *Housing and Residential Services*, the overarching concern of many agencies, consumers, and advocates is the lack of affordable and accessible housing for the target population, particularly those in nursing homes who wish to return to the community but who have lost or can no longer afford the housing they left when they entered the nursing home.

**Table 3.14
Gaps in In-Home Services Reported by State Agencies:
Maryland, 2007**

GAP	PROGRAMS REPORTING GAP	GAP DESCRIPTION
Lack of Funds	Senior Care	Additional funds needed to purchase service for the growing number of frail seniors
	In-Home Aides Services Purchase of Service	To meet demand for service
Lack of Qualified Providers	Attendant Care Program	Staff burn-out, lack of providers in Western and Eastern Shore
Lack of Qualified Providers	Attendant Care Program	Family members should be allowed as providers
	Senior Care	Lack of adequate case management coverage adds to wait list and slows down the process
	In-Home Aides Services Purchase of Service	More difficult to recruit and retain aide staff due to poor pay, lack of benefits.
Lack of Adequate Volunteers	Home Delivered Meals	Additional volunteers are needed to deliver meals to
Coordination	In-Home Aides Services Purchase of Service	Need improved coordination among public program providers
Provider Reimbursement Rate	Attendant Care Program	Increase in provider reimbursement rates needed
Affordable, Accessible Housing	All In-Home Programs	Need more units of subsidized housing, more accessible housing

Source: Center for Health Program Development and Management, UMBC. (2007). Data from service inventory of state agencies and local jurisdictions.

Regional and National Context

The Community Living Exchange Collaborative¹⁶⁷ tracks state Medicaid spending on institutional and community-based care across the United States. Even though this section of the report is confined to in-home services and the Collaborative's data includes both in-home and community-based services, it is useful to present the Collaborative's findings here to illustrate how Maryland compares to the rest of the country in terms of the percentage of Medicaid funds spent for institutional care versus community-based care. Table 3.15 compares expenditures for institutional and community-based care for the aged and disabled population nationally and for Maryland and surrounding states (a comparison of all 50 states can be found in Appendix 7). Institutional expenditures include only Medicaid nursing facility costs. Community-based services expenditures include home- and community-based waiver services, state plan personal care services, and home health services. The Exchange does not include durable medical equipment or disposable medical supplies, nor does it consider Medicare, state- or local-only funding, or private-pay sources of funding. While Maryland has steadily increased Medicaid expenditures for waiver and state plan services, its costs for nursing facility services have also continued to increase. As a result, Maryland ranked 35th in the nation in terms of the percentage of "aged and disabled" Medicaid expenditures for community-based services as a percentage of total long-term care expenditures (Maryland's percentage was 17.4 percent). Among Maryland's neighbors, only Pennsylvania and Delaware devote a lower percentage to community-based services. The national average was 27.1 percent.

Table 3.15
A Comparison of Medicaid Expenditures for
Institutional vs. Community-Based Services
Maryland and Selected States, FY 2005

State	Institutional		Community		Total Expenditures (\$ Billions)
	Expenditures (\$ Billions)	Percent of Total	Expenditures (\$ Billions)	Percent of Total/Rank	
Pennsylvania	\$4.337	90.5	\$.456	9.5 (47)	\$4.793
Delaware	\$.155	87.9	\$.021	12.1 (41)	\$.176
Virginia	\$.686	78.9	\$.183	21.1 (27)	\$.869
District of Columbia	\$.176	81.9	\$.039	18.1 (32)	\$.215
West Virginia	\$.391	76.7	\$.119	23.3 (21)	\$.511
Maryland	\$.895	82.6	\$.189	17.4 (35)	\$1.084
Nation	\$47.236	72.9	\$17.594	27.1	\$64.832

Source: The Community Living Exchange Collaborative (www.hcbs.org), CMS 64 Cost Report Data, FY 2005. *Note:* Totals may differ from other data presented in this report, which use more recent updates of FY 2005 CMS 64 Cost Report Data.

¹⁶⁷ The Community Living Exchange Collaborative (www.hcbs.org) is recognized as a definitive source of information about national trends to rebalance institutional and community-based services in the Medicaid program. The Exchange is a joint effort of Independent Living Research Utilization, a program of the Institute for Rehabilitation and Research, and Rutgers Center for State Health Policy. The Exchange is funded by the Centers for Medicare and Medicaid Services as part of the New Freedom Initiative launched in 2001.

Projected Costs in 2010, 2020, 2030

Estimation Factors:

Services with historical trend data: To account for expected reductions in informal caregiving, population-based utilization rates for individuals aged 65 and over were adjusted by a net 0.5 percent increase per year. Because the decline in informal/family care is anticipated to lead to more units of personal care services for those who receive formal personal care, an adjustment was made for a net 0.5 percent increase per year in units of personal care services from 2006 through 2020, after which a net annual increase of 0.75 percent in units of care received is assumed.

Services without historical trend data: Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. Utilization rates for individuals aged 65 and older were adjusted first by a decrease of 0.75 percent per year because of declining disability rates, and then by a net increase of 1.5 percent per year to reflect anticipated preference shifts from institutional to home based care.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

In-home services costs are projected to increase by 340 percent by 2030, from \$94.5 million in 2005 to \$416 million in 2030 (Table 3.16). Of particular interest is the expected growth in costs for the aged 65 and older population. Medicaid state plan services are expected to increase eightfold and other in-home services will almost quadruple. By 2030, total state costs for in-home services (Medicaid and non-Medicaid) for persons aged 65 and older are projected to be \$216.8 million, up from \$30.5 million in 2005.

The variance analysis in Table 3.17 indicates that the projected growth in in-home costs from 2005 to 2030 is attributable primarily to growth in the percentage of the population using in-home services (\$116.9 million) and inflationary pressure on the cost of services (\$145.5 million). These two factors account for 82 percent of the variance.

Figure 3.13 provides a graphical representation of projected growth in costs for in-home services.

Table 3.16
Actual and Projected State Costs for In-Home Services:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Medicaid State Plan Services:						
Under Age 65	\$59.1	\$86.5	\$128.2	\$188.6	\$129.4	219%
Age 65 and Over	\$20.5	\$33.7	\$78.2	\$169.1	\$148.6	725%
Total	\$79.6	\$120.3	\$206.4	\$357.7	\$278.1	349%
Non-Medicaid In-Home Services:						
Under Age 65	\$4.9	\$5.9	\$7.9	\$10.6	\$5.7	116%
Age 65 and Over	\$10.0	\$13.1	\$25.7	\$47.7	\$37.7	377%
Total	\$14.9	\$19.0	\$33.6	\$58.3	\$43.4	292%
Total	\$94.5	\$139.3	\$240.0	\$416.0	\$321.5	340%

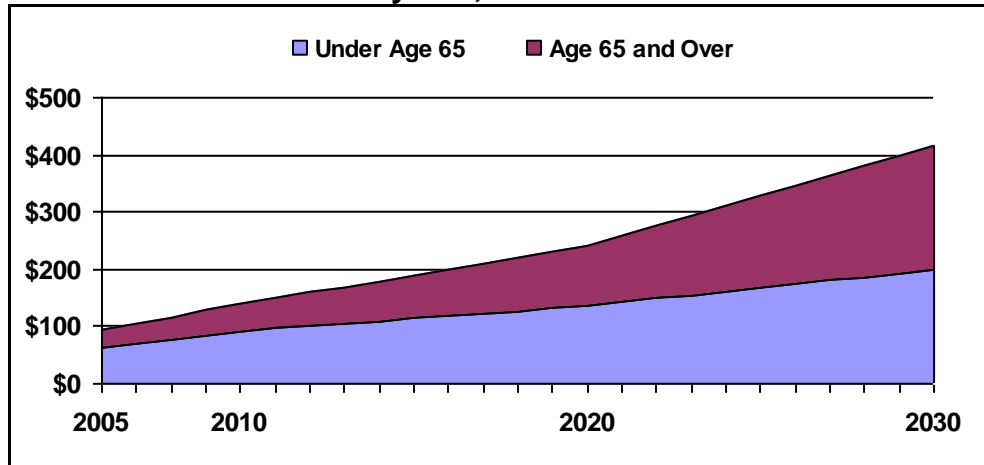
Source: Center for Health Program Development and Management, UMBC.

Table 3.17
Variance Analysis
Projected State Costs for In-Home Services:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Medicaid State Plan Services	\$79.6	\$36.1	\$101.2	\$16.8	\$124.0	\$357.7	349%
Non-Medicaid In-Home Services	\$14.9	\$6.2	\$15.8	\$0.0	\$21.5	\$58.3	292%
Total	\$94.5	\$42.3	\$116.9	\$16.8	\$145.5	\$416.0	340%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.13
Actual and Projected State Costs for In-Home Services:
Maryland, 2005 – 2030



Source: Center for Health Program Development and Management, UMBC.

Community Services and Supports

In Maryland, numerous publicly funded long-term services and supports are available in the community to individuals aged 65 and older and persons with disabilities. Funding sources include federal funds from a variety of sources, as well as state and local funds. This section of the chapter discusses services provided largely outside the home that are funded by the state. It includes home- and community-based services waiver programs in their entirety, even though some of those services are provided in the home (e.g., personal care in the Older Adult Waiver).

Local jurisdictions provide a wide variety of community services for the target population that are funded with local-only funds. Many local jurisdictions provide local funds to supplement state and federal funds as well. However, since there is extensive variability in the types of services and expenditures using local funds, the contribution of local jurisdictions to supporting long-term care programs is discussed in Chapter V entitled *Long-Term Services and Supports in Maryland's Jurisdictions*. Community long-term services and supports for persons with mental illness and persons with developmental disabilities are discussed separately in the later sections of this chapter entitled *Mental Health Services* and *Services and Supports for Persons with Developmental Disabilities*.

Use and Costs

This analysis includes the five service categories listed below. The services included in these categories are detailed in Appendix 6.

- Adult day care
- Medicaid home- and community-based waiver services
- Respite and caregiver services
- General support and services
- Other – Senior Legal Assistance

Table 3.18 summarizes expenditures and persons served in each of these categories in FY 2006. Expenditures for community-based services and supports for older adults and people with disabilities totaled more than \$205 million, with \$118.3 million, or more than half, coming from state funds. Combining this with the \$86.2 million in state funds for in-home services (see Table 3.9 in the preceding section entitled *In-Home Services and Supports*) results in a total of more than \$291 million for non-institutional services provided to individuals aged 65 and over and persons with disabilities.

Table 3.18
Use of and Expenditures for State-Funded Community
Long-Term Services and Supports:
Maryland, FY 2006

Service Category	Expenditures (\$ Millions)	Individuals Served	Percent State Funds
Adult Day Care	\$77.0	7,378*	51.8%
Medicaid Home- and Community- Based Waivers	\$91.3	4,352*	50.0%
Respite and Caregiver Services	\$4.3	19,188**	94.0%
General Supports and Services	\$32.1	***	91.7%
Other Services: Senior Legal Assistance	\$0.4	2,821**	0%
Total	\$205.1		
Total State Funds	\$118.3		57.7%

* Unduplicated, unique users

** Duplicated users (one user may use multiple services)

*** Services may be used by the general population (e.g., prevention and health promotion), so no estimate is made of total users in this category.

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2, and service inventory of state and local agencies.

Adult Day Care

Adult day care services are provided to eligible individuals in community-based centers throughout Maryland.¹⁶⁸ Often, the availability of adult day care enables a caregiver to work outside the home while his or her family member attends adult day care. For others, it provides the opportunity for eligible individuals to receive services and to enjoy social contacts that are vital to maintaining functioning and emotional health. Medicaid beneficiaries must be eligible for nursing facility level of care in order to receive adult day care services covered by Medicaid. Individuals not eligible for Medicaid adult day care may be supported by the Department of Health and Mental Hygiene's non-Medicaid adult day care program or may receive services paid for privately or through other payers.

In FY 2006, 6,488 Medicaid-eligible individuals received adult day care services at a cost of \$74.3 million (state and federal costs). In addition, the state, using state-only funds, subsidized an additional 890 non-Medicaid-eligible individuals with adult day care services at a cost of \$2.8 million. In all, a total of \$77 million (\$40 million of which was state funds) was spent to provide adult day care services to 7,378 unique Marylanders (Table 3.19).

¹⁶⁸ Adult day care, also known as medical day care, and for licensing purposes known as "Day Care for the Elderly and Adults with Medical Disabilities" as authorized by sections 2-104, 14-206, and 14-304 of the Maryland Annotated Code, and regulated by section 10.12.04 of the Maryland Code of Regulations, provides a variety of services that include nursing services, physician consultation, social services, rehabilitation activities, and other services intended to improve a participant's well being. Day care centers cannot be open 24 hours a day, nor can they provide residential services. Centers may serve elderly persons and persons with mental illness or development disabilities.

**Table 3.19
Use of and Expenditures for State-Funded Adult Day Care Services:
Maryland, FY 2006**

Service	Agency	Expenditures	Persons Served (Unduplicated)	Percent State Funds
Adult Day Care – Medicaid	DHMH*	\$74,277,690	6,488	50%
Adult Day Care – Non-Medicaid	DHMH	\$2,764,671	890	100%
Total		\$77,042,361	7,378	51.8%
Total State Funds		\$39,903,516		

* Maryland Department of Health and Mental Hygiene

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2, and service inventory of state and local agencies.

Medicaid Home- and Community-Based Waiver Services

Like all other states except Arizona, Maryland has utilized the authority under Section 1915(c) of the Social Security Act to provide home- and community-based services under the Medicaid program that generally are unavailable under the regular Medicaid state plan. The premise of the home- and community based services (HCBS) waiver authority is that services provided to persons in the community who are otherwise eligible for institutional services helps to deflect or defer institutional placement. For those already residing in an institution, HCBS waivers provide an opportunity to return to community living.

Besides being able to offer services that would otherwise not be allowable under Medicaid, Section 1915(c) of the Social Security Act allows states to limit waivers to certain populations, sections of the state, and the total number of persons they will serve. This last point is especially important to the analysis in this report. Waiver growth or constriction is principally a function of how much money the state appropriates for waiver services. For example, in Maryland, the Living at Home Waiver (serving adults with disabilities 18 through 59 years of age) is limited to 500 participants in a given month. Thus, unlike nursing facility eligibility and utilization, waivers typically have waiting lists and grow incrementally, based on authorized levels of participation.

There are five home- and community-based waivers considered in this section. Two additional waivers serving persons with developmental disabilities will be addressed in a later section of this chapter. In Maryland, the two waivers that serve children are the Model Waiver and the Autism Spectrum Waiver. The Model Waiver targets medically fragile individuals including technology-dependent individuals who, before the age of 22, would otherwise be hospitalized and are certified as needing hospital or nursing home level of care. Through the waiver, services are provided to enable medically fragile children to live and be cared for at home rather than in a hospital. The Autism Spectrum Waiver serves children from age 1 through 21. Services are directed toward enabling children with autism to continue to live successfully

with their families. The largest service category by far within the Autism Spectrum waiver is intensive individual support services.

The three waivers that serve older adults and persons with disabilities are the Traumatic Brain Injury (TBI) Waiver, the Living at Home (LAH) Waiver, and the Older Adult Waiver (OAW). The TBI Waiver is a very small waiver, serving only 19 people in FY 2006. The waiver services include residential habilitation, day habilitation, and supported employment services to adults aged 22 through 64 with traumatic brain injuries who are eligible for chronic care hospital or nursing facility level of care.

The LAH Waiver serves individuals 18 through 59 years of age with physical disabilities who are eligible for nursing facility level of care. Ninety-five percent of LAH Waiver expenditures are for personal care attendant services. The OAW is the largest of the non-developmental disability waivers, serving older adults 50 years of age and older who are eligible for nursing facility level of care. Maryland law provides a guaranteed slot in the OAW for persons transitioning to the community from nursing facilities if the individual is financially eligible for the waiver and has a plan of care that allows him or her to be able to be served cost-effectively in the community. Personal care is the largest waiver service category in the OAW, consuming 60 percent of waiver expenditures.

In FY 2006, 4,352 unique individuals¹⁶⁹ participated in five waivers at a total cost of \$91.2 million, of which \$45.6 million were state funds. Table 3.20 provides a summary of Maryland's home- and community-based waiver expenditures and persons served in FY 2006.

¹⁶⁹ It is possible for a person who "ages out" of the Living at Home Waiver to transition to the Older Adult Waiver, but for purposes of this analysis, the totals can be considered "unduplicated."

Table 3.20
Use of and Expenditures for Medicaid
Home- and Community-Based Services Waivers:
Maryland, FY 2006*

Waiver	Administering Agency	Expenditures	Persons Served (unduplicated)	Percent State Funds
Model Waiver	DHMH**	\$1,996,609	210	50%
Autism Waiver	MSDE***	\$17,566,354	881	50%
Traumatic Brain Injury Waiver	DHMH	\$1,678,968	19	50%
Living at Home Waiver	DHMH	\$13,989,360	461	50%
Older Adult Waiver	MDoA****	\$55,997,492	2,781	50%
Total		\$91,228,783	4,352	
Total State Funds		\$45,614,392		50%

* Excludes waivers for persons with developmental disabilities.

** Maryland Department of Health and Mental Hygiene

*** Maryland State Department of Education

**** Maryland Department of Aging

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2

Respite and Caregiver Services

In addition to respite services provided within Medicaid HCBS waivers (e.g., OAW and Autism), the state provides extensive respite and caregiver services to persons not eligible for Medicaid waivers. In FY 2006, the state provided non-Medicaid respite and caregiver services to over 18,800 (duplicated) individuals at a total cost of \$4.3 million, of which \$2 million was state funds. As with waiver respite services, state- and grant-funded respite and caregiver services provide families and caregivers with relief from the constant challenges of caring for a loved one, which further strengthens the family's or caregiver's ability to continue to support their family member in the community (see Chapter II, "Family and Informal Sources of Care"). Table 3.21 provides a summary of non-Medicaid caregiver services in FY 2006.

Table 3.21
Use of and Expenditures for Non-Medicaid Respite and Caregiver Services:
Maryland, FY 2006

Service	Agency	Expenditures	Persons Served (Duplicated)	Percent State Funds
Respite Care Services Program	DHR*	\$1,852,348	5,863	100%
National Family Caregiver Support Program	MDoA**	\$2,468,893	13,060	2%
Total		\$4,321,241		
Total State Funds		\$1,901,726		44%

* Maryland Department of Human Resources

** Maryland Department of Aging

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2, and service inventory of state agencies.

General Supports and Services

The state provides a variety of services in the community that do not fall readily into any other service category. Table 3.22 provides a summary of these services for FY 2006. Many receive only a portion of their total support from the state, with the balance of funds coming from federal appropriations and grant programs (“0%” in the “Percent State Funds” column means the program is funded with 100 percent federal funds).

Table 3.22
Use of and Expenditures for Non-Medicaid General Supports and Services:
Maryland, FY 2006

Service	Agency	Expenditures	Persons Served (Duplicated)	Percent State Funds
DHR Adult Services*	DHR**	\$27,591,462	3,715	100%
Aging and Disability Resource Center	MDoA***	\$450,000	14,000	56%
Senior Center Plus	MDoA	\$0****	345	
Health Promotion and Disease Prevention	MDoA	\$363,898	72,814	0%
Senior Centers Operating Fund	MDoA	\$500,000	1,846	100%
Senior Information and Assistance	MDoA	\$967,701	39,541	0%
Senior Nutrition-Congregate Meals	MDoA	\$681,419	35,294	0%
Senior Health Insurance Assistance Program	MDoA	\$892,092	26,519	50%
Public Guardianship	MDoA	\$642,691	756	100%
Total		\$32,089,261		91.7%
Total State Funds		\$29,432,199		

* Includes Adult Public Guardianship, C.A.R.E., Social Services to Adults, and Adult Protective Services.

** Maryland Department of Human Resources

*** Maryland Department of Aging

**** Senior Center Plus has no budget of its own. Participants are funded through OAW or private funds.

Source: Center for Health Program Development and Management, UMBC. Data from interviews with the Maryland Department of Human Resources and the Maryland Department of Aging.

Other Services – Legal Assistance Services

While not long-term care services in themselves, legal assistance services are included in this analysis because legal intervention can help individuals secure their rights; address abuse, neglect, and fraud issues; and carry out estate planning. All of these are vital to helping people continue to live in their homes and communities. The Senior Legal Assistance program served 2,821 people in FY 2006 (Table 3.23).¹⁷⁰ This program was funded entirely through federal grants.

¹⁷⁰ The Maryland Department of Aging website indicates that this service is for “older Marylanders;” no lower age limit for eligibility is noted. See www.mdoa.state.md.us.

Table 3.23
Use of and Expenditures for Other Services –
Legal Assistance Services:
Maryland, FY 2006

Service	Agency	Expenditures	Persons Served (Unduplicated)	Percent State Funds
Senior Legal Assistance	MDoA*	\$367,413	2,821	0%

* Maryland Department of Aging

Source: Center for Health Program Development and Management, UMBC. Data from interviews with the Maryland Department of Aging.

Addressing Service Gaps

Table 3.24 provides information on the program gaps that have been identified in Maryland’s HCBS waivers (excluding developmental disabilities). A major challenge to the provision of services has been the waiting lists; four of the five waivers detailed in this chapter have waiting lists, the largest being the Older Adult Waiver where, at any given time, as many as 8,000 individuals are on the registry awaiting the opportunity to make application for the waiver. While the MDoA reports that only about 25 percent of all individuals on the registry are found to be still interested or eligible at the time they are given the opportunity to apply, there still remains a “qualified” waiting list of about 2,000 people. In 2006, only the small TBI Waiver had no waiting list.

Additional funds and staff are needed to increase the number of available waiver slots, expand the administrative capacity of the waiver programs, and expedite the eligibility determination process. The lack of qualified service providers was also identified as a challenge to service provision. Agencies administering the waiver programs have experienced occasional shortages of qualified providers.

The same gaps were identified by state agencies administering the various non-Medicaid community-based services: not enough funds to provide for growing service demand, not enough qualified providers and direct service workers, and problems with identifying and coordinating services for a growing number of individuals 65 and older and persons with disabilities.

Table 3.24
Gaps in Home- and Community-Based Services Waiver Programs:
Maryland, 2007

Gap	Programs Reporting Gap	Gap Description
Lack of Funding	Older Adults Waiver	Increase number of waiver participants, administrative capacity
Lack of Qualified Providers	Older Adults Waiver	Unqualified providers, occasional shortage of providers
Eligibility	Older Adults Waiver	Timeliness of eligibility determination
Waiting List for Service	Older Adults Waiver	Programs have a waiting list for service. Additional waiver slots needed to meet the demand for service.
	Living at Home Waiver	
	Model Waiver	
	Autism Waiver	

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2, and service inventory of state and local agencies.

Regional and National Context

As shown in Table 3.15 in the preceding section of this chapter entitled *In-Home Services and Supports*, Maryland ranked 35th in the nation in terms of the percentage of Medicaid “aged and disabled” expenditures for community-based services as a percentage of total long-term care spending (Maryland’s percentage was 17.4 percent of total Medicaid expenditures for long-term care).

Projected Costs in 2010, 2020, 2030

Estimation Factors:

Services with historical trend data: Historical utilization trend data was used to estimate future utilization; no further adjustments were made.

Services without historical trend data: Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. The use rate was decreased by 1 percent per year to reflect declining disability rates, then increased by 1 percent per year to reflect increasing preference for community-based care rather than institutional care.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

Immediately below are projections for costs of community services excluding home- and community-based waiver services. Projections for waiver services costs follow thereafter.

Community Services (Excluding Waivers)

Community services costs (excluding home- and community-based waiver services) are estimated to increase by 271 percent from FY 2005 to FY 2030 (Table 3.25). The greatest portion of that growth is projected to occur in Medicaid adult day care services, particularly among those aged 65 and over. The variance analysis in Table 3.26 illustrates that the increase in the percentage of the target population using adult day care, as well as the expected increase in the cost per unit of service, account for the greatest portion of the increase.

General supports and services are funded through state, and in some cases, federal appropriations. In FY 2006, adult services administered by the Department of Human Resources accounted for 86 percent of total expenditures in this category (Table 3.22). Consequently, most of the projected increase in the costs of general supports and services can be attributed to adult services.

Figure 3.14 provides a graphical representation of projected growth in costs for community services for persons under age 65 and for older adults.

Table 3.25
Actual and Projected State Costs for Community Services
Excluding Home- and Community-Based Waivers:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Medicaid Adult Day Care						
Under Age 65	\$37.8	\$59.4	\$85.6	\$120.9	\$83.1	220%
Age 65 and Over	\$35.2	\$51.8	\$100.3	\$191.0	\$155.8	442%
Total	\$73.0	\$111.2	\$185.9	\$311.9	\$238.9	327%
Caregiver Services						
Under Age 65	\$3.7	\$4.4	\$5.9	\$7.9	\$4.2	116%
Age 65 and Over	\$0.5	\$0.7	\$1.2	\$2.1	\$1.6	303%
Total	\$4.2	\$5.0	\$7.1	\$10.0	\$5.8	139%
General Supports/Services						
Under Age 65	\$24.6	\$29.4	\$39.7	\$53.2	\$28.6	116%
Age 65 and Over	\$6.3	\$8.2	\$14.8	\$25.5	\$19.2	303%
Total	\$30.9	\$37.5	\$54.5	\$78.6	\$47.7	155%
Total—Under Age 65	\$66.0	\$93.1	\$131.2	\$182.0	\$116.0	176%
Total—Age 65 and Over	\$42.0	\$60.6	\$116.3	\$218.5	\$176.5	420%
Grand Total	\$108.0	\$153.8	\$247.5	\$400.5	\$292.4	271%

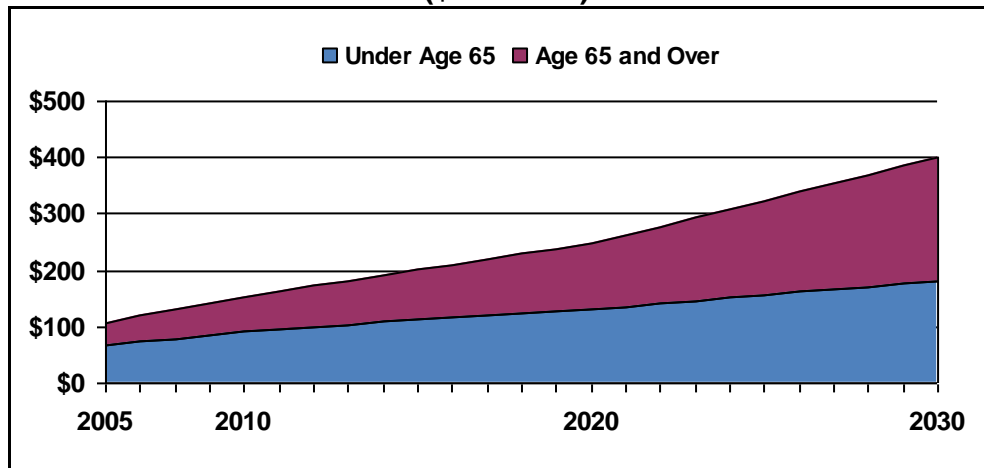
Source: Center for Health Program Development and Management, UMBC.

Table 3.26
Variance Analysis
Projected State Costs for Community Services
Excluding Home- and Community-Based Waivers:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Medicaid Adult Day Care	\$73.0	\$32.2	\$92.7	\$2.7	\$111.2	\$311.9	327%
Caregiver Services	\$4.2	\$1.3	\$0.0	\$0.0	\$4.5	\$10.0	139%
General Supports/Services	\$30.9	\$9.9	\$3.2	\$0.0	\$34.7	\$78.6	155%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.14
Actual and Projected State Costs for Community Services
Excluding Home- and Community-Based Waivers:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Home- and Community-Based Services Waivers

Unlike “entitlement” long-term care services under Medicaid (e.g., nursing facility services and adult day care), Medicaid waivers are subject to authorized caps on the number of participants allowed. Waivers expand or contract as a function of General Assembly appropriations. Thus, projections for waiver services costs in the future warrant separate consideration.

Two approaches are modeled here. Model A is based on historical spending projections relative to the population and assumes that historical trends will continue.¹⁷¹ Consequently, the cost and variance analysis shows that there will be a decline in the percentage of the population using waiver services (Tables 3.27). Almost, but not all, of this variance comes from the OAW, resulting in a \$42.6 million “savings” over time (Table 3.28). In Model A, total costs increased 102 percent, from \$99.2 million in 2005 to \$200.1 million in 2030.

In Model B, the assumption is that there will not be a decline in the percentage of the population using OAW services. This second projection model is provided here in anticipation of the implementation of the Money Follows the Person demonstration program beginning in January 2008. The State has committed to increasing waiver slots sufficient to serve those transitioning from nursing facilities under this program. Model B will result in higher projected costs compared to Model A (Table 3.29). The variance in the percentage of the population using waiver services reflects this change in assumptions. The result is a modest \$3.8 million decline in costs coming entirely from slight decreases in usage of the other waivers (Table 3.30). The remaining variances come from the increase in the population and inflationary pressure on the cost of each unit of service. In Model B, total costs increase from \$99.2 million in 2005 to \$239 million in 2030, an increase of 141 percent.

¹⁷¹ In Chapter IV, the projections for Model A are used in the projections of total costs to the State because Model A projections are the most conservative.

Table 3.27
Model A: Actual and Projected State Costs for
Home- and Community-Based Services Waivers:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Medicaid HCBS Waivers—Model A:						
Under Age 65	\$16.9	\$17.5	\$24.2	\$34.0	\$17.2	102%
Age 65 and Over	\$82.4	\$85.6	\$118.0	\$166.1	\$83.7	102%
Total	\$99.2	\$103.1	\$142.1	\$200.1	\$100.9	102%

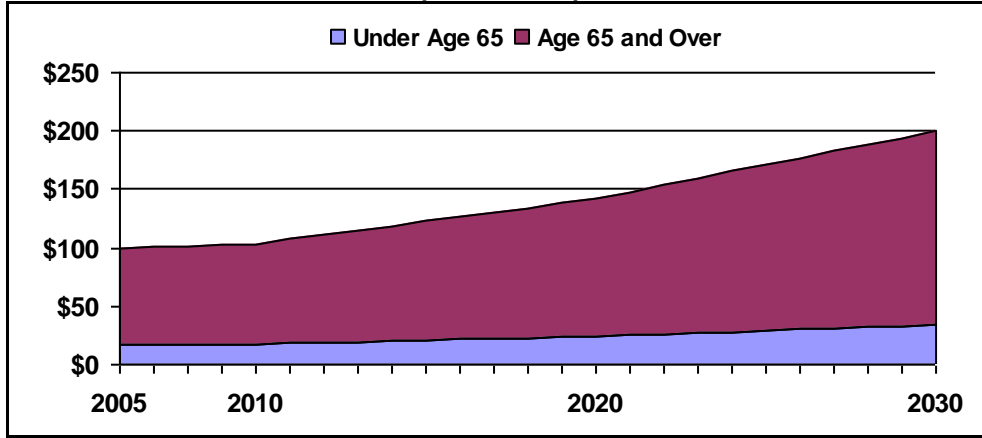
Source: Center for Health Program Development and Management, UMBC.

Table 3.28
Model A: Variance Analysis
Projected State Costs for Home- and Community-Based Services Waivers
Maryland, 2005 – 2030
(\$ Millions)

1 Service	2 Actual 2005	Variance				7 Projected 2030	8 Percent Change 2005-2030
		3 Population Growth	4 Percent of Population Using Service	5 Average Number Units per User	6 Average Cost per Unit of Service		
Model Waiver	\$1.9	\$0.5	(\$0.6)	(\$0.4)	\$2.2	\$3.7	95%
Autism Waiver	\$15.8	\$2.6	(\$2.3)	\$1.9	\$20.7	\$38.7	145%
Traumatic Brain Injury Waiver	\$1.3	\$0.4	(\$0.2)	\$0.3	\$1.8	\$3.7	191%
Living at Home Waiver	\$14.3	\$1.2	(\$0.7)	(\$1.5)	\$17.5	\$30.8	116%
Older Adult Waiver	\$66.0	\$37.4	(\$38.9)	(\$18.7)	\$77.4	\$123.3	87%
Total	\$99.2	\$42.3	(\$42.6)	(\$18.4)	\$119.7	\$200.1	102%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.15
Model A: Actual and Projected State Costs for
Home- and Community-Based Services Waivers:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Table 3.29
Model B: Actual and Projected State Costs for
Home- and Community-Based Services Waivers:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Medicaid HCBS Waivers—Model B:						
Under Age 65	\$16.9	\$19.5	\$28.2	\$40.6	\$23.8	141%
Age 65 and Over	\$82.4	\$95.3	\$137.5	\$198.3	\$116.0	141%
Total	\$99.2	\$114.9	\$165.7	\$239.0	\$139.7	141%

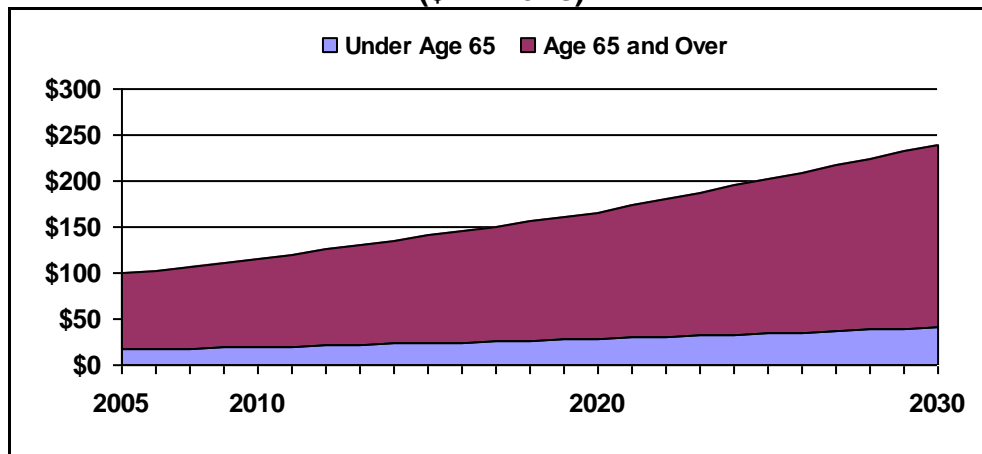
Source: Center for Health Program Development and Management, UMBC.

Table 3.30
Model B: Variance Analysis
Projected State Costs for Home- and Community-Based Services Waivers
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Model Waiver	\$1.9	\$0.5	(\$0.6)	(\$0.4)	\$2.2	\$3.7	95%
Autism Waiver	\$15.8	\$2.6	(\$2.3)	\$1.9	\$20.7	\$38.7	145%
Traumatic Brain Injury Waiver	\$1.3	\$0.4	(\$0.2)	\$0.3	\$1.8	\$3.7	191%
Living at Home Waiver	\$14.3	\$1.2	(\$0.7)	(\$1.5)	\$17.5	\$30.8	116%
Older Adult Waiver	\$66.0	\$37.4	\$0.0	(\$18.7)	\$77.4	\$162.1	146%
Total	\$99.2	\$42.3	(\$3.8)	(\$18.4)	\$119.7	\$239.0	141%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.16
Model B: Actual and Projected State Costs for
Home- and Community-Based Services Waivers:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Housing and Residential Services

Housing and supportive residential living arrangements are the backdrop for all long-term care services. Individual needs for long-term services and supports are generally served through residential living arrangements, including independent homeowners and renters, group homes, independent living “smart homes,” board and care, assisted living, family care-giving, and continuing care retirement communities (CCRCs). Naturally occurring retirement communities (NORCs) also form a backdrop in which services and supports can be targeted and delivered. This section assesses the Maryland housing and supportive residential backdrop and its implications for the State’s future long-term care needs. Three housing components are examined: overall housing availability, public/subsidized housing programs, and supportive residential alternatives.

Housing Availability

Availability of suitable housing is determined, in large part, by affordability. This is especially true for the elderly and individuals with disabilities who are disproportionately represented in the nation’s low-income or very-low-income strata. Housing affordability is particularly challenging in Maryland. In 2005, there were 55,252 Marylanders between the ages of 18 and 64 living with significant and long-term disabilities who rely on Supplemental Security Income (SSI) to cover living expenses.¹⁷² Nationally, Maryland is second only to Hawaii among the 50 states in the percentage of SSI needed to rent a one-bedroom housing unit. To further underscore the high rental rates, in 2006, Columbia, Maryland, was ranked as the highest cost local housing market area in the country when calculating the percentage of SSI needed (193 percent) to rent a one bedroom unit.¹⁷³ Correspondingly, in Maryland, SSI payments constituted only 13.6 percent of one-person median income in 2006 (second lowest among 50 states with the national average at 18.2 percent).¹⁷⁴ It is often a dire situation for both younger and older adults struggling with fixed, low incomes to maintain or attain adequate, affordable housing. These desperate circumstances for low-income and very-low-income individuals magnify the important role of federally sponsored subsidized housing and state housing programs. This crisis for the elderly and disabled poor can be sometimes hidden or overlooked since Maryland as a whole compares favorably with the United States population regarding the percentage of households with a housing cost “burden” (households spending at least 30 percent of gross income on housing) and a “severe burden” (households spending at least 50 percent of gross income on housing) (Figures 3.17 and 3.18). With homeownership close to 50 percent among all age groups (although nationally less than 10 percent of adults with disabilities own homes¹⁷⁵), and home ownership of 80 percent among persons aged 50 and over, Maryland also compares favorably with the rest of the country. See Chapter II for a more in-depth discussion of home ownership and housing as an asset.

¹⁷² Social Security Administration. (December 2005). Supplemental security record, characteristic extract record format, 100 percent data.. http://www.socialsecurity.gov/policy/docs/statcomps/ssi_sc/2005/.

¹⁷³ O’Hara A., E. Cooper, A. Zovisoski, J. Buttrick (2007). Priced out in 2006: the housing crisis for people with disabilities. Boston, MA, Technical Assistance Collaborative, Inc., p. 2.

¹⁷⁴ *Ibid*, p. 1.

¹⁷⁵ The White House. (February 2001). New Freedom Initiative. <http://www.whitehouse.gov/news/freedominitiative/freedominitiative.pdf>, p. 2.

Figure 3.17
Share of Housing Cost Burden,* All Ages:
Maryland and the United States, 2003-2004

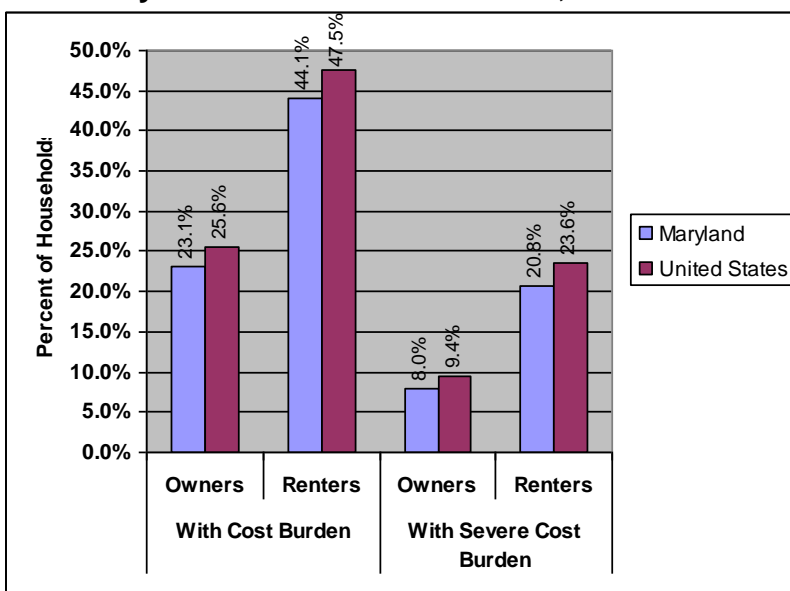
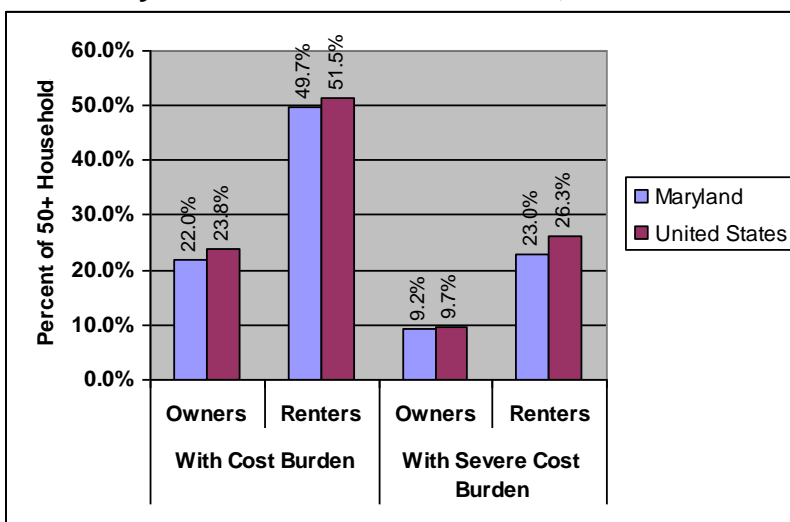


Figure 3.18
Share of Households with Housing Cost Burden*, Ages 50+:
Maryland and the United States, 2003-2004



Source (Figure 3.17 and 3.18): Kochera, A. (2007). State housing profiles: A special analysis of the Census Bureau's American Community Survey. Washington, DC: AARP Public Policy Institute. http://www.aarp.org/research/housing-mobility/affordability/d18637_housing.html.

*Housing cost burden is calculated as the use of 30 percent or more and "severe" burden represents 50 percent or more of gross household income devoted to housing costs.

Public/Subsidized Housing Programs

Housing affordability for the poor is often measured as a percentage of Area Median Income (AMI). In Maryland, this measurement underscores the critical need for both public housing and subsidized rental housing for low- and very-low-income (less than 30 percent of AMI) individuals and households, including households that rely on SSI income. New public housing units funded by the Department of Housing and Urban Development (HUD) are not being added to the existing stock of 1.2 million units nationally. Due to the attrition of public housing units, Maryland's total units have declined in recent years (24,278 units in 2000 to 22,545 in 2005).¹⁷⁶ There are lengthy waiting lists and shortages for public and subsidized housing units nationally. In Maryland, the waiting lists are projected to vary by jurisdiction, ranging from 27,000 in Montgomery County to 300 in Garrett County (see Table 5.9 in Chapter V entitled *Long-Term Services and Supports in Maryland's Jurisdictions*).

In addition to public housing, affordable rental housing is made available through two broad federal categories: the Section 8 Housing Choice Voucher Program (Table 3.31) and the Low-Income Housing Tax Credit (LIHTC) Program serving people of all ages. Low-income elderly and individuals with disabilities are also served by the Public Housing Program (Table 3.32) and Supportive Housing Program.

Federal Housing Assistance Programs

The Section 202 Supportive Housing Program is designed to serve the needs of older persons and persons with disabilities through the issuance of capital grants; beginning in 1990 the Program was separated into Section 202 for older persons and Section 811 for persons with disabilities. Most of this housing is targeted for those earning less than 30 percent of area median income.

The Low-Income Housing Tax Credit (LIHTC) Program awards tax credits to housing providers in return for setting aside a certain share of housing units for low-income renters of all ages including older adults, individuals with disabilities or other special populations (e.g. homeless). The credits are allocated to states on a per capita basis and competitively awarded under Internal Revenue Code provisions.

Housing Choice Voucher Program of Section 8 is the dominant form of federal housing assistance. The Program is designed for very low-income families, the elderly, and the disabled to afford housing in the private market which meet certain requirements. The rental units are not limited to subsidized housing projects. The housing subsidy is paid by the local Public Housing Authority to the landlord and the family pays the difference. Under certain circumstances the family may use its voucher to purchase a modest home.¹⁷⁷

¹⁷⁶ Maryland Department of Housing and Community Development. (no date available). *Five Year Consolidated Plan for 2005-2009*. <http://www.dhcd.state.md.us/Website/programs/cdbg/consolidatedPlan.aspx>.

¹⁷⁷ U.S. Department of Housing and Urban Development (August 2007). Housing choice vouchers fact sheet. www.hud.gov.

In spite of these programs, there is a significant shortage in affordable rental housing¹⁷⁸ in Maryland and that shortage is expected to grow much greater for the elderly disabled and non-elderly disabled, without the production of new rental subsidized units (Table 3.33). Public housing units continue to deteriorate and federal housing support programs have generally lost ground since 2004, serving fewer low-income families and individuals.¹⁷⁹ The Section 202 program, for example, has been scheduled for significant cuts in the President's last two budget proposals, but has maintained flat funding for the past two fiscal years based on Congressional funding restorations.¹⁸⁰ While the waiting list for Maryland 202 housing is not available, nationally there are, on average, 50 applicants waiting for each Section 202 property.¹⁸¹ The supply of subsidized housing in Maryland and elsewhere is additionally jeopardized since many subsidized HUD Section 8 rental property contracts will begin expiring in late 2007. Between 2007 and 2012, project-based Section 8 contracts covering 232 developments in Maryland will expire. These developments represent over 15,000 affordable housing units¹⁸² and the potential exists for many property owners to opt out of the program and convert these units to condominiums or more expensive apartment rentals.¹⁸³

Table 3.31
Section 8 Housing Choice Voucher Program
New Construction or Substantial Rehabilitation:
Maryland, 2000 and 2007
(Number of Housing Units)

	2000	2007
Maryland Section 8 New Construction or Substantial Rehabilitation	41,549	47,663

Source: Technical Assistance Collaborative, Inc. (November 2001). Assessment of housing opportunities for people with severe disabilities in Maryland. Boston, MA.
U.S. Department of Housing and Urban Development. (2007). Housing agencies profiles, Maryland. Housing agencies profile list (2007 data).

¹⁷⁸ Most frequently defined as families earning less than 50 percent of the AMI and paying more than 30 percent of household income for housing.

¹⁷⁹ Rice, D., B. Sard. (June 2007). *Congress should increase HUD's budget to prevent families from losing assistance and address growing needs*. Washington, DC: Center on Budget and Policy Priorities.

¹⁸⁰ Older Americans Report. (April 27, 2007). Baltimore, MD: Business Publishers, Inc., p. 86.

¹⁸¹ Kochera, A. (2006). Developing appropriate rental housing for low-income older persons: A survey of Section 202 and LIHTC property managers. Washington, DC, AARP Public Policy Institute.

¹⁸² National Housing Trust. (August 2007). http://www.nhtinc.org/data_reports/MD_Expiring_Contracts.xls.

¹⁸³ Karen Friedman, Director of Housing Policy, Maryland Department on Disabilities, Personal Interview, August 16, 2007.

Table 3.32
Maryland Public Housing Households by
Income, Age, and Disability Status:
Maryland, 2000

Program	Average Annual Household Income	Percentage of Households, Head/Co-Head with a Disability	
		Under 62	62 and Over
Public Housing	\$9,700	29%	41%

Source: U.S. Department of Housing and Urban Development. (2000). *Picture of subsidized households*. Washington, DC: HUD USER Policy Development and Research Information Service.

The Governor’s Commission on Housing Policy was developed in 2003 to provide recommendations on the housing needs of seniors and individuals with disabilities in Maryland. In 2000, there was a deficit of 125,000 units of affordable and available rental housing in the state. Waiting lists by county for subsidized housing reflect wide variation in need and the critical shortage in certain jurisdictions (see Chapter V). The Commission on Housing Policy predicted that by 2014, Maryland would experience a shortage of 157,000 units of affordable housing for low-income families, seniors, and individuals with disabilities. This projected shortage was calculated using 2000 U.S. Census Data and is based on Maryland households with incomes below 50 percent of the AMI that pay more than 30 percent of their income for rent. Because the median household income varies greatly in Maryland, the study used a different income threshold for each county. The projected shortage of rental housing is based on Census population projections and the assumption that no additional affordable rental housing would be built by the Maryland Department of Housing and Community Development (DHCD) after 2005 (Table 3.33). Housing units for low-income families are predicted to account for 66 percent of the 2014 housing deficit, while housing units for individuals with disabilities and older adults will account for 18 and 16 percent of the deficit, respectively.

Table 3.33
Affordable Rental Housing Shortage:
Maryland, 2014 (Projected)*

Household Type*	Shortage*	Percent of Total*	Cost (\$ Billions)**
Families	103,100	66%	\$12.8
Seniors	25,000	16%	\$3.1
Individuals with Disabilities	28,800	18%	\$3.6
Total	156,900	100%	\$19.5

* Figures based on families that earn less than 50 percent of AMI and pay more than 30 percent of gross income for housing.

Sources:
 Economic and Community Development Report. (2005). Maryland General Assembly: Issue Papers, 2005 Legislative Session.
 Maryland Department of Housing and Community Development, Office of Research. (2005). *Governor’s Commission on Housing Policy: Final report*.

Supportive Residential Alternatives

Assisted Living

In Maryland, **assisted living** refers to a “residential or facility-based program that provides housing and supportive services, supervision, personalized assistance, health-related services, or a combination thereof that meets the needs of individuals who are unable to perform or who need assistance in performing the activities of daily living or instrumental activities of daily living in a way that promotes optimum dignity and independence for the individuals.”¹⁸⁴ These facilities may or may not be constructed for the purpose of caring for seniors and typically include special amenities such as walk-in showers, wide doors for wheelchair access, and emergency call pull cords. A range of services providing support with activities of daily living are required of assisted living facilities, including individual care planning and medication management.

There are approximately 18,000 elderly people and persons with disabilities residing in approximately 1,300 assisted living facilities in Maryland.¹⁸⁵ These facilities can range in size from one resident to over one hundred residents (see Table 5.11 in Chapter V for a listing of the number of facilities by county with resident capacity).

The vast majority of assisted living is paid for through private funds, resulting in a large gap in assisted living services for low-income individuals. Various initiatives have allocated public funds to make assisted living more affordable to low-income individuals. In FY 2006, over 500 seniors received subsidized assisted living placements through Maryland’s Senior Assisted Living Group Home Subsidy program (SALGHS) administered by the Maryland Department of Aging (MDoA). The average SALGHS resident costs the State less than \$4,000 annually. In FY 2007, \$1.1 million in additional funds were allocated to subsidize the cost of assisted living in group homes with 4-16 residents with low to moderate incomes. The additional funds will be used to provide services to persons currently on the waiting list for this program. In addition to SALGHS, the MDoA manages the (Medical Assistance) OAW program, which includes assisted living for 2,781 individuals (see the section on *Community Services and Supports* in this chapter for program characteristics and usage data). These assisted living programs serving lower-income Marylanders are a vital resource in supporting the residential needs of individuals in non-institutional settings. However, the individuals served by these programs only constitute approximately 10 percent of the total licensed assisted living beds in Maryland. For further background and trends regarding assisted living, see the section in Chapter II entitled “Housing as an Asset.”

Naturally Occurring Retirement Communities

Naturally Occurring Retirement Communities (NORCs) is the term given to communities characterized by high-density older adult populations that were not specifically planned as aging communities but evolved over time as residents aged in place. NORCs exist throughout Maryland. In the Central Region, 29 NORC “clusters” (lower density communities

¹⁸⁴ Office of Health Care Quality, Maryland Department of Health and Mental Hygiene (January 2004). From Maryland Health-General 19-1801 as quoted in: Maryland’s assisted living program. Report required by Senate Bill 553 of the 2003 General Assembly Session. Baltimore, MD, Maryland Department of Health and Mental Hygiene.

¹⁸⁵ Maryland Office of Health Care Quality. (2007). http://www.dhmq.state.md.us/ohcq/licensee_directory/licensee_directory.htm.

adjacent to the high density NORC areas) have been identified by transportation studies.¹⁸⁶ NORCs are viewed as opportunities to serve a large number of older adults in a defined geographic area. NORC program initiatives are intended to attract or provide a variety of supports and services such as social opportunities, concentrated health care and social services resources, and health promotion activities.

Maryland currently has two funded NORC target sites, both in urban areas: one in Northwest Baltimore and one in Montgomery County. The MDoA's FY 2007 budget includes \$500,000 in new funding to expand these two NORC support programs. The actual number of participants served by the NORC program is not available.

Planned Senior Adult Living Communities

Planned Senior Adult Living Communities are age-restricted (age 55 and older) housing developments which have become increasingly popular in Maryland and throughout the nation. These communities provide another opportunity for baby boomers to remain in their communities but also may present new challenges by the year 2020 when the number of individuals reaching the age of 55 begins to taper. Currently, most Maryland counties do not track the development of such communities.¹⁸⁷ Frederick and Washington Counties in Western Maryland and Anne Arundel, Carroll, Harford and Howard Counties in the Baltimore Region do track these projects, however. The total number of existing and planned age-restricted housing units in these six counties is 18,623 in 122 Senior Adult Living Communities. There are no state programs supporting the development of these communities, but local governments often favor development since the tax base is increased without an expansion in school enrollment and other costs associated with younger families.¹⁸⁸

Continuing Care Retirement Communities

Continuing Care Retirement Communities (CCRCs), also referred to as life care communities, provide a range of independent living, assisted living, and health services in a retirement housing setting. CCRCs combine lifetime housing with a range of services, which may include meals, housekeeping, social activities, transportation, and access to medical and nursing services. Resident contract agreements and entrance and monthly service fees are established by the individual CCRC and are regulated by MDoA.

Maryland has 34 CCRC facilities providing over 11,000 independent living units, approximately 2,000 assisted living units, and over 2,500 nursing home beds for a total of almost 16,000 units/beds. In addition, there are approximately 1,500 units/beds currently under development. The actual number of participants served by CCRC facilities is not available. Admission to a CCRC generally requires a substantial equity investment. For a complete listing

¹⁸⁶ Baltimore Metropolitan Council. (June 2004). *Naturally Occurring Retirement Communities in the Baltimore area*. p. 9.

¹⁸⁷ The Frederick County Division of Planning. (May 2006). *Age restricted community report, Trends and issues of the aging population: Final report*.

¹⁸⁸ McGowan, P. (May 27, 2007). "New housing caters to 55-and-older set," *Baltimore Sun*.

of CCRCs in Maryland and the number of independent, assisted living, and licensed nursing home beds in these facilities, see Table 5.12 in Chapter V.

Congregate Housing Services Programs

Congregate Housing Services Programs (CHSP) is administered by the MDoA and provides supportive services to residents in selected independent living communities. Residents of congregate housing facilities live in their own apartments and receive supportive services on site to help them remain independent. MDoA contracts with public housing authorities, housing management companies, and service providers, and the services are supervised by an on-site care manager or social worker. Services may include daily meals, weekly housekeeping and laundry, medication reminders, and limited personal assistance with ADLs.

In FY 2006, over 800 Maryland residents in more than 30 older adult apartment buildings located throughout the state received services through the CHSP.

Homeowners and Renter Tax Credit Program

Maryland provides some relief for eligible residents in the amount they must pay toward rent or property taxes. Eligibility is based on gross household income compared with the amount paid toward the rent or property taxes. The Homeowners' Property Tax Credit Program is available to Maryland homeowners of all ages. The program sets a limit on the amount of property taxes any homeowner must pay based on his or her income. Tax assistance is provided to older adults with incomes up to \$55,000 and homes valued up to \$300,000. The homeowner must reside in the residence for at least six months of the year and be legally responsible for the rent. Renters who are either age 60 or older or 100 percent disabled may be eligible for a tax credit of up to \$600. Eligibility is based on the relationship between the renter's rent and income amounts. Under certain circumstances, renters under age 60 with children may also be eligible. The number of eligible applications in 2005 was 48,666, which fell to 46,628 in 2006. During the same time, the state funding increased from \$39.5 million to \$41.7 million.¹⁸⁹

Maryland Housing Assistance Programs

Maryland's programs to assist older adults and individuals with disabilities in securing affordable and accessible housing were designed to keep disabled, frail, or cognitively impaired individuals in their own homes, or, alternatively, to provide community-based residential alternatives to older adults and persons with disabilities who are no longer able to manage at home but do not require institutional level of care. These efforts include the following larger or more innovative programs:

- **Homeownership Program for Individuals with Disabilities:** Stakeholders have identified homeownership as a desired choice for community living. In Maryland, rental housing opportunities for individuals with disabilities are limited and subsidies for rental housing have long waiting lists. Homeownership is key to building wealth for all

¹⁸⁹ Department of Legislative Services. (2007). House Bill 854 - Property tax, homeowners tax credit income, limitations: Fiscal and policy note, Exhibit 1.

individuals, with and without disabilities; yet, homeownership rates are particularly low for individuals with disabilities. The Maryland Department of Housing and Community Development (DHCD) created and currently administers the Homeownership Program for Individuals with Disabilities to expand homeownership opportunities for individuals with disabilities and families who have children with disabilities. This program provides below-market-rate financing and an exception for individuals who have poor credit due to medical expenses. In the last six years, the program has funded 126 loans totaling \$9.7 million.¹⁹⁰

- **Bridge Subsidy Demonstration Program:** The Governor's Commission on Housing Policy recommended the Bridge Subsidy Demonstration Program. This program provides state-funded short-term rental assistance for eligible individuals with disabilities who are receiving SSI or SSDI cash payments or are enrolled in the OAW while they await permanent housing assistance. In FY 2006, the Bridge Subsidy Demonstration Program provided assistance to 18 participants at a cost of \$700,000. The program operates in 13 Maryland counties and currently serves approximately 39 participants.¹⁹¹
- **Accessible Homes for Seniors Program:** DHCD, in partnership with MDoA, implemented the Accessible Homes for Seniors Program. This program provides funding/loans for home improvements to make homes more accessible (e.g., grab bars, ramps, door widening) and is available statewide to residents aged 55 years or older. In FY 2006, the program was budgeted at \$1 million and approved seven loans at a cost of approximately \$100,000.
- **Project HOME:** Project HOME is administered through the Maryland Department of Human Resources. Based on the adult foster care model, the program supports disabled Maryland citizens aged 18 and older who are able to live in the community but cannot live unaided. The program provides room/board and the assistance/supervision individuals need in their homes. In 2005, there were 263 licensed Project HOME programs across the state, with each program on average providing services to three individuals.¹⁹²
- **Group Home Financing Program:** This program provides low-interest financing through loans to both non-profit organizations and individuals so they may buy and rehabilitate properties to create living facilities for people with disabilities or special needs.¹⁹³ These loans can be used for acquisition, rehabilitation, and closing costs and may cover up to 100 percent of the property value post-rehabilitation. The program is funded primarily through state appropriations with some federal funding support.

¹⁹⁰ Sylvester, P.R. (2007, August 29). *The nuts and bolts of affordable housing at DHCD*. Presentation at Money Follows the Person Housing Day sponsored by Maryland Department of Housing and Community Development. 2007

¹⁹¹ Ibid.

¹⁹² *Maryland's assisted living program, 2005 evaluation: Final report and recommendations*. (2006, January). Baltimore, MD: Department of Health and Mental Hygiene, Office of Health Care Quality.

¹⁹³ Technical Assistance Collaborative, Inc. (November 2001). *Assessment of housing opportunities for people with severe disabilities in Maryland*. Boston, MA.

- **Rental Allowance Program (RAP):** RAP is a state program operated by DCHD that funds local governments to provide flat rent subsidies to low-income families who are either homeless or have an emergency housing need. The program is used by seniors and individuals with disabilities but no data specific to their program participation is available. The goal of the program is to enable these households to move from homelessness or temporary emergency housing into more permanent housing and to return to self-sufficiency. This is a rent subsidy program administered locally. The amount of monthly rental allowance payments is based on family size and area of the state.

Other Housing Support Programs and Considerations

Emergency shelter and other supports for homeless people are not analyzed in this report, nor are costs associated with these services included in the estimates of future long-term support and services. However, it should be noted that significant federal and state/local support is provided for services to the homeless, and Maryland's acute shortage of affordable housing increases the risk of homelessness. As many as 25 percent of homeless individuals have a disability, and individuals with behavioral disorders are often among those who experience hardship in securing or maintaining appropriate housing.¹⁹⁴

Universal design includes housing and other environmental design features that accommodate people with a wide range of abilities. It is a housing concept and movement with the goal of designing living environments that will, to the maximum extent possible, be usable by all people. When required by a jurisdiction, it may include certain product and interior design specifications. Howard County, for example, has required certain universal design features in the development of all age-restricted housing. These requirements include no-step access to community buildings and dwelling units, lever handles on doors, specified door widths, and more.¹⁹⁵ It is generally assumed that the adoption of universal design statewide and for all residential development would have a salutary outcome for enhancing the quality of life for older adults and individuals with disabilities. The costs (e.g., housing construction and specified features) for implementing universal design requirements is not calculated in this report (for additional background on universal design and state initiatives to make housing more adaptable, see Chapter II of this report).

The Maryland Affordable Housing Trust is a charitable public corporation created by the General Assembly in 1992 to promote affordable housing throughout the state. The Trust is administratively supported by the DHCD. The funding allocations from the Trust are not included in the inventory of state programs and are not calculated in the estimates of future expenditures by the State.

¹⁹⁴ Governor's Interagency Council on Homelessness (December 2005). Maryland's 10-year plan to end homelessness. Annapolis, MD, Office of the Governor, p. 39.

¹⁹⁵ Rosenthal, I (January 22, 2007). Housing options for seniors and persons with disabilities in Maryland: Current and future. Presentation to the Maryland Health Care Commission, Long-Term Care Advisory Committee. Baltimore, MD, Maryland Department on Aging.

Inclusionary housing/zoning is a practice in which developers are required by policy (usually created by local zoning authorities) to build a certain percentage of their total new housing development units for low/moderate-income families.¹⁹⁶ In return for building these affordable units, cities give the developers more flexibility with regard to regulations (e.g., expedited permitting, lower permit fees, higher allowable densities, more relaxed development criteria). Cities may also offer financial incentives (or “cost offsets”) to the developers (e.g., below-market rate construction loans; land “write-downs,” involving selling publicly owned land for a low price; or tax-exempt mortgage financing for low/moderate-income homebuyers). This practice not only increases the amount of affordable housing available, but also mixes affordable housing into communities and neighborhoods.

Montgomery County’s Moderately Priced Dwelling Unit program has been highly successful in both increasing affordable housing units and in ensuring that these units are mixed into neighborhoods with regular market-rate housing.¹⁹⁷ In 1974, the county created this pioneering program by passing a piece of local legislation called the Moderately Priced Housing Law. This law requires that 12.5 percent to 15 percent of all units in a subdivision or high-rise building with 50 or more units must have a specific selling or renting price that is affordable to low/moderate-income families. Developers are then given density bonuses of up to 22 percent. This allows developers to build more units on a particular piece of land than would be allowed for regular, market-rate housing. This program has received much national recognition as the first mandatory inclusionary zoning program and serves as a model for integration of low-income households, including individuals with disabilities and the elderly, in the wider community.

Addressing Service Gaps

As discussed above, there is a severe housing shortage for low-income individuals and households; this shortage could reach as high as 157,000 rental units by 2014; and housing units for low-income families are predicted to account for 66 percent of the 2014 housing deficit, while housing units for individuals with disabilities and older adults will account for 18 percent and 16 percent, respectively.

¹⁹⁶ Transportation and Land Use Coalition. (2004). *Instant Advocate – Inclusionary Housing*. <http://www.transcoalition.org/ia/inclhous/02.html>.

¹⁹⁷ *Inclusionary housing in Montgomery County, MD*. Chicago, IL: Business and Professional People for the Public Interest, Reasonable Affordable Housing Inclusionary Zoning Policy Briefs. *Issue Brief # 4*. http://www.bpichicago.org/rah/pubs/ci_issue_brief4.pdf.

Projected Costs in 2010, 2020, 2030

Estimation Factors:

Services without historical trend data: Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. The use rate was decreased by 0.5 percent per year to reflect declining disability rates, then increased by 2 percent per year to reflect increasing preference for home- and community-based care rather than institutional care.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

The scope of future unmet need for subsidized housing for people with disabilities of all ages will depend on whether federal support for affordable housing continues to remain static (e.g., public housing units), undergoes modest funding increases (e.g. Housing Voucher Program), or experiences funding reductions (as proposed for Section 202 in the President’s budget). The availability of suitable and affordable housing in Maryland for older adults and persons with disabilities is very much dependent on federal programs as well as programs funded by the State through the Department of Housing and Community Development, other state agencies, and public housing agencies. State-funded programs are listed in Table 3.34.

**Table 3.34
State-Funded Housing and Residential Support Programs:
Maryland, 2006**

Program	State Agency	Expenditures	Percent State Funds
Homeownership for Individuals with Disabilities Program (Maryland Home Financing Program)	DHCD*	\$758,000	100%
Maryland Bridge Subsidy Demonstration Program	DHCD	\$700,000	100%
Accessible Homes for Seniors	DHCD	\$1,000,000	100%
Naturally Occurring Retirement Communities	MDoA*	\$500,000	100%
Senior Assisted Living Group Home	MDoA	\$2,354,929	100%
Congregate Housing	MDoA	\$2,625,248	100%

* Maryland Department of Housing and Community Development

** Maryland Department of Aging

Source: Center for Health Program Development and Management, UMBC. Data from service inventory of state and local programs.

The state-funded programs that form the basis for the cost estimates in this report provide critical support in making affordable housing and home ownership available to older adults and persons with disabilities. Some programs also support individuals in maintaining or achieving independent living opportunities. Cost projections are shown in Table 3.35 and Figure 3.19.

As shown in the variance analysis in Table 3.36, future costs for these programs will largely be driven by the increased number of people in need and the escalating costs associated with the housing industry. The low thresholds of asset accumulation for the majority of baby boomers discussed in Chapter II (see the section entitled “Financial Assets and Savings”) will

likely fuel an already serious shortage of affordable housing in Maryland. Additionally, it is likely that Maryland will continue to be one of the most expensive housing markets in the nation.

The federal funds that support most of the state's housing subsidies are not included in this report's estimates of future costs. These subsidies are primarily directed to low-income households with set-asides for older adults and persons with disabilities or special needs (e.g., the homeless). State agencies and public housing agencies can sometimes determine the minimum set-aside thresholds for particular populations.

Table 3.35
Actual and Projected State Costs for
Housing and Residential Support Programs:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Housing and Residential Supports						
Under Age 65	\$4.2	\$5.2	\$7.1	\$9.8	\$5.5	131%
Age 65 and Over	\$3.6	\$5.1	\$10.9	\$22.4	\$18.8	517%
Total	\$7.9	\$10.2	\$18.1	\$32.2	\$24.3	309%

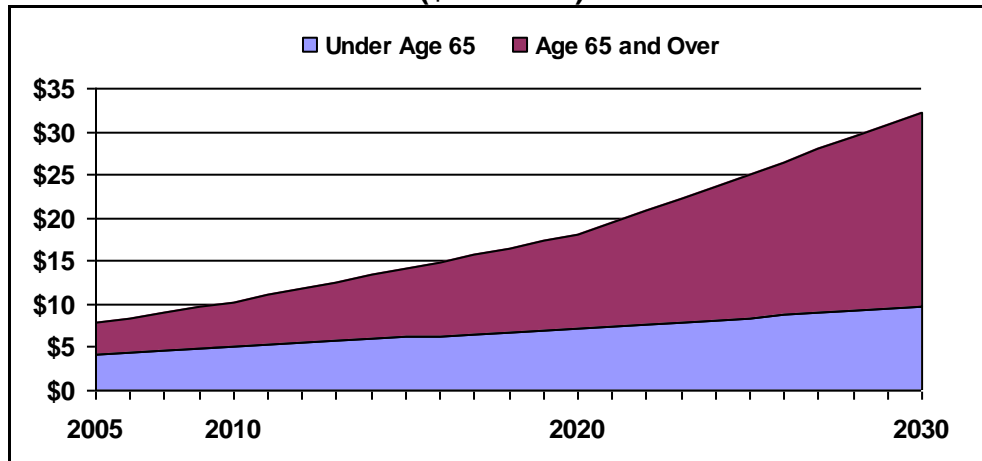
Source: Center for Health Program Development and Management, UMBC.

Table 3.36
Variance Analysis
Actual and Projected State Costs for
Housing and Residential Support Programs
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Housing and Residential Services	\$7.9	\$3.4	\$8.2	\$0.0	\$12.7	\$32.2	309%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.19
Actual and Projected State Costs for
Housing and Residential Support Programs:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Mobility and Transportation Services

Transportation is a critical issue for people with disabilities, as well as a vexing public policy question:

For many people with disabilities, life is severely limited by the lack of transportation. Some people with disabilities who are willing and able to work cannot do so because of inadequate transportation. Others cannot shop, socialize, enjoy recreational or spiritual activities or even leave their homes for the same reason.¹⁹⁸

Some researchers have concluded that “a direct cause of deterioration in the lifestyle of the elderly in coming decades will be declining mobility ... There is no evidence that older people’s desire to travel will decline at the same rate as their ability to drive or find other options.”¹⁹⁹ This section of the report examines the mobility needs and patterns of older adults and people with disabilities. It should be noted that having a disability, even if it is severe, does not tell us whether that person faces significant mobility constraints since there is not a clear link between disability rates and mobility constraints.²⁰⁰ Following an overview of the interaction of older adults and individuals with disabilities with public transit and with the automobile, a description of current transit programs and estimates of future use and state-related costs is presented.

Mass Transit and Improving Mobility for Individuals with Disabilities of all Ages

Barriers to mobility have “complicated causes,” including the conclusion by some studies that “almost all transportation problems among the elderly or those of any age with disabilities were related to income alone; reported transportation problems dropped drastically with rising income, even controlling for age, physical disability, and health status.”²⁰¹ Deficiencies in public transit systems or in access to public transportation are not the sole reason or even the primary reason for mobility limitations. Overall, studies show that the “most significant transportation problems mentioned (either overall or for the non-use of public transit) are barriers in the pedestrian environment,”²⁰² including the lack of pedestrian paths and ramped curbs. Furthermore, in a 1994 disability supplement to the National Health Interview Survey (NHIS-D), among those who indicated that public transit was available but not used, the majority stated that “their health or disability was not the reason for non-use.”²⁰³ Among the older adult population as a whole, only about 3 percent of those over age 65 use public transportation of any kind.

¹⁹⁸ National Council on Disability (2005, April 13). The current state of transportation for people with disabilities in the United States. Washington, DC, National Council on Disability.

¹⁹⁹ Rosenbloom S. (2004). “Mobility of the elderly: Good news and bad news.” *Transportation in an aging Society: A decade of experience. Conference Proceedings*. Washington, DC: National Academy Press, p. 3.

²⁰⁰ Rosenbloom, S. (2007). “Transportation patterns and problems of people with disabilities.” *The future of disability in America*. Washington, DC: Institute of Medicine, p. G-1.

²⁰¹ *Ibid*, p. G-2.

²⁰² *Ibid*, p. G-6.

²⁰³ *Ibid*, p. G-3.

However, future reliance on family and friends to fulfill transportation needs may be less possible due to geographic separation and a greater proportion of families in which both spouses work.²⁰⁴ Moreover, half of all adults in the United States cannot choose to use public transportation because service is not available in their area, particularly in rural areas and small towns.²⁰⁵

The Maryland Transit Administration (MTA) services the Central Maryland area with several modes of public transportation (metro subway, light rail, bus, commuter train, and mobility/paratransit services). The MTA fixed route fleet is 100 percent wheelchair accessible and includes visual and automated stop announcements. Federal transportation funding for a variety of programs, including the Elderly Individuals and Individuals with Disabilities Program (Section 5310), requires the development of regionally based transportation coordination plans for human services. In response to this requirement, transportation planning efforts in Maryland have examined the concentration of older adults and persons with disabilities as well as the number of persons below poverty level in each region.²⁰⁶ Using these data in relation to the number of auto-less households, the Coordinated Public Transit-Human Services Transportation Plans for Maryland have established transit-dependent population profiles for each Maryland region. Not surprisingly, the Central Region has the highest level of transit-dependent populations. One of the unmet transportation needs in the Central Region identified by the plan is the lack of transportation options for people who may need more customized transportation services and greater assistance to travel.²⁰⁷ In other Maryland regions, the need for appropriate travel training in use of public transit routes was identified as a need for older adults and individuals with disabilities unfamiliar with services provided.²⁰⁸

The **Americans with Disabilities Act (ADA)** has dramatically changed the availability of, and access to, public transportation for people with disabilities of all ages. The ADA, for example, requires public transit operators to purchase only accessible buses (regular coaches that provide access by lowering the entrance side of the bus to assist those who have difficulty with stairs and providing mechanical lifts for those who are wheelchair-bound or who cannot climb stairs.) The ADA also requires new commuter and light rail trains and stations to be made accessible and existing systems, in some cases, to be retrofitted. The ADA also requires public transit systems to provide “complementary paratransit—that is, special, demand-responsive transportation services—for people who are unable to board even an accessible bus or who do not have an accessible path to an accessible bus.”²⁰⁹ The low rate of older adult use of public transportation (3 percent) was previously described. It should also be noted that “...many older

²⁰⁴ Safe mobility for a maturing society: Challenges and opportunities. (2003). Washington, DC: U.S. Department of Transportation, p. 17.

²⁰⁵ Bailey, L. (2004). “Aging Americans: Stranded without options.” *Surface transportation policy report*, p. 1.

²⁰⁶ Regions used by MTA are defined as Central (Baltimore City and Anne Arundel, Baltimore, Carroll Harford, Howard); Upper Eastern (Caroline, Cecil, Dorchester, Kent, Queen Anne’s, Talbot); Lower Eastern (Somerset, Wicomico, Worcester); Southern (Calvert, Charles, St. Mary’s); Western (Allegany, Frederick, Garrett, Washington). Montgomery and Prince Georges Counties are included in the National Capital Regional Transportation Plan and therefore were not included in the Maryland human service transportation coordination analysis.

²⁰⁷ KFH Group. (August 2007). Baltimore area coordinated public transit-human services transportation plan. Final Draft, p. 5.

²⁰⁸ KFH Group. (August 2007). Lower Eastern Shore coordinated public transit-human services transportation plan, Final Draft, p. 3-12.

²⁰⁹ Rosenbloom. (2007). p. G-14.

adults do not meet the Americans with Disabilities Act (ADA) definitions of eligibility and do not have access to ADA paratransit.”²¹⁰ Additionally, ADA requirements regarding complementary paratransit are limited to geographical areas adjacent to public transit fixed routes which are generally located in more densely populated areas. Consequently, areas not served by public transit do not have ADA paratransit mandates.

Auto Use and Improving Mobility for Individuals with Disabilities of all Ages

It is overwhelmingly clear that the preferred mode of transportation by individuals with disabilities is the personal vehicle (as driver or passenger), a finding that may not be surprising since the car provides greater convenience and flexibility for many individuals.²¹¹ The dramatic increase in car use by older adults (Figure 3.20) signals a decline in the use of public transit by older Americans nationally, and Maryland-specific analysis has also shown the dominance of driving and automobile travel for seniors.²¹² Increased automobile use is an important consideration in planning for the aging population in Maryland. Planning will need to accommodate both the increased reliance on the car as well as the growing number of older adults who do not drive. The National Household Travel Survey records that the number of non-drivers in Maryland aged 65 and older was 170,000 in the year 2000.²¹³ If the same ratio of driver/non-driver persists, the number of Maryland non-drivers over the age of 65 in the year 2030 will be 225,533. Planning necessarily requires efforts beyond the introduction of public transportation systems. “Transportation is one part of getting people to the places they want to be. Community design and land use planning are the larger picture: creating places where older people are able to get around safely and easily, whether by using public transportation or by walking to destinations that are close to home.”²¹⁴ Maryland has been recognized by the Federal Administration on Aging as a leader in building infrastructures, policies, and programs that facilitate human service transportation coordination, e.g., interagency coordination.²¹⁵ It is likely that more coordination, innovation, and planning will be needed to face the transportation challenges over the next twenty years.

²¹⁰ Safe mobility for a maturing society: Challenges and opportunities. (2003). Washington, DC: U.S. Department of Transportation, p. 17.

²¹¹ Rosenbloom. (2007). p. G-27.

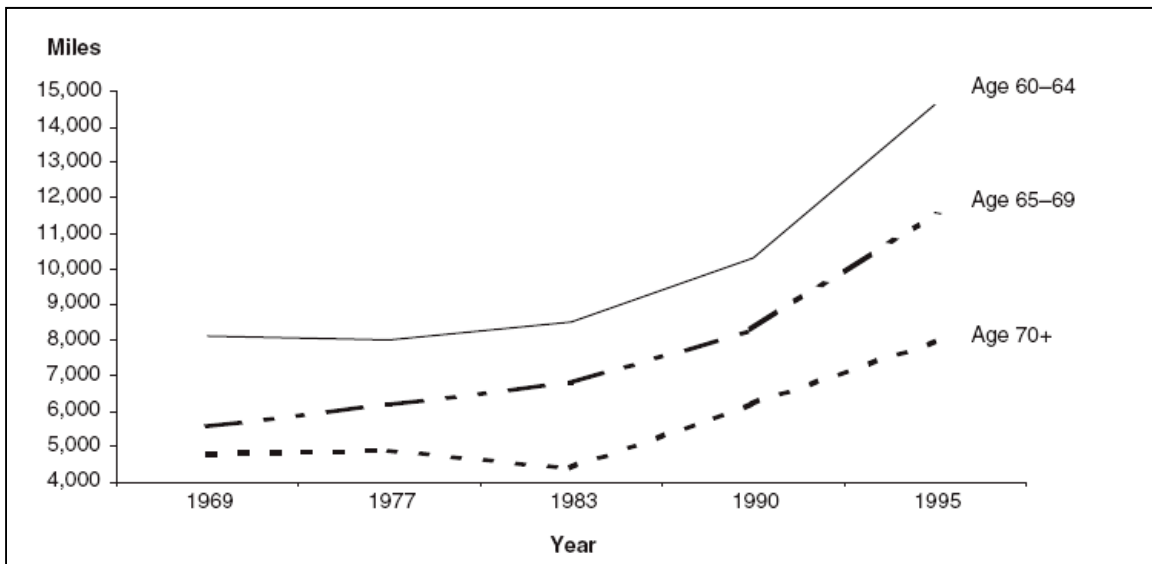
²¹² Baltimore Metropolitan Council. (December 1999). *Baltimore region elderly activity patterns and travel characteristics study*, p. 7.

²¹³ Bailey. (2004). p. 16.

²¹⁴ *Ibid*, p. 11.

²¹⁵ Administration on Aging. (2005). *Seniors benefit from transportation coordination partnerships: A toolbox*. Washington, DC: U.S. Department of Health and Human Services, p.9.

Figure 3.20
Average Miles Driven by Older People:
United States, 1969-1995



Source: Rosenbloom, S. Mobility of the elderly: Good news and bad news. *Transportation in an aging Society: A decade of experience*. Conference Proceedings. Washington, DC, National Academy Press.

The movement of Maryland’s senior population to more rural areas, including those who will have travel-related disabilities (see Chapter V entitled *Long-Term Services and Supports in Maryland’s Jurisdictions*), will contribute to an even greater reliance on the car as the primary mode of transportation. Suburban non-rural areas will experience similar growth by 2030. For example, the Baltimore Region population with travel-related disabilities will undergo significant migration to the Baltimore suburbs.²¹⁶ This increased auto reliance also has implications for traffic safety and fatality rates. The fatality rate per each mile driven is nine times higher for drivers age 70 and older than for drivers 25 to 69 years old (Figure 3.21).²¹⁷ A variety of public safety measures, perhaps involving sizeable public expenditures, will likely be required to meet the challenges of increased auto use by Maryland’s elderly. These costs are not estimated in this analysis.

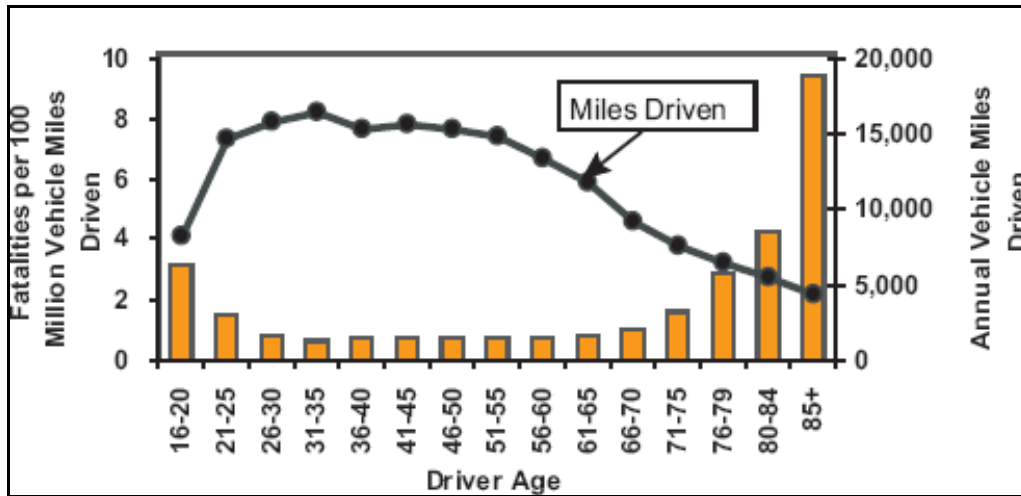
A variety of methods to enhance the driving of older people facing increasing disabilities have been proposed,²¹⁸ including improving roadways and signage to constraints of older drivers, vehicle aftermarket devices such as larger mirrors and swing-out seats, driver re-education, and preparation for driver cessation.

²¹⁶ Baltimore Region Travel-Related Disability Study, Baltimore Metropolitan Council, June, 2006, p 8.

²¹⁷ Bailey. (2004). p.3

²¹⁸ Rosenbloom. (2007), p. G-9.

**Figure 3.21
Driver Fatality Rates and Distance Driven by Age:
United States, 2001**



Source: Bailey, L. (2004). "Aging Americans: Stranded without options", *Surface transportation policy report*.

Similarly, there is a variety of vehicle options that would help meet the mobility needs of all people with disabilities, such as wheelchair racks and auto accessibility features for those who cannot transfer from wheelchairs.

For individuals with disabilities under the age of 65, the relationship between mobility and reliance on car use is similar to the experience of the elderly except for the fatality rate implications. Approximately two-thirds of adults under age 65 who reported the existence of one or more disabling conditions drove a car at least occasionally.²¹⁹ Additionally, only 13 percent of people with disabilities live in a house without a car.²²⁰

Maryland Specialized Public Transit Programs

The Maryland Department of Transportation provides specialized transportation services to assist persons who cannot drive or who have physical limitations that prevent the use of public fixed-route bus systems. Specialized transportation programs include:

- **Statewide Specialized Transportation Assistance Program (SSTAP):** This program awards funds annually to each Maryland county and Baltimore City. The funds allow for general purpose transportation for older adults and individuals with disabilities. Sixty percent of the funds are divided equally among the 24 jurisdictions; the remaining 40 percent of the funds are divided among the jurisdictions based on their percentage of older adults and individuals with disabilities. In FY 2006, the cost of SSTAP exceeded \$4.3 million.

²¹⁹ Rosenbloom, (2007) p. G-3.

²²⁰ Rosenbloom. (2007). p. G-4.

- **Mobility/ParaTransit Program:** This program provides transportation services to Maryland residents who are certified MTA Mobility participants. In FY 2006, 5,500 of the 22,000 certified MTA participants received services at an estimated cost of \$39 million. The MTA Mobility program provides service in limited areas of the state, including Baltimore City and Baltimore and Anne Arundel Counties. In Prince George's and Montgomery Counties, the Washington Metropolitan Area Transit Authority (WMATA) provides paratransit services through its MetroAccess program. Non-MTA paratransit services are provided on a smaller scale in other areas of the state in compliance with ADA requirements.
- **Taxi Access Program:** This program provides 24-hour transportation services to certified MTA Mobility participants using contracted taxi and/or sedan providers. In FY 2006, the program provided transportation services for 3,701 participants at an estimated cost of \$10 million. The Taxi Access Program provides services in limited areas of the state, including Baltimore City, Baltimore County, and some areas of Anne Arundel County.
- **Senior Rides Demonstration Program:** This program provides door-to-door volunteer transportation services for low-income to moderate-income seniors over 60 who have difficulty accessing or using fixed-route transportation. This program also provides services in limited areas of the state (five transportation providers across the state receiving grants in FY 2006). Together, the five grantees provide transportation in the following areas: parts of Baltimore City, Baltimore County (Pikesville, Park Heights, and Owings Mills), Howard County, and Anne Arundel County. The program began in July 2005 with a proposed budget of \$400,000. The budget was approved for \$100,000 with a required 25 percent local funding match.
- **Reduced Fare Care Program:** This program provides reduced transportation fares to certified MTA Mobility participants who are, based on level of care, able to ride fixed-route public transportation. The dollar amount of reduced revenue is not included in future cost estimates in this report.

In addition to the above Maryland Department of Transportation programs, certain transportation services are provided by state agencies to support existing programs and services. According to a report prepared for the MTA,²²¹ in FY 2006, the Medicaid State Plan provided transportation services to over 9,000 (ABD population) participants at a cost of \$2.7 million. The Mental Hygiene Administration provides transportation services for its psychiatric rehabilitation program participants and the Department of Human Resources (DHR), the Developmental Disabilities Administration (DDA), and the Department of Housing and Community Development (DHCD) all have limited and specialized client transportation services. The costs for these services are included in other service categories of this report (e.g., DDA) or are not specific to the target populations of older adults or individuals with disabilities (e.g., Medical Assistance transportation grants).

²²¹ KFH Group. (May 2000). Inventory of Maryland human service transportation programs and services report. Prepared for the Mass Transit Administration and the Maryland Coordinating Committee for Human Services Transportation. Bethesda, MD: KFH Group.

The lack of qualified providers for the Taxi Access Program and the growth in the Mobility/ParaTransit Program were identified by transportation representatives in the service inventory as major resource challenges for the MTA.

Addressing Service Gaps

As noted above, paratransit services are required by the ADA but exist only in areas where public transit services already exist; driver re-education and driving cessation preparation is needed for the aging population; and improving and adapting roadways to higher frequency use by elders is needed. Also, Department of Transportation officials who responded to the state service inventory reported that the lack of qualified providers of wheelchair accessible vehicles for the Taxi Access Program and the growth in the Mobility/ParaTransit Program are presenting service challenges.

Projected Costs in 2010, 2020, 2030

Estimation Factors:

Services with historical trend data: Historical utilization trend data was used to estimate future utilization; no further adjustments were made.

Services without historical trend data: Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. The use rate was decreased by 1 percent per year to reflect declining disability rates.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

As noted in the preceding analysis, mobility and the use of public transportation are significantly affected by income as well as age and physical disability. Additionally, the changing demographics of an aging population and continued suburban and rural population growth also have important consequences for the mobility of the general population and especially for the elderly and persons with disabilities.

Public transit programs operated by the state and local jurisdictions provide a vital support for non-drivers and low-income populations. These transit services are heavily supported by federal funds. Table 3.37 shows 2005 state expenditures of almost \$54 million for special transit programs for persons with disabilities. The estimates of future use and cost are predicated on a modest increase in ridership due largely to the growth of the older adult population and the increase in the number of non-drivers. The percentage of the population using these services and the frequency/intensity of use are estimated to remain somewhat static as a result of increased auto use and the continued movement of the population to less population-dense areas of the state (Table 3.38). The use of services and supports described in this section will significantly increase in cost because of the escalation of unit cost. These services are dependent on motorized vehicles, which are expected to increase in operating cost at a level beyond general inflation levels. The disproportionate share of costs relating to the individuals with disabilities under age 65 (Table 3.37 and Figure 3.22) is due largely to specialized transit programs that provide curb-to-curb service (demand/response systems) to the under age 65 population; however, as previously noted, these programs are used by people with disabilities of all ages.

Table 3.37
Actual and Projected State Costs for
Mobility and Transportation Services:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Mobility/Transportation Services						
Under Age 65	\$47.4	\$57.6	\$78.6	\$106.9	\$59.5	126%
Age 65 and Over	\$6.3	\$8.0	\$13.4	\$21.5	\$15.2	240%
Total	\$53.7	\$65.6	\$92.1	\$128.4	\$74.7	139%

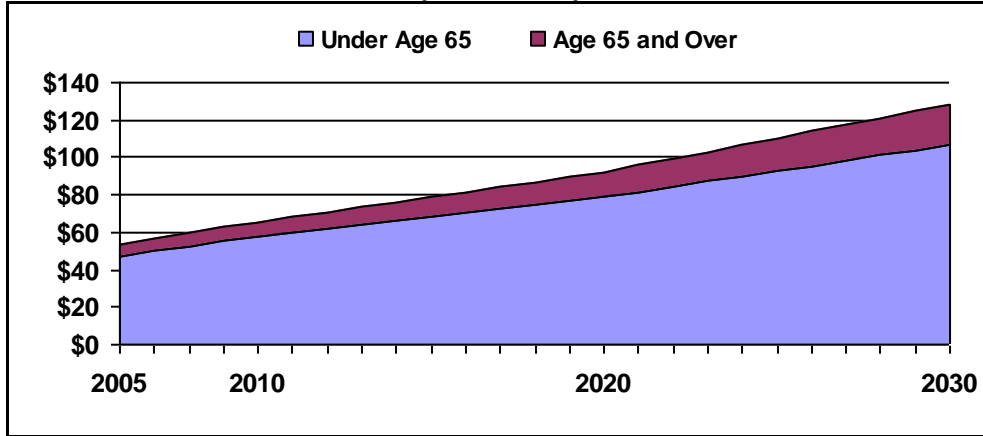
Source: Center for Health Program Development and Management, UMBC.

Table 3.38
Variance Analysis
Actual and Projected State Costs for
Mobility and Transportation Services:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Mobility/Transportation	\$53.7	\$16.7	(\$2.8)	(\$3.5)	\$64.3	\$128.4	139%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.22
Actual and Projected State Costs for
Mobility and Transportation Services:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Mental Health Services

In the public mental health system in Maryland, the Mental Health Administration (MHA) operates inpatient facilities and funds an array of community-based services for children and adults with mental illness. This section of the report will delineate and describe services provided to individuals with serious mental illness who are assessed as having a disability and in need of long-term care services. Estimates of current utilization of and expenditures for state-funded long-term mental health services for this population will be provided, as well as projections of service use and costs in 2010, 2020, and 2030.

Prior sections of this chapter detail current utilization and expenditure data for publicly funded institutional, in-home, and community long-term services and supports as reported by state agencies in the service inventory conducted for this report.²²² The MHA participated in the service inventory and reported 2006 expenditures of \$302.9 million for community-based mental health services for 89,910 unduplicated individuals (excluding inpatient services in general hospitals, private psychiatric hospitals, and private residential treatment centers). These expenditures were a mix of Medicaid and state-only funds. Also discussed in this section of the report are expenditures of \$4.5 million in 2006 for Medicaid institutional services for persons aged 65 and older with mental illness served in the publicly-operated state hospital system.²²³ However, the extent to which these expenditures for community-based and institutional services were for disabled persons with serious mental illness (the target population), and the portion of the expenditures that were used for long-term services and supports, cannot be distinguished from available data. Varying definitions of serious mental illness and the kinds of services that comprise “long-term services and supports” for individuals with serious mental illness further complicate efforts to compile reliable utilization and expenditure data.

Below, definitions of serious mental illness are presented, followed by prevalence estimates. This is followed by a discussion of usage of and expenditures for publicly funded long-term institutional services for persons with serious mental illness. Next is a discussion of state-funded community-based long-term services and supports for persons with serious mental illness. Because of definitional and data challenges, the methodology used to estimate usage of and expenditures for community-based services and supports differs from the methodology used for other service categories in this chapter; therefore, the methodology is described below. This section concludes with use and cost projections for 2010, 2020, and 2030.

Definitions and Prevalence of “Serious Mental Illness”

“**Serious mental illness**” is defined by type of disorder as well as severity. Serious mental illness in adults includes, but is not limited to, diagnoses of moderate to severe schizophrenic disorders, major affective disorders and other psychotic disorders, specific personality disorders, and bi-polar affective disorder, among others. Generally, serious mental illness is so long-lasting and severe that it seriously interferes with a person's ability to take part

²²² The instrument used for the state service inventory can be found in Appendix 4. Appendix 6 lists the services identified by state agencies.

²²³ Other institutional services provided through the MHA are discussed below under the heading “Institutional Services.” These services are not included in this analysis because the data does not distinguish institutional services applicable to the target population.

in major life activities. A similar definition addresses children with serious emotional disorders.²²⁴

Contributing to the seriousness and costs of care for persons with any mental disorder is the increased prevalence of co-occurring addictive disorders. According to the chapter of the Healthy People 2010 report devoted to mental health issues, “Among adults aged 18 years and older with a lifetime history of any mental disorder, 29 percent have a history of an addictive disorder; of those with an alcohol disorder, 37 percent have had a mental disorder; and among those with other drug disorders, 53 percent have had a mental disorder.”²²⁵

National Prevalence Estimates

Estimates of serious mental illness prevalence among adults and children differ, as do the terms in the literature²²⁶ for describing the severity of mental illness:

- **Adults:** The National Institute of Mental Health (NIMH) estimated that in 2004, 26.2 percent of adults aged 18 and older had a *diagnosable mental illness*. However, NIMH estimated that only 6 percent of adults had a *serious mental illness*.²²⁷
- **Children:** NIMH estimates that 10 percent of children have an *identifiable mental illness* (which includes autism spectrum disorder).²²⁸ The Surgeon General’s 1999 report on mental health estimated that 20 percent of children have a *diagnosable mental illness*, and half of these children have a *serious emotional disturbance*.²²⁹ A 2005 survey found that 5 percent of children were reported by a parent to have *serious (definite or severe) emotional or behavioral difficulties*.²³⁰

While adults are generally referred to as having *serious mental illness* and children as having *serious emotional disturbance*, for simplicity in this report, the term *serious mental illness* will be used henceforth to refer to serious mental illness in both adults and children.

²²⁴ Maryland FY2008 Community Mental Health Block Grant Application, September, 2007.

²²⁵ Substance Abuse and Mental Health Services Administration. (August 2007). Health people 2010: *Conference edition, chapter 18, mental health and mental disorders*. <http://mentalhealth.samhsa.gov/features/hp2010/trends.asp>.

²²⁶ For an exhaustive review of the state of mental health in the United States, including prevalence studies for both adults and children, see Manderschein, R.W. , et al. (2004). *Mental health, United States, 2004*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services.

²²⁷ National Institute of Mental Health. (August 2007). *The numbers count: Mental disorders in America*. www.nimh.nih.gov/publicat/numbers.cfm#Intro.

²²⁸ National Institute of Mental Health. (August 2007). *Child and adolescent mental health*. <http://www.nimh.nih.gov/healthinformation/childmenu.cfm>.

²²⁹ U.S. Department of Health and Human Services. (1999.) *Mental health: A report of the surgeon general*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

²³⁰ The Federal Interagency Forum on Child and Family Statistics. (2007). *America's children: Key national indicators of well-being*. <http://www.childstats.gov/americaschildren/highlights.asp> . The Forum includes the following federal agencies: Departments of Agriculture, Commerce, Education, Defense, Health and Human Services, Housing and Urban Development, Labor, and Transportation, as well as the Environmental Protection Agency, National Science Foundation, and the Executive Office of Management and Budget.

Maryland Prevalence Estimates

As part of the on-going application process for the federal mental health block grants,²³¹ the National Research Institute (NRI) develops prevalence estimates for adults aged 18 and older with serious mental illness and for children aged 9–17 with serious emotional disturbance. The data are reported in ranges. For Maryland in 2005,²³² the NRI estimated that between 154,045 and 295,599 adults had a serious mental illness, or between 2.7 percent and 7.1 percent of the adult population. Among children, between 36,464 and 51,050 had a serious emotional disturbance, or between 4.9 percent and 6.9 percent of children aged 9–17.²³³ Thus, for Maryland in 2005, the NRI estimated 190,509 to 346,649 Marylanders aged nine and older had a serious mental illness. It is important to stress that not all persons who fall within these estimates need publicly funded services or require services all the time. However, these estimates provide an outer boundary for thinking about the extent of serious mental illness in Maryland.

Assuming the population in Maryland will grow by 11.8 percent from 2000 to 2010, the population with a serious mental illness is estimated to be between 212,989 and 387,554 by 2010.²³⁴

Prevalence of Mental Illness Among Medicare Beneficiaries

Since most individuals aged 65 and over in Maryland are Medicare beneficiaries, and since 14 percent of Maryland's Medicare beneficiaries are under age 65 and have a disability, it is useful to explore the prevalence of mental illness among Medicare beneficiaries. Estimates of mental illness prevalence among Medicare beneficiaries are higher than for the general adult population. A report from the National Health Policy Forum estimated that 9 percent of Medicare beneficiaries have a serious mental illness. Among the 14 percent of Medicare beneficiaries who are eligible for Medicare based on a disability,²³⁵ 37 percent are estimated to have a serious mental illness, compared to 4 percent of aged Medicare beneficiaries. Per capita spending for those Medicare beneficiaries who were eligible for Medicare based on a disability and had mental illnesses was 22 percent higher than average per capita spending for all Medicare beneficiaries eligible based on a disability.²³⁶

²³¹ The mental health block grants total about \$11 million annually. See Chapter V for details on the distribution of block grant funds to Maryland jurisdictions. These grants are funded through the federal Center for Mental Health Services (CMHS), Substance Abuse and Mental Health Services Administration.

²³² Facsimile transmission from Stacey Rudin, MHA, 8/29/07.

²³³ Defined as a level of functioning score of 50 or lower. For children, the CMHS requires a functionality score in addition to diagnoses to aid in defining the prevalence of children with severe emotional disturbances. The functionality score is derived from standard questions about areas of daily life affected by the emotional difficulty (e.g., problems in school, problems with family, behavioral disturbances in public).

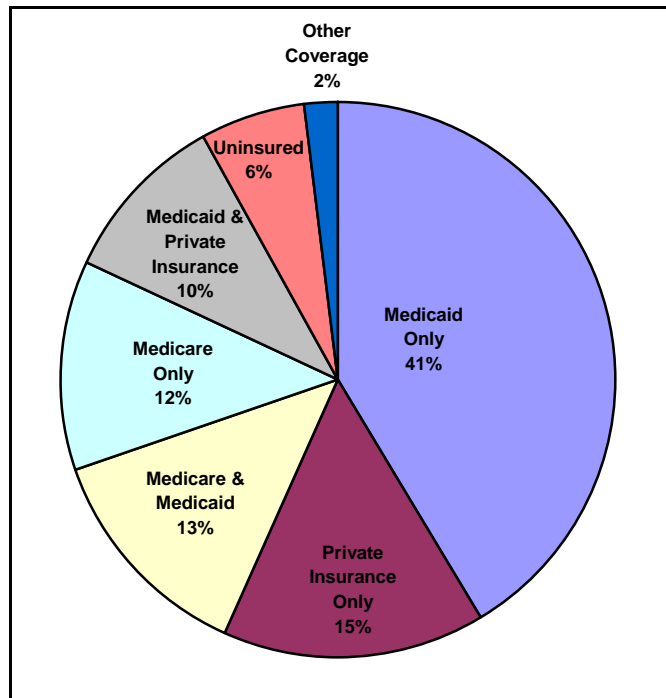
²³⁴ Projected population for individuals aged 5 and older. Source: Maryland Department of Planning. (October 2006). Total population projections by age, sex, and race, 2006.

²³⁵ Individuals under age 65 who are eligible for Medicare based on eligibility for Supplemental Security Income (SSI) or Supplemental Security Disability Income (SSDI).

²³⁶ Loftis, C.W., E. Salinsky. (November 27, 2006). *Medicare and mental health: The fundamentals*. Washington, DC: George Washington University, National Health Policy Forum.

The National Health Policy Forum also reported source of insurance coverage for disabled persons with mental illness (Figure 3.23). Because the Social Security Administration's definition of disability includes a severity indicator related to an inability to work as a result of a disability, it is reasonable to assume that Figure 3.23 is representative of those with serious mental illness.

Figure 3.23
Source of Health Insurance Coverage for
Persons Disabled by Mental Disorders:
United States, 2003



Source: Loftis, C.W., E. Salinsky. (November 27, 2006). *Medicare and mental health: The fundamentals*. Washington, DC: George Washington University, National Health Policy Forum.

Data Sources

Federal Uniform Reporting System (URS): The analysis of mental health services in this report uses data from the Uniform Reporting System maintained by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration (CMHS/SAMHSA), within the U.S. Department of Health and Human Services. The most recent data available is for FY 2005.*

Each year, as part of the application process for the federal mental health block grant, Maryland submits extensive demographic data on the state's public mental health system** to the National Research Institute which, under contract with CMHS/SAMHSA, compiles state-by-state reports in the Uniform Reporting System. Expenditure data is entered into the URS tables from information supplied by the state to NRI via a separate survey, "Revenue and Expenditure Reporting."

There are two limitations to this data: 1) the three main categories of services expenditures from the Revenue and Expenditure Reporting survey (state mental hospitals, other 24-hour care, and ambulatory/community) are "rolled up" totals that cannot be disaggregated within each fee-for-service service category and 2) the total figure for ambulatory/community services includes not only fee-for-service costs, but federal grants and other state costs (e.g., administration, training, etc.), including Maryland's mental health block grant (details on the block grant can be found in Chapter V of this report). Typically about 20 federal grants (other than the block grant) are active at any given time; these are generally narrowly targeted and time-limited and support a variety of mental health projects.

For purposes of this report, federal grants and other state costs have been subtracted from the total for ambulatory/community services reported in the Uniform Reporting System. This was done because these grants and other costs cannot be disaggregated and their purposes are varied and limited. For FY 2006, the MHA reports federal grants and other costs totaling \$55.1 million. The MHA stated that \$55 million in prior years would be a reasonable estimate.***

Maryland Mental Hygiene Administration: The MHA provided data for FY 2006 on community-based services provided by the public mental health system that it administers. Table 3.40 summarizes this data, service by service. These services are reimbursed on a fee-for-service basis (mental health services are "carved out" of the Medicaid HealthChoice program and reimbursed fee-for-service). Table 3.40 does not include federal grant funds and other state costs.

The MHA was unable to provide service-by-service data for previous years. Therefore, for purposes of the cost projections in this study, MHA fee-for-service totals are used for FY 2006 and prior-year data is obtained from the federal Uniform Reporting System.

* Data from CMHS/SAMHSA's Uniform Reporting System. Accessed August 29, 2007, at http://download.ncadi.samhsa.gov/ken/excel/URS_Data05/MD.xls.

** Medicare, private insurance, and other non-public data are excluded.

*** Personal communication with MHA, September 5, 2007.

Individuals Served by Maryland's Public Mental Health System

The MHA provided services to an unduplicated total of 92,928 individuals in FY 2005. This represents about one-third of the total number of Marylanders estimated to have a serious mental illness in the above discussion (the estimate was between 154,045 and 295,599). Of those 92,928 individuals served by the MHA, 89,910 were served in the community and 3,470 were served in state hospitals.²³⁷ Demographically, 50 percent were women and 50 percent were men. Forty-seven percent were children and 53 percent were adults. Only 1.3 percent were persons aged 65 and older. Half were African-American, 44 percent were white, and the rest were other races (or race was not reported). Significantly, 73 percent of users in 2005 were Medicaid-only

²³⁷ A total of 452 individuals received services in both settings; thus the two numbers total 93,380 if duplicates are included.

individuals, 17 percent were state-funded only, and 10 percent were Medicaid and other state funds. These Medicaid percentages are much higher than the national data shown in Figure 3.23.²³⁸

Of the 92,928 individuals served in the public mental health system in Maryland in FY 2005, 68 percent, or 63,077, were reported as having a serious mental illness. It is important to note that the designation of “serious mental illness” is based solely on diagnosis, and does not include consideration of functional limitations.

While these data are useful for providing a portrait of persons served by the public mental health system, they do not represent users with serious mental illness who need and use persistent, long-term care interventions. Some persons with serious mental illness may need and use only periodic services during a period of an acute episode and are otherwise stable and able to function in their daily lives. Thus, some assumptions must be made in order to estimate the costs of community-based services used by persons with serious mental illness who use long-term interventions. These assumptions will be discussed below.

Institutional Services

The CMHS/SAMHSA Uniform Reporting System does not distinguish institutional services applicable to the target population in this report.²³⁹ The only category of institutional costs that can be captured is for Medicaid beneficiaries aged 65 years and older being cared for in state-operated “institutions for mental diseases (IMDs)”. In FY 2006, 39 individuals were eligible for IMD services (Table 3.39). From FY 2000 to FY 2006, there has been modest growth in the number of IMD-eligible individuals cared for in these institutions.

²³⁸ CMHS/SAMHSA. (August 2007). Uniform Reporting System. http://download.ncadi.samhsa.gov/ken/excel/URS_Data05/MD.xls.

²³⁹ Data reported by the CMHS/SAMHSA Uniform Reporting System in FY 2005 indicates that in FY 2004, state-financed inpatient mental health services totaled \$435.4 million. Of this total, \$218.3 million was expended in state hospitals (includes Medicaid costs for Medicaid beneficiaries age 65 and older shown in Table 3.39) and \$217.1 million was expended for “other 24-hour care.” Within the state hospital system, those who were not discharged by the end of FY 2004 had been inpatient residents an average of almost four years (this likely includes the Medicaid beneficiaries reported in Table 3.39), whereas those who were discharged during FY 2004 had an average length of stay of 156 days. It is not possible to determine from the data how many “long stay” individuals were included in the \$218.3 million in state hospital spending. Therefore, while there are some long-term chronically mentally ill persons in the state hospital system (some of whom would be forensic placements), it is not possible to capture the costs for this population.

Table 3.39
Medicaid Payments to Institutions for Mental Diseases for
Eligible Persons Aged 65 and Older:
Maryland, FY 2000 - FY 2006

Fiscal Year	Total Expenditures	Persons Served (Unduplicated)	Percent State Funds
2000	\$2,995,843	37	50%
2001	\$3,799,932	39	50%
2002	\$4,534,314	43	50%
2003	\$3,620,864	38	50%
2004	\$4,327,996	42	50%
2005	\$5,114,424	43	50%
2006	\$4,536,301	39	50%

Source: Center for Health Program Development and Management, UMBC. (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

Community-Based Services

Public funding for the fee-for-service community-based (e.g., excluding inpatient hospital and residential treatment centers) mental health system in Maryland comes from a variety of sources. Medicaid accounts for 44.9 percent of total public expenditures for community-based services for all users; 55.1 percent comes from other state funding sources. As mentioned earlier, various federal grant funds help support the community mental health services system. Federal grant funds are not included in this analysis.

In FY 2006, expenditures by the MHA for community-based fee-for-service mental health services totaled \$302.9 million (Table 3.40). Over half (\$167 million) of all funding is from state funds. Some services are funded totally by state funds.

Table 3.41 shows community-based public health system spending as reported by the CMHA/SAMHSA Uniform Reporting System. The expenditure totals in Table 3.41 are consistent with the FY 2006 expenditure total in Table 3.40, indicating that the data is consistent across the two data sources. As discussed above, the CMHA/SAMHSA data is only available by broad category, not service-by-service, and totals are net of federal grant funds. State versus federal share of spending is not derivable from data reported for FY 2000 to FY 2005, so the state share of 55.1 percent in FY 2006 in Table 3.41 is assumed to be the same in prior years.

Table 3.40
State Expenditures for Community-Based Mental Health Services*
Provided by the Mental Hygiene Administration:
Maryland, FY 2006

Service	Expenditures	Persons Served (Duplicated)	Percent State Funds
Crisis	\$3,199,877	1,466	100%
Mobile Treatment	\$8,216,388	1,557	54.2%
Psychiatric Rehabilitation Program Children	\$8,359,979	4,432	54.2%
Psychiatric Rehabilitation Program Adults	\$97,549,039	9,194	54.2%
Psychiatric Day Treatment/Partial Hospitalization Children	\$5,045,633	1,109	64.1%
Psychiatric Day Treatment/Partial Hospitalization Adult	\$9,363,274	2,726	64.1%
Outpatient Mental Health Services Children	\$77,448,089	39,705	54.7%
Outpatient Mental Health Services Adult	\$59,549,635	42,504	54.7%
Mental Health Targeted Case Management Children	\$2,538,510	907	65.9%
Mental Health Targeted Case Management Adult	\$8,388,881	3,681	65.9%
Residential Rehabilitation Program Adults	\$9,650,428	3,986	100.0%
Residential Rehabilitation Program Children	\$46,205	123	100.0%
Supported Employment Services Children (Mental Health)	\$13,395	20	100.0%
Supported Employment Services Adults (Mental Health)	\$3,347,788	1,565	100.0%
Respite Services Adult (Mental Health)	\$38,805	44	100.0%
Respite Services Children (Mental Health)	\$706,089	221	100.0%
Baltimore Partial Capitation Project (Mental Health)	\$9,451,568	360	65.8%
Total Expenditures**	\$302,913,583		
State Expenditures	\$167,016,871		55.1%

* Includes all community-based mental health services—i.e., shorter-term services for persons requiring community-based mental health services as well as long-term services and supports for persons with a serious mental illness.

** Includes federal and state expenditures.

Source: Maryland Mental Hygiene Administration. (2007). *FY 2006 budget report*. Updated upon request, September 6, 2007.

**Table 3.41
Unduplicated Users and Expenditures for
Ambulatory/Community Services in the
Public Mental Health System:
Maryland, FY 2001 – FY 2006**

Fiscal Year	Total Users (Unduplicated)	Total Expenditures	Percent State Funding
2001	Not reported*	\$203,046,048	55.1%
2002	Not reported	\$242,700,000	55.1%
2003	Not reported	\$288,400,000	55.1%
2004	89,430	\$305,900,000	55.1%
2005	89,910	Not yet available	--
2006	Not yet available**	\$302,913,583	55.1%

* "Not reported" means that for these years, the state did not unduplicate the totals served between in-patient and community-based consumers.

** While each Uniform Reporting System report contains demographic data for the current reporting year, it provides financial data for the *prior year* (the data comes from two different sources). Thus, the FY 2005 report contains FY 2005 demographic data but FY 2004 financial data. The FY 2006 financial data reported by MHA does not have an unduplicated count of users, and the FY 2006 Uniform Reporting System report, which provides the unduplicated count, has not yet been posted by CMHS/SAMHSA.

Sources: Data from CMHS/SAMHSA's Uniform Reporting System. Accessed August 29, 2007, at http://download.ncadi.samhsa.gov/ken/excel/URS_Data05/MD.xls. Maryland Mental Hygiene Administration. (2007). *FY 2006 budget report*.

It is important to note that only a portion of the services listed in Tables 3.40 and 3.41 were provided to disabled persons with a serious mental illness. Definitional and data challenges preclude precise identification of services provided to this target population. A two-step methodology for estimating the size of this population, their utilization of services, and the cost of those services was developed as described below.

Step 1: Estimate the number of consumers in Maryland with serious mental illness who use the public mental health system.

Using the data reported by MHA in the FY 2005 report, there were 63,077 individuals with a serious mental illness. Of this total, 50 percent (31,566) were children and 50 percent (31,511) were adults.

Step 2: Of those individuals with a serious mental illness, estimate the number whose serious mental illness is continuous and persistent and therefore requires community long-term care services. Then estimate the costs of providing long-term services and supports to this population.

For purposes of this analysis, it has been assumed that 50 percent of the *unduplicated* number of persons with a serious mental illness who were served by the MHA in FY 2005 were, in fact, individuals with a serious mental illness that was continuous and persistent and required long-term care services. From Step 1,

63,077 unduplicated individuals had a serious mental illness, so it is assumed that *31,538 individuals* (50 percent) had a serious mental illness that results in the use of long-term, continuous public mental health services.²⁴⁰

Medicare data indicate that dually-eligible disabled beneficiaries with a serious mental illness expend 22 percent more in services than do other disabled beneficiaries.²⁴¹ Hence, expenditures for persons with a serious mental illness requiring long-term care services are estimated to be \$127,504,476 in FY 2006, or 42 percent of total expenditures in Table 3.40.²⁴²

It is important to note that the MHA reported that in FY 2005, 73 percent of all consumers were Medicaid-only. Another 10 percent had Medicaid and other state funds. Together, 83 percent of the individuals served had some Medicaid funding.

However, one cannot automatically assume that 83 percent of individuals with serious mental illness served by the MHA are eligible for Medicaid. Because a higher percentage of disabled Medicare beneficiaries have a mental illness than non-disabled Medicare beneficiaries (see “Prevalence of Mental Illness Among Medicare Beneficiaries” above), one can reasonably assume that 90 percent of the persons with serious mental illness in the public mental health system have some Medicaid coverage (e.g., either full Medicaid or dually eligible). In 2005 numbers, this would result in 56,769 individuals served who are Medicaid-eligible. Thus, the great majority of those served who are in the target population are likely Medicaid beneficiaries.

In summary, an estimated 31,500 individuals served by the public mental health system had a serious mental illness that required long-term care services, and the cost of providing community services to this population was about \$127.5 million in FY 2006.

It is important to note that the estimated number of persons with continuous and persistent mental illness and the costs of providing long-term community services derived above is conservative. Estimated costs do not include any inpatient admissions for an acute or recurring episode that requires hospitalization, nor does it account for pharmacy costs which are often key

²⁴⁰ The challenge presented in this analysis is how best to estimate the percentage of those served in the public mental health system who receive services that are analogous to services received by other segments of the target population of this report (e.g., persons aged 65 and older receiving waivers services) in amount, duration, and scope. Thus, the conservative estimate of 50 percent is a judgment and was chosen to provide a reasonable “marker” for estimating the long-term care use and costs for this population. This estimate is simply a reasonable judgment about how many require services that would generally fall within the scope of “long-term services and supports.” More detailed analysis would be required to refine this estimate.

²⁴¹ See previous discussion under the heading “Prevalence of Mental Illness Among Medicare Beneficiaries.”

²⁴² This was calculated by assuming that while these individuals comprise 35 percent of the total number served, they consume 20 percent more per capita in services than those who do not require long-term care. In other words, the estimate was derived by multiplying 63,077 (total number of persons with a serious mental illness served by the MHA) by 50 percent, which comes to 31,538 individuals (the number estimated to need long-term care). That number was then multiplied by \$3,369.07, which is per capita spending for total persons served in the community by MHA (expenditures of \$302,913,583 divided by 89,910 persons equals \$3,369.07). The result is \$106,253,730 (31,538 individuals multiplied by \$3,369.07 in per capita spending). Finally, this amount was increased by 20 percent, which is the estimated additional cost associated with the assumed higher utilization of services by this population (\$106,253,730 multiplied by 1.20). The estimated sum, then, for community-based long-term care services in the public mental health system for FY2006 is \$127,504,476.

to an individual's ability to live successfully in the community. Likewise, it does not include any estimated increase in unduplicated users.

Addressing Service Gaps

The MHA reported the service gaps in Table 3.42. While these gaps do not specifically address the target population of this report, the target population is included, and the gaps reflect the significant challenges Maryland's public mental health system faces as it works to meet the growing demands for public mental health services.

**Table 3.42
Reported Service Gaps in the Public Mental Health System:
Maryland, 2007**

Gap	Service	Comments
Lack of Funding	Psychiatric Rehabilitation Program	Need adequate funding for SSI, SSDI, uninsured individuals in special population groups, Medicare recipients with SSDI and elderly populations
	Psychiatric Day Treatment/Partial Hospitalization	
	Mental Health Targeted Case Management	
	Outpatient Mental Health Services	
	Residential Rehabilitation Programs	Need other levels of housing to enable movement through Residential Rehabilitation Programs
Uninsured	Residential Rehabilitation Programs	Growing number of uninsured who need funding for mental health services
	Psychiatric Rehabilitation Program	
	Psychiatric Day Treatment/Partial Hospitalization	
	Mental Health Targeted Case Management	
	Outpatient Mental Health Services	
Expand Coverage	Residential Rehabilitation Programs	Expand coverage on mental health, fully implement parity
	Psychiatric Rehabilitation Program	
	Psychiatric Day Treatment/Partial Hospitalization	
	Mental Health Targeted Case Management	
	Outpatient Mental Health Services	
Lack of Qualified Providers	Residential Rehabilitation Programs	Recruitment and retention of staff
	Psychiatric Rehabilitation Program	Recruitment and retention of direct care level staff
	Psychiatric Day Treatment/Partial Hospitalization	Need more qualified providers, especially in some regions of the state
	Outpatient Mental Health Services	Lack of licensed mental health professionals particularly in rural areas

Source: Center for Health Program Development and Management, UMBC. (2007). Data from service inventory of state agencies.

Projected Use and Costs in 2010, 2020, 2030

Estimation Factors:

Services without historical trend data: Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. No further adjustments were made.

Services with historical trend data: Assumptions were made to estimate the percentage of users and costs of community-based long-term public mental health services and the percentage of total costs attributable to those users. Then, historical utilization trend data was used to estimate future utilization; no further adjustments were made.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

State-Operated Medicaid Institutions for Mental Diseases

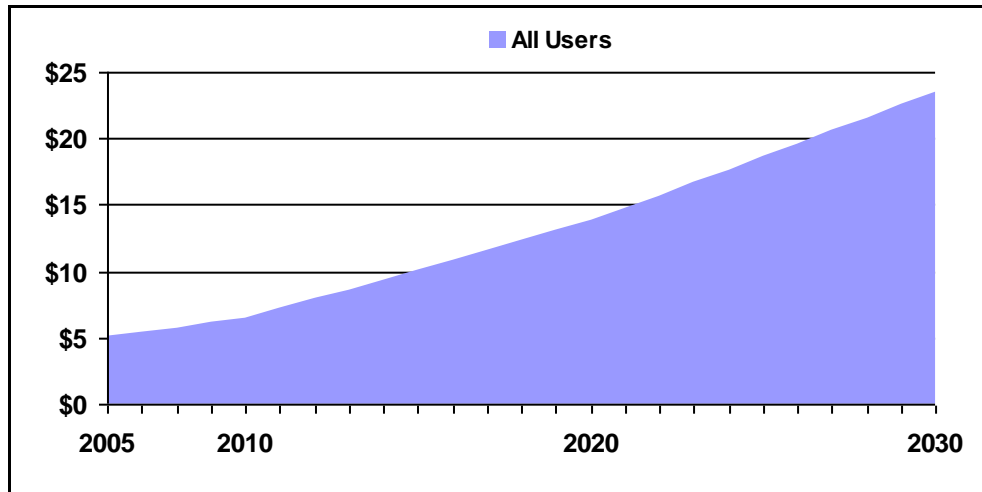
Reflecting projected growth in the aged 65 and older population, state-operated IMDs are projected to serve 47 Medicaid beneficiaries aged 65 and older in 2010, 72 in 2020, and 91 by 2030. Table 3.43 and Figure 3.24 show the projected cost growth during this period. These projections do not include those non-Medicaid-eligible persons who have long stays in the public mental health hospital system, as data to identify the numbers and expenditures for this population was not available.

Table 3.43
Actual and Projected Costs for Medicaid-Eligible Persons Aged 65 and Older
In State-Operated Institutions for Mental Diseases (IMDs):
Maryland, 2010 – 2030

Fiscal Year	Medicaid Expenditures (\$ Millions)
2005	\$5.1
2010	\$6.5
2020	\$13.8
2030	\$23.5

Source: Center for Health Program Development and Management, UMBC.

Figure 3.24
Actual and Projected Costs for Medicaid-Eligible Persons Aged 65 and Older
In State-Operated Institutions for Mental Diseases (IMDs):
Maryland, 2010 – 2030



Source: Center for Health Program Development and Management, UMBC.

Community Public Mental Health Services

While the MHA data show that 50 percent of unduplicated users with severe mental illness are children and 50 percent are adults, those adults requiring long-term care services are projected to be more costly to serve than children (as noted in Table 3.44 and Figure 3.25). Projected users of long-term community public mental health services are expected to grow 19 percent from FY 2005 (31,538) to FY 2030 (37,543). Costs will grow from \$127.5 in FY 2005 to \$301.4 million in FY 2030, an increase of 136 percent.

Table 3.45 provides the variance analysis for this growth. Population growth accounts for a significant portion of the projected increase, as does the increase in the cost per unit of service.

Table 3.44
Projected Costs for Long-Term Community Public Mental Health Services:*
Maryland, 2005 – 2030
(\$ Millions)

Service	Estimated 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Programs for Children	\$43.0	\$51.5	\$72.5	\$101.6	\$58.6	136%
Programs for Adults	\$84.5	\$101.2	\$142.5	\$199.8	\$115.3	136%
Total	\$127.5	\$152.7	\$215.0	\$301.4	\$173.9	136%

* Includes only long-term community-based mental health services and supports for persons with a serious mental illness.

Source: Center for Health Program Development and Management, UMBC.

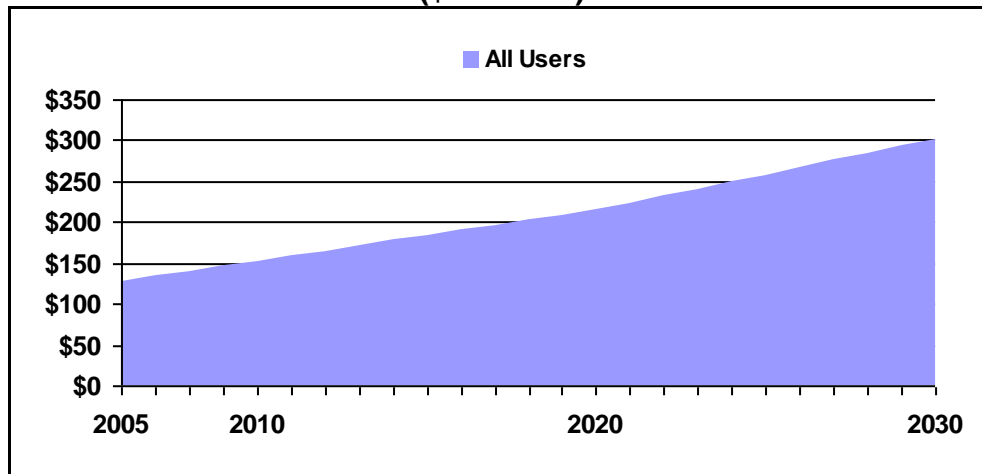
**Table 3.45
Variance Analysis
Projected Costs for Long-Term Community Public Mental Health Services:*
Maryland, 2005 – 2030
(\$ Millions)**

1	2	Variance				7	8
		3	4	5	6		
Service	Estimated 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Programs for Children	\$43.0	\$13.2	(\$0.9)	\$0.0	\$46.4	\$101.6	136%
Programs for Adults	\$84.5	\$25.9	(\$1.8)	\$0.0	\$91.2	\$199.8	136%
Total	\$127.5	\$39.0	(\$2.7)	\$0.0	\$137.6	\$301.4	136%

* Includes only long-term community-based mental health services and supports for persons with a serious mental illness.

Source: Center for Health Program Development and Management, UMBC.

**Figure 3.25
Projected Costs for Long-Term Community Public Mental Health Services:*
Maryland, 2005 – 2030
(\$ Millions)**



* Includes only long-term community-based mental health services and supports for persons with a serious mental illness.

Source: Center for Health Program Development and Management, UMBC.

Total Long-Term Public Mental Health Services

Tables 3.46 and 3.47 and Figure 3.26 provide the combined projections for both persons aged 65 and older using IMDs and community-based long-term services for persons with severe mental illness (children and adults) in the public mental health system. Total costs are projected to increase from \$132.6 million in 2005 to \$324.9 million in 2030, an increase of 145 percent.

Table 3.46
Projected Costs for Total Long-Term Public Mental Health Services:
Maryland, 2005 – 2030
(\$ Millions)

Service	Estimated 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
Programs for Children	\$43.0	\$51.5	\$72.5	\$101.6	\$58.6	136%
Programs for Adults	\$84.5	\$101.2	\$142.5	\$199.8	\$115.3	136%
Public Institutions for Mental Disease (IMDs)	\$5.1	\$6.5	\$13.8	\$23.5	\$18.4	359%
Total	\$132.6	\$159.1	\$228.8	\$324.9	\$192.3	145%

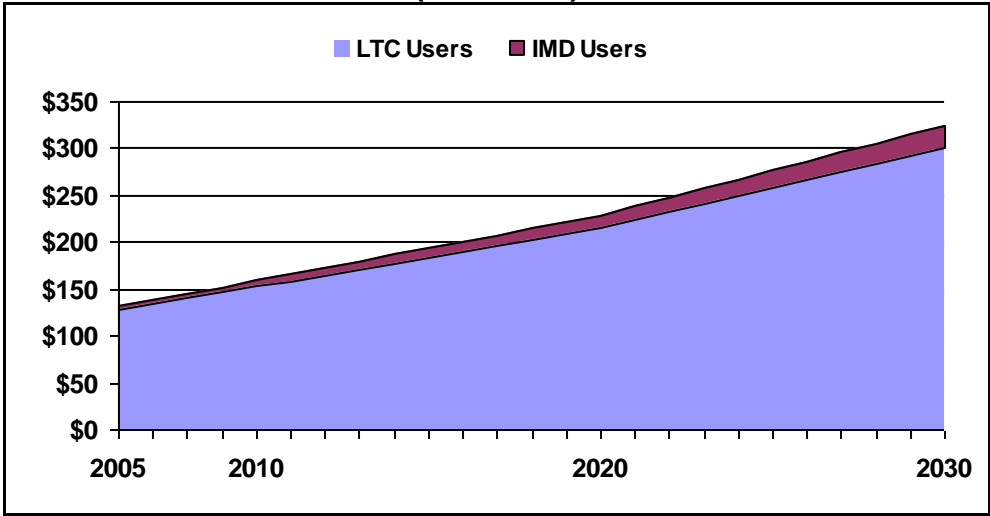
Source: Center for Health Program Development and Management, UMBC.

Table 3.47
Variance Analysis
Projected Costs for Total Long-Term Public Mental Health Services:
Maryland, 2005 – 2030
(\$ Millions)

1 Service	2 Estimated 2005	Variance				7 Projected 2030	8 Percent Change 2005-2030
		3 Population Growth	4 Percent of Population Using Service	5 Average Number Units per User	6 Average Cost per Unit of Service		
Programs for Children	\$43.0	\$13.2	(\$0.9)	\$0.0	\$46.4	\$101.6	136%
Programs for Adults	\$84.5	\$25.9	(\$1.8)	\$0.0	\$91.2	\$199.8	136%
Public Institutions for Mental Disease (IMDs)	\$5.1	\$2.4	\$6.7	\$1.2	\$8.1	\$23.5	359%
Total	\$132.6	\$41.4	\$4.0	\$1.2	\$145.7	\$324.9	145%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.26
Projected Costs for Total Long-Term Public Mental Health Services:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Services and Supports for Persons with Developmental Disabilities

Maryland provides a comprehensive set of services and supports for persons with developmental disabilities, almost entirely within a home- and community-based framework. The following discussion focuses only on publicly funded services (with state and federal funds) provided through the Developmental Disabilities Administration (DDA), as well as services and supports provided by local jurisdictions, where applicable. Services provided to children with developmental disabilities through the Maryland State Department of Education and local education systems are excluded.

The National Association of Councils on Developmental Disabilities (NACDD), which is a national, member-driven organization consisting of 55 state and territorial councils, provides the following definition of developmental disability:

A developmental disability is a severe, chronic disability that begins any time from birth through age 21 and is expected to last for a lifetime. Developmental disabilities may be cognitive, physical, or a combination of both. While not always visible, these disabilities can result in serious limitations in every day activities of life, including self-care, communication, learning, mobility, or being able to work or live independently. Such disabilities are almost sure to result in a lifetime of dependence on publicly-funded services, unless families receive sufficient support, children receive appropriate education, and adults receive appropriate services that enable them to live and work in their local communities.²⁴³

Neither the Maryland Department of Budget and Planning nor the DDA maintains estimates of the Maryland population with a developmental disability. The only available estimate of the prevalence of developmental disabilities in Maryland comes from the Maryland Developmental Disabilities Council, as noted in their five-year plan:

No reliable data exists on the prevalence of developmental disabilities in Maryland. For the purposes of the Five Year State Plan, the estimate is based on a national prevalence rate of 1.8% developed by Gollay and Associates. According to the 2000 U.S. Census, the estimate of the population in the state is 5,296,486. Based on the population projection of 1.8%, approximately 95,337 people in Maryland have a developmental disability.²⁴⁴

The presence of a developmental disability does not mean a person is functionally dependent on the state for publicly funded services and supports. Rather, the DDA reports that their budget projections are based on those individuals who request services, not on how many people in Maryland are estimated to have a developmental disability. So, the number that the DDA plans for is the number of individuals who have requested services, are currently on the DDA's waiting list, and have been assessed as needing services, as well as those who are currently receiving services. The DDA's waiting list is discussed below.

²⁴³ National Association of Councils on Developmental Disabilities (August 2007). http://www.nacdd.org/pages/who_we_are.htm#what.

²⁴⁴ Maryland Developmental Disabilities Council (August 15, 2006). Five year plan fiscal years 2007 – 2011: Submitted to the federal Administration on Developmental Disabilities. Baltimore, MD, Maryland Developmental Disabilities Council.

Maryland provides services to adults with developmental disabilities in both institutional and community settings. Like many other states, Maryland has aggressively pursued a course to increase the availability of services to persons with developmental disabilities in home- and community-based settings, while at the same time reducing the use of publicly operated state residential centers. In 2005, Maryland ranked 10th in the nation in terms of the percentage of Medicaid funds expended in home- and community-based settings versus institutional settings for persons with developmental disabilities. In FY 2005, Maryland spent 85 percent of its funds allocated for persons with developmental disabilities in the community and only 15 percent in state residential centers. Only two states—Alaska and Oregon—spent 100 percent of their Medicaid funds for persons with developmental disabilities in community settings.²⁴⁵ Table 3.48 provides a regional and national context for Maryland’s Medicaid expenditures between institutional and community services.

Table 3.48
A Comparison of Medicaid Expenditures for
Institutional vs. Community-Based Services for
Persons with Developmental Disabilities:
Maryland and Other Selected States, FY 2005

State	Institutional		Community		Total Expenditures (\$ Billions)
	Expenditures (\$ Billions)	Percent of Total	Expenditures (\$ Billions)	Percent of Total/Rank	
Pennsylvania	\$.650	38.2	\$1.050	61.8 (30)	\$1.700
Delaware	\$.026	32.5	\$.054	67.5 (23)	\$.079
Virginia	\$.229	44.0	\$.292	56.0 (34)	\$.521
District of Columbia	\$.079	88.7	\$.010	11.3 (49)	\$.089
West Virginia	\$.055	22.5	\$.190	77.5 (16)	\$.245
Maryland	\$.063	15.0	\$.358	85.0 (10)	\$.421
Nation	\$12.103	41.6	\$17.042	58.4	\$29.127

Note: Totals may differ from other data presented in this report, which use more recent updates of FY 2005 data from Maryland’s MMIS2 system.

Source: The Community Living Exchange Collaborative, CMS 64 Cost Report Data, FY 2005. www.hcbs.org.

Below, the use and costs of services for persons with developmental disabilities in Maryland are discussed, first for institutional services and then for in-home and community services. Within the latter category, federal waiver programs are presented along with services that are funded solely by the state. Finally, services provided by local jurisdictions are discussed, along with contributions by the Maryland Developmental Disabilities Council.

²⁴⁵ Source: www.hcbs.org. Based on CMS 64 Cost Reports for CY 2005. “Institution” refers to intermediate care facilities for the mentally retarded and “community” includes Medicaid home- and community-based waiver services. Seven states use institutional funding for small community-based ICF/MRs.

Institutional Services

Maryland currently operates four state residential centers that are funded through participation in the Medicaid ICF/MR program: Brandenburg Center, Holly Center, Potomac Center, and the Rosewood Center (Table 3.49). These institutions are also referred to as state residential centers (SRCs). The state has reduced dependency on SRCs for persons with developmental disabilities by over half since 1996. Table 3.50 illustrates this decline in the use of residential centers. Currently, the DDA is preparing a report for the Maryland General Assembly that will address options for the placement of residents in the community or in other ICF/MRs if the Rosewood Center were to be closed.

Table 3.49
Census of State Residential Centers (ICFs/MR):
Maryland, September 2007

State Residential Center	Location	Census
Joseph D. Brandenburg Center	Cumberland	19
Holly Center	Salisbury	96
Potomac Center	Hagerstown	58
Rosewood Center	Owings Mills	168
Total		341

Source: Personal communication with each center, September 21, 2007.

Table 3.50
Total Medicaid Enrollment and Expenditures for ICFs/MR:
Maryland, 1996 – 2006*

FY	Enrollees	Expenditures (\$ Millions)
1996	789	\$67.1
1997	647	\$57.8
1998	630	\$55.8
1999	598	\$53.4
2000	562	\$56.3
2001	547	\$59.3
2002	497	\$54.9
2003	422	\$63.5
2004	390	\$62.9
2005	384	\$64.9
2006	363	\$63.2

* Data on additional forensic placements who are *not* eligible for Medicaid is not available at present.

Source: Center for Health Program Development and Management, UMBC. Maryland Department of Health and Mental Hygiene, MMIS2.

In addition to supporting individuals in the state's four ICF/MRs, the state also currently finances residential (institutional) care for two individuals out of state at a cost of \$35,746, using state-only dollars.

The DDA continues its efforts to help residents, their families, and caregivers to evaluate the opportunities for living in the community. A July 2007 report to the Maryland General Assembly indicated that in FY 2006, 352 residents of SRCs received the legislatively mandated plan of habilitation describing the “most integrated setting appropriate for the individual.” Opposition may be registered by the individual, family members, or legal guardians. Of the 352 evaluated individuals, 251 were the subject of opposition to community residential placement from one source or another, which illustrates the challenges involved in relocating institutionalized persons. Community capacity issues provided additional barriers in some cases, and in others, court-ordered placement in the centers also provided barriers to community integration. Despite these challenges, the DDA successfully transitioned 23 individuals (six percent of the total) in CY 2006 into community settings.²⁴⁶

Thus, as the DDA continues to work to further reduce the population of the state's ICF/MRs, residential placements will continue to decline. However, until the General Assembly makes a decision about the future of the Rosewood Center, it is difficult to predict how steeply the downward trend will proceed. It is clear from recent history, however, that there is no basis on which to predict that the number of people in Maryland's ICF/MRs will again increase. A possible trajectory, based on historical data, is presented at the conclusion of this chapter.

In-Home and Community-Based Services

Maryland provides services to adults with developmental disabilities in the community based on assessed need and availability of resources, which include both Medicaid home- and community-based waivers and state-only funds. In other words, the DDA provides services to individuals based on level of need, not on whether the individual qualifies financially for Medicaid waiver services. For example, if two individuals have the same assessed level of need and one meets the financial eligibility criteria for Medicaid waiver services, that individual will be enrolled in the Medicaid waiver if a waiver “slot” is available. The second individual—who does not meet the financial eligibility criteria for the Medicaid waiver—may receive the same services as the first individual, but with state-only funds, if those funds are available. In this way, two individuals with the same assessed level of need but different financial circumstances may receive services. However, the DDA reports that the majority of state-only funding that is not devoted to the state match for waiver services goes to annualizing services currently funded. Thus, new state-only-funded persons can be provided state-only services through attrition.

²⁴⁶ Secretaries of Maryland's Departments of Health and Mental Hygiene and Disabilities (July 2007). Written plan of habilitation for individuals in state residential centers: Report to the Maryland General Assembly. Baltimore, MD, Maryland Department of Health and Mental Hygiene and Disabilities, pp. 1-7.

Total Use and Costs

Since most individuals receiving DDA services participate in a complete 24-hour-a-day program, in-home and community services will be discussed together. In FY 2006, Maryland provided a wide variety of home- and community-based services and supports to over 43,000 (duplicated) individuals by service²⁴⁷ at a cost of \$555.1 million. Of this total, 59 percent (\$328.5 million) was state-funded. In-home services totaled \$391.9 million (71 percent) and services in the community totaled \$163.2 million (29 percent) of the total non-institutional community-based expenditures for persons with developmental disabilities. See Table 3.51.

Since the state provides waiver-equivalent services with state-only dollars to individuals who do not qualify financially for Medicaid waiver services, and since some programs are funded entirely with state-only dollars, the state's share of costs for services for persons with developmental disabilities is higher than the 50 percent state share associated with other Medicaid waiver programs.

Table 3.51 lists the in-home and community-based services provided by the DDA. Since waiver spending comprises such a major portion of total spending, waiver services costs are included in Table 3.50, but are detailed separately in Table 3.52 to clarify how many individuals, and at what cost, are served through Medicaid waiver programs versus programs funded wholly by the state. The DDA reports that, on average in FY 2006, only 5 percent of the individuals participating in its services were 65 years of age or older.

²⁴⁷ "Duplicated" means that each person receiving a service is counted in that service category, so the total duplicated count includes individuals who are counted more than once because they received more than one service. Within this duplicated count, the data show that 10,626 unduplicated individuals received one or more Medicaid waiver services.

**Table 3.51
In-Home and Community-Based Services and Supports Provided by the
Developmental Disabilities Administration:
Maryland, FY 2006**

DDA IN-HOME SERVICES	Percent Total Dollars	Total DDA Dollars	Waiver** Dollars	Federal Dollars	State Dollars	Percent State Dollars
Community Support Living Arrangements	13.47%	\$52,802,908	\$33,396,561	\$16,698,280	\$36,104,628	68%
Individual Support Services for individuals 22 and older	7.42%	\$29,068,744	\$4,118,446	\$2,059,223	\$27,009,521	93%
Individual Family Care for individuals in foster care	1.23%	\$4,821,374	\$4,427,149	\$2,213,575	\$2,607,799	54%
Family Support Services for individuals under 22	2.34%	\$9,166,923	\$0	\$0	\$9,166,923	100%
New Directions*	0.01%	\$38,975	\$5,880	\$2,940	\$36,035	92%
Community Residential Services	75.53%	\$295,991,612	\$287,093,126	\$143,546,563	\$152,445,049	52%
Total	100.00%	\$391,890,536	\$329,041,161	\$164,520,581	\$227,369,955	58%

DDA COMMUNITY SERVICES	Percent Total Dollars	Total DDA Dollars	Waiver Dollars	Federal Dollars	State Dollars	Percent State Dollars
Supported Employment	28.91%	\$47,167,713	\$38,085,974	\$19,042,987	\$28,124,726	60%
Summer Program	0.19%	\$309,944	\$0	\$0	\$309,944	100%
Resource Coordination (case management)	14.53%	\$23,702,625	\$10,390,750	\$5,195,375	\$18,507,250	78%
Behavioral Services	3.52%	\$5,742,706	\$733,069	\$366,535	\$5,376,171	94%
Day Programs	52.85%	\$86,238,039	\$74,890,777	\$37,445,389	\$48,792,650	57%
Total	100.00%	\$163,161,027	\$124,100,571	\$62,050,285	\$101,110,742	62%
Grand Total DD Services		\$555,051,563	\$453,141,732	\$226,570,866	\$328,480,697	59%

* Since the New Directions waiver only began enrolling new participants in FY 2006, reported expenditures may not be fully accurate (e.g., the federal/state share should be 50/50).

** Except for New Directions, all waiver dollars are expended through Community Pathways.

Source: Center for Health Program Development and Management, UMBC. Maryland Developmental Disabilities Administration, July 2007.

Table 3.52 illustrates the dramatic growth in state expenditures since 1996 for services for persons with developmental disabilities. Total expenditures (state and federal) for home- and community-based services for persons with developmental disabilities increased more than 130 percent from FY 1996 to FY 2006. The state amount increased by 87 percent during the same period (though the percentage of state share to total expenditures declined). The total number of duplicated persons receiving one or more services almost doubled as well, while the cost per duplicated person rose only 18.4 percent during that time.

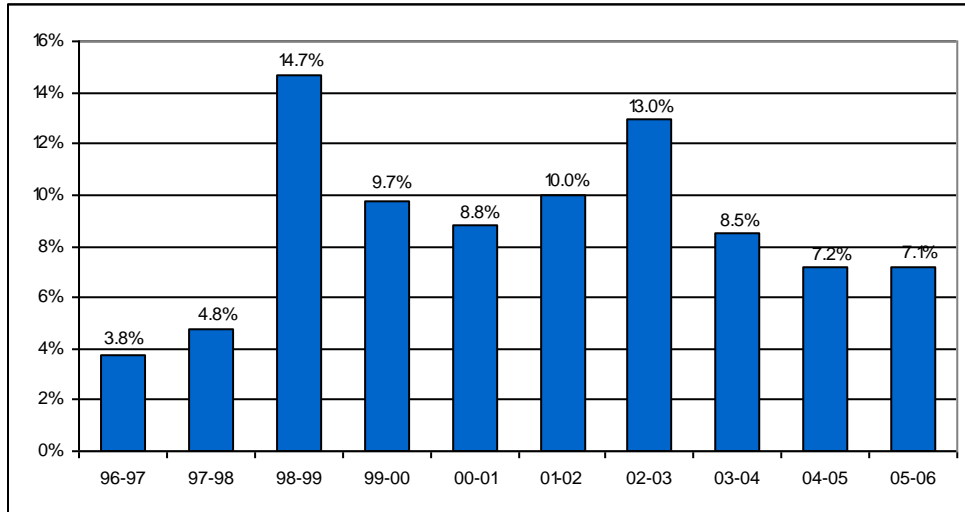
Table 3.52
Federal and State Expenditures for In-Home and
Community Services and Supports
For Persons with Developmental Disabilities:
Maryland, FY 1996 – 2006

Fiscal Year	Total Costs (\$ Millions)	Total State Funds (\$ Millions)	Percent State Funds	Duplicated Number of Users	Average Cost per User
1996	\$240.9	\$175.9	73.0	22,205	\$10,849
1997	\$250.0	\$176.3	71.0	24,174	\$10,342
1998	\$261.9	\$184.8	71.0	24,486	\$10,696
1999	\$300.3	\$215.6	72.0	28,589	\$10,504
2000	\$329.5	\$239.0	73.0	29,928	\$11,010
2001	\$358.5	\$258.0	72.0	32,471	\$11,041
2002	\$394.3	\$268.5	68.0	35,530	\$11,098
2003	\$445.5	\$296.5	67.0	36,482	\$12,212
2004	\$483.5	\$316.1	65.0	38,348	\$12,608
2005	\$518.1	\$314.8	61.0	41,586	\$12,459
2006	\$555.1	\$328.4	59.0	43,203	\$12,849

Source: Center for Health Program Development and Management, UMBC. Data from Maryland Developmental Disabilities Administration, July 2007.

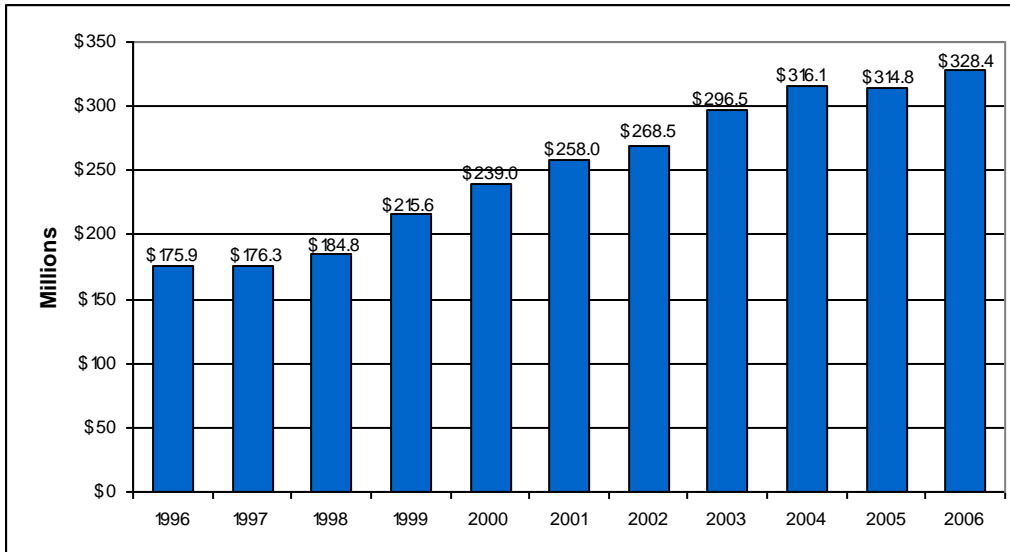
Figure 3.27 illustrates the year-to-year percentage change in total federal and state dollars spent on in-home and community services. Figure 3.28 shows the growth in state-only funding from FY 1996 to FY 2006. Figure 3.29 shows the declining percentage of state funds relative to federal funds for in-home and community services. Figure 3.30 highlights the annual percentage change in the total number of duplicated users of services. While there has been an increase each year, the percentage increases have varied from year to year, generally as a function of available funds and the level and intensity of services requested and provided.

Figure 3.27
Annual Percentage Change in Total Federal and State Expenditures for
In-Home and Community Services for Persons with Developmental Disabilities:
Maryland, FY 1996 – FY 2006



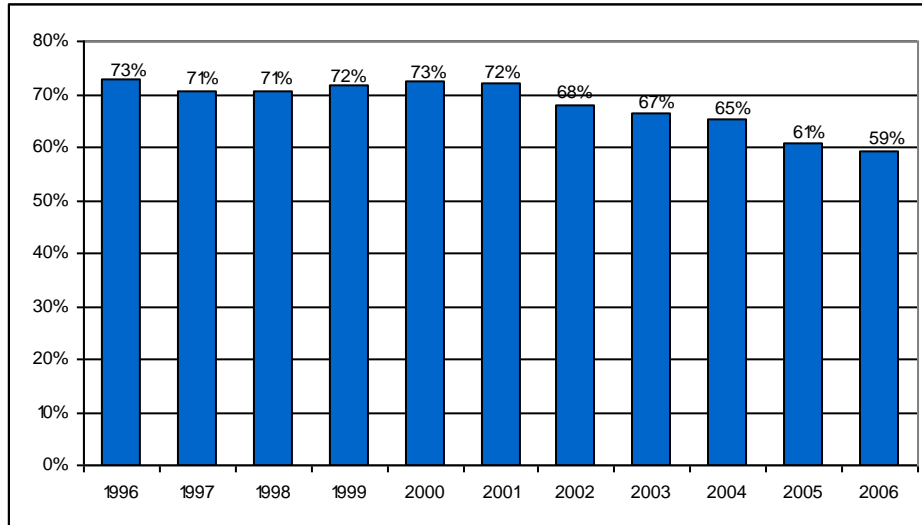
Source: Center for Health Program Development and Management, UMBC. Maryland Developmental Disabilities Administration, July 2007.

Figure 3.28
State Expenditures for In-Home and Community Services for
Persons with Developmental Disabilities:
Maryland, FY 1996 – 2006



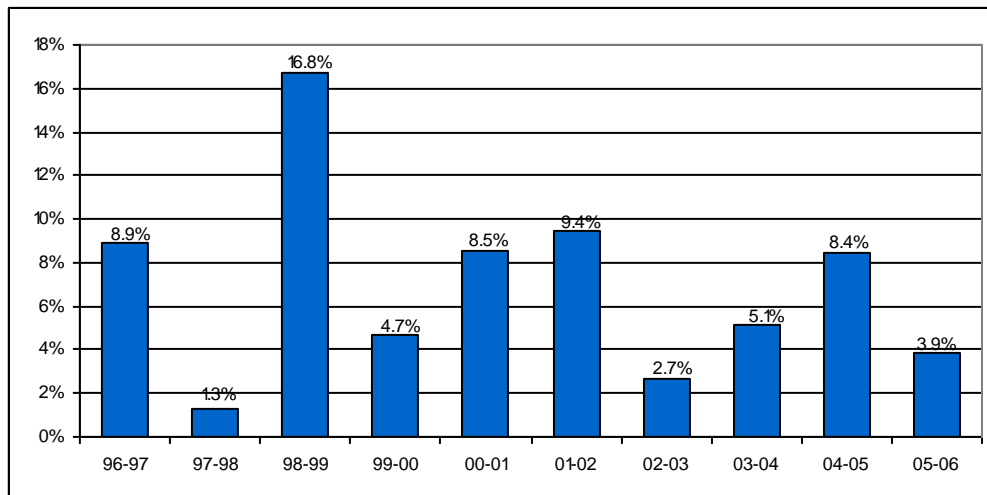
Source: Center for Health Program Development and Management, UMBC. Maryland Developmental Disabilities Administration, July 2007.

Figure 3.29
State Expenditures as a Percentage of Total Public Expenditures for
In-Home and Community Services for Persons with Developmental Disabilities:
Maryland, FY 1996 – 2006



Source: Center for Health Program Development and Management, UMBC. Maryland Developmental Disabilities Administration, July 2007.

Figure 3.30
Annual Percentage Change in the Number of Persons with
Developmental Disabilities Receiving In-Home and Community Services:
Maryland, FY 1996 – 2006



Source: Center for Health Program Development and Management, UMBC. Maryland Developmental Disabilities Administration, July 2007.

Waiver Costs

As previously discussed, the DDA budgets and delivers services by service categories to individuals who are Medicaid waiver participants and to individuals who are funded with state-only funds. The preceding discussion (and Tables 3.51-3.52 and Figures 3.27-3.30) encompasses funding for services provided to both Medicaid waiver participants and individuals supported with state-only funds. The discussion below focuses on participation in and expenditures for Maryland's two Medicaid waivers for persons with developmental disabilities operated by the DDA: Community Pathways and New Directions.

Community Pathways: This is the primary Medicaid waiver for persons with developmental disabilities. In FY 2006, Community Pathways provided services to 10,626 unique users at a total cost of \$453.1 million, of which \$226.5 million was state funds. Clearly, Medicaid plays an important role in providing home- and community-based services to people with developmental disabilities in Maryland. As shown in Table 3.52, total costs for in-home and community services for persons with developmental disabilities was \$555.1 million in FY 2006. Of this total, Medicaid waiver expenditures were \$453.1 million, or 82 percent. The remaining \$102 million in state-only funds provided services to individuals who were not financially eligible for Medicaid waiver services, and funded programs that would not be covered by Medicaid (e.g., a summer program).

Table 3.53 provides a historical view of the growth in the Community Pathways waiver relative to total spending for persons with developmental disabilities.

Table 3.53
Expenditures for the Community Pathways Medicaid Waiver Compared to
Total Expenditures for Services for Persons with Developmental Disabilities:
Maryland, FY 1996 – 2006

Fiscal Year	Number of Waiver Participants (Unduplicated)	Federal/State Medicaid Waiver Expenditures (\$ Millions)	Total DD Expenditures (\$ Millions)	Federal/State Medicaid as Percent of Total DD Expenditures
1996	3,938	\$130.0	\$240.9	54%
1997	4,067	\$147.1	\$250.0	59%
1998	4,154	\$154.1	\$261.9	59%
1999	4,711	\$169.5	\$300.3	56%
2000	5,507	\$181.0	\$329.5	55%
2001	6,516	\$201.0	\$358.5	56%
2002	7,462	\$251.3	\$394.3	64%
2003	8,125	\$298.0	\$445.5	67%
2004	9,179	\$334.7	\$483.5	69%
2005	10,174	\$406.6	\$518.1	78%
2006	10,626	\$453.1	\$555.1	82%

Source: Center for Health Program Development and Management, UMBC. (2007). Maryland Department of Health and Mental Hygiene, MMIS2.

New Directions: The DDA received approval from CMS to begin implementation of the New Directions waiver on July 1, 2005. Individuals eligible for Community Pathways have the option to enroll in New Directions, which offers the same services as Community Pathways, but participants may self-direct their services through individual budgets. The one additional service available to New Directions participants is a services broker who can assist the individual in negotiating for service providers. The cost of services provided to participants in New Directions is included in the Community Pathways tallies in Table 3.53, with one exception: the cost of assistance by the services brokers, which totaled just over \$5,880 in FY 2006. Because New Directions participants are not necessarily “new” participants but persons otherwise eligible for Community Pathways, they do not necessarily increase the total number of persons receiving waiver services. (A new Community Pathways enrollee may elect New Directions, in which case that enrollee would increase the total number of persons receiving waiver services.)

New Directions enrolled its first participant in the spring of 2006. By July of 2006, 18 individuals were enrolled; by December of 2006, 38 participants were enrolled; and by mid-2007, about 100 individuals were participating. New Directions has an authorized waiver cap of 300 enrollees. While the trend toward self-direction is growing, the impact on overall services and supports provided to persons with developmental disabilities is expected to be nominal.

Waiting Lists: Despite continued growth in both expenditures and the number of persons served, the DDA maintains an active, ever-expanding waiting list for services. The waiting list is composed of individuals who have been assessed and determined to need one or more supports and/or services provided by DDA programs. However, individuals on the waiting list have not yet been determined to be financially eligible for Medicaid waiver services.

As of July 1, 2007, the DDA reported that 16,356 unique individuals were on the active waiting list for one or more of three basic services (residential, day, and supports services), for a total of 29,532 service requests. However, 5,042 of these individuals were already receiving at least one service while they were waiting to receive additional services. At the same time, 11,314 individuals on the waiting list were receiving no services at all. Table 3.54 illustrates the growth in the DDA waiting list since CY 2000.

Table 3.54
Waiting List for Persons Determined in Need of
Services for Developmental Disabilities:
Maryland, January 2000 – July 2007

Wait Listed as of:	Individuals Waiting for Service	Number of Services Requested*
January 1, 2000	6,602	9,292
January 1, 2001	7,556	10,988
June 30, 2001	8,102	12,027
January 1, 2003	9,697	14,962
January 1, 2004	11,653	18,819
January 1, 2005	14,616	24,700
January 1, 2006	15,498	27,464
January 1, 2007	15,790	27,912
July 1, 2007	16,356	29,532

* Each individual on the waiting list may request one or more of three basic services (residential, day, and supports services).

Source: Maryland Developmental Disabilities Administration, July 2007.

Addressing Service Gaps

Clearly, the single greatest service gap identified by the DDA is the growing inability to provide needed and requested services to the thousands of adults with developmental disabilities on the waiting list detailed in Table 3.54. Likewise, as noted earlier, the diminishing proportion of state-only funds targeted at persons who are not Medicaid-eligible to state funds devoted to matching federal waiver funds has resulted in a growing inability to provide needed community-based services to non-Medicaid-eligible individuals. Many are in need of the same services that Medicaid-eligible individuals receive in the developmental disability waivers. These gaps are occurring at the same time that Maryland’s support for persons with developmental disabilities continues to grow at about 8.9 percent a year, now totaling over \$555 million a year. The DDA also reports that as community programs expand, and as the consumer base increasingly includes individuals with severe and challenging behaviors, providers are increasingly experiencing “provider fatigue.” That is, it is increasingly difficult to provide services in a disperse service delivery system in the community for an increasingly challenging population. Likewise, as noted in other chapters, the developmental disability provider community also faces the same difficulties in finding and keeping qualified direct service staff to provide the services persons with developmental disabilities need.²⁴⁸

²⁴⁸ Interview with DDA staff. (Spring 2007).

Funding by Local Jurisdictions

In addition to the significant expenditures for services for persons with developmental disabilities that are funded with state and federal funds, 11 Maryland jurisdictions reported expenditures to supplement and expand services to persons with developmental disabilities in their jurisdictions. In FY 2006, these local jurisdictions contributed \$13.1 million to the services mix. Montgomery County contributed \$7.1 million, accounting for 54 percent of all local funds reported.²⁴⁹ Appendix 8 provides details on local jurisdiction funding for developmental disabilities services in FY 2006.

Contributions from the Maryland Developmental Disabilities Council

The Maryland Developmental Disabilities Council (MDDC) receives funds from the Federal Administration on Developmental Disabilities.²⁵⁰ The purpose of this organization is to advocate on behalf of all persons with developmental disabilities and to provide small grants to organizations to promote innovative approaches to service delivery and advocacy. In CY 2006, MDDC provided funds statewide for the following activities, totaling \$592,205:

- Transportation \$85,000
- Family and community supports \$124,913
- Small grants \$20,429
- Legislative and advocacy \$216,863
- Education and early intervention \$145,000

Projected Use and Costs in 2010, 2020, 2030

Estimation Factors:

Historical utilization trend data, available for all services, was used to estimate future utilization; no further adjustments were made. Future state-only funding of non-Medicaid services was held constant at the FY 2006 level.

(For more on the methodology used for cost projections, see Technical Notes in Appendix 3. For information on the availability of historical data by service, see Appendix 6.)

Since Maryland provides services with state-only funds for persons with developmental disabilities who do not meet financial eligibility requirements to participate in the Medicaid waiver program (as well as providing some programs with 100 percent state funding), and since the state is increasingly utilizing the Medicaid waiver program to fund its service programs (see Table 3.53), this analysis of projected costs will include not only projections of future use and total costs, but also projections of Medicaid waiver costs.

Since the Medicaid waiver data show (and estimates from DDA confirm) that only 5 percent of the costs of services for persons with developmental disabilities (both waiver and

²⁴⁹ Only those jurisdictions that reported local funding are included. This list may not be inclusive of all local jurisdictional funding for services for persons with developmental disabilities.

²⁵⁰ Maryland Developmental Disabilities Council (2006). Annual report. Baltimore, MD, Maryland Developmental Disabilities Council, www.md-council.org.

state-only funded) are attributable to persons aged 65 and older, the projections noted below are not broken out by age.

Projected Use and Costs of ICF/MRs

Based on historical trends (see Table 3.50), the number of persons residing in ICF/MRs is projected to continue to decline from 384 in FY 2005 to 350 in 2010, 316 in 2020, and 288 in 2030. However, this projection could change greatly if the DDA is successful in achieving 200 additional transitions to community living through FY 2012, as proposed under Maryland’s Money Follows the Person Demonstration program, which will be implemented beginning January 1, 2008.²⁵¹

Total costs for ICF/MR services is expected to decline by 6 percent by 2030 to \$61 million (Table 3.55). This projection is based on the historical trend toward continuing decreases in utilization of institutional ICF/MR services. In the variance analysis (Table 3.56), reductions in “percent using” accounts for over half of the reduction, canceling out the expected increases in cost per unit and slight population growth (implying larger numbers of potential users).

The graph in Figure 3.31 shows a slight increase in costs for ICF/MRs by 2020. However, the total effect of the expected reductions in users will likely overcome the increases in unit costs, resulting in a downward trend towards 2030.

**Table 3.55
Actual and Projected State Costs for ICF/MR Services
for Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)**

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
ICF/MR Services	\$64.9	\$62.2	\$63.4	\$61.0	(\$3.9)	(6%)

Source: Center for Health Program Development and Management, UMBC.

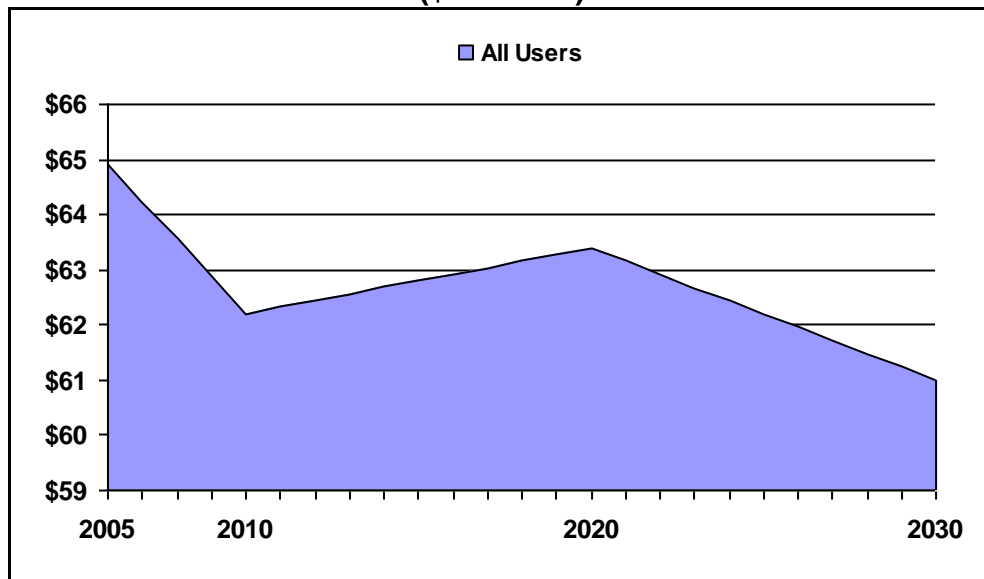
²⁵¹ DDA projected transitions in the CMS application for the demonstration, Nov. 1, 2006 and working documents in preparation of the Operational Protocol, DHMH, Summer 2007.

Table 3.56
Variance Analysis
Actual and Projected State Costs for ICF/MR Services
for Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
ICF/MR Services	\$64.9	\$10.4	(\$33.8)	(\$1.1)	\$20.5	\$61.0	(6%)

Source: Center for Health Program Development and Management, UMBC.

Figure 3.31
Actual and Projected State Costs for ICF/MR Services
for Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Projected Use and Costs of In-Home and Community-Based Services

Because the DDA only counts duplicated users for in-home and community services and supports (see Table 3.52), projections of users of these services is based on “duplicated” historical user data. It is important to note that counts of “service users” are more representative of the number of services people use than of the number of individuals using services. The projected number of duplicated “service users” of in-home and community services and supports will expand from 41,586 in 2005 to 51,641 in 2010, 55,223 in 2020, and 59,481 in 2030, an increase of 43 percent from 2005 to 2030. These projections include participants in the Community Pathways and New Directions waivers.

Because 82 percent of total DDA service expenditures are for the Community Pathways and New Directions waivers, projecting the growth in waiver participants is an important trend to observe as well. Data on unduplicated waiver participants is available and is used for projections of waiver participants. Unduplicated waiver users are projected to increase from 10,174 in 2005 to 13,788 in 2010, 16,469 in 2020, and 19,042 in 2030, an increase of 87 percent from 2005 to 2030.

The growth in waiver spending outpaces the growth in overall spending for persons with developmental disabilities (see Tables 3.53 and 3.57). Therefore, using a simple logarithmic progression, waiver costs would exceed state-only costs by 2020. This analysis assumes that the Maryland General Assembly will continue to provide state-only funds to serve persons needing services who do not meet Medicaid financial eligibility, and to fund some programs for which Medicaid funding is not available. Thus, for purposes of this analysis, state-only funds, as a percentage of the total (excluding the state funds needed to match Medicaid waiver services costs), are deliberately held constant at the FY 2006 level. The projections result in stable state-only funds, even as Medicaid waiver services costs continue to rise. Since the General Assembly provides the amount of state-only funds, which could increase or decrease over time, holding this projected rate constant was viewed as a reasonable and neutral way of continuing to show state-only funds, even as the Medicaid waiver share continues to increase.

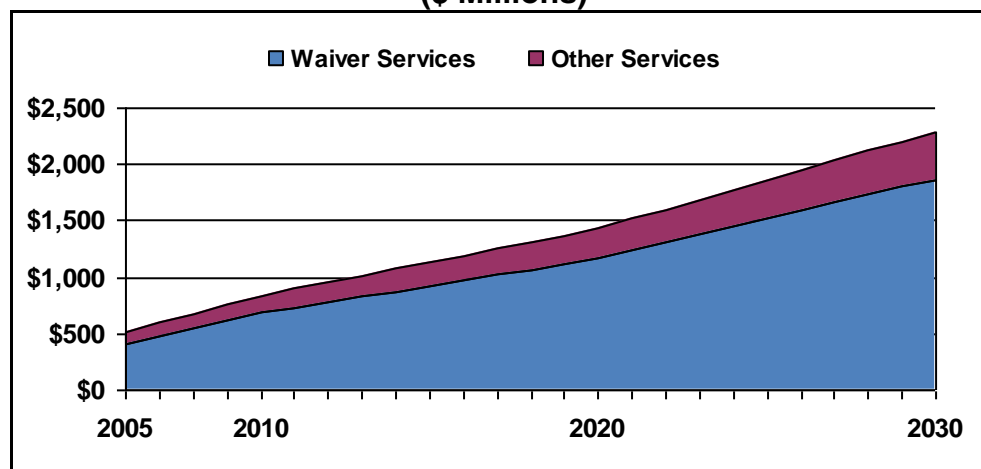
Since the projections for this analysis hold the state-only funds constant at 2006 levels, no variance table is found here. However, to illustrate these trends, Figure 3.32 shows the continued state-only funding on top of the waiver increases.

Table 3.57
Actual and Projected State Costs for In-Home and
Community-Based Services for Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
In-Home Services						
Waiver Services	\$298.5	\$501.6	\$848.4	\$1,356.4	\$1,057.9	354%
Other Services	\$83.9	\$95.8	\$162.0	\$259.1	\$175.2	209%
Total	\$ 382.4	\$597.4	\$1,010.4	\$1,615.4	\$1,233.0	322%
Community-Based Services						
Waiver Services	\$108.1	\$182.5	\$319.0	\$514.1	\$406.0	375%
Other Services	\$27.6	\$57.4	\$100.4	\$161.8	\$134.2	486%
Total	\$135.7	\$239.9	\$419.5	\$675.9	\$540.2	398%
Total	\$518.1	\$837.3	\$1,429.9	\$2,291.3	\$1,773.2	342%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.32
Actual and Projected State Costs for In-Home and
Community-Based Services for Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Projected Use and Costs of Medicaid Waiver Services

Based on historical trends in Medicaid waiver expenditures for persons with developmental disabilities, it is estimated that total Medicaid waiver costs for persons with developmental disabilities will increase by 360 percent by 2030, from \$406.6 million in FY 2005 to \$1.87 billion in 2030 (Table 3.57). Projected costs are shown graphically in Figure 3.33. All of the variance factors listed in Table 3.58 contribute to the significant increase in projected costs in

waiver services by 2030, with the largest portion projected in inflationary per-unit costs. These increases are not surprising given the significant rate of increases noted historically in waiver spending (Table 3.52). Given the ever-increasing waiting list as well, these projections for waiver services appear reasonable.

Table 3.58
Actual and Projected State Costs for Medicaid Waiver Services for
Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
In-Home Medicaid Waiver Services	\$298.5	\$501.6	\$848.4	\$1,356.4	\$1,057.9	354%
Community-Based Medicaid Waiver Services	\$108.1	\$182.5	\$319.0	\$514.1	\$406.0	375%
Total	\$406.6	\$684.1	\$1,167.4	\$1,870.5	\$1,463.8	360%

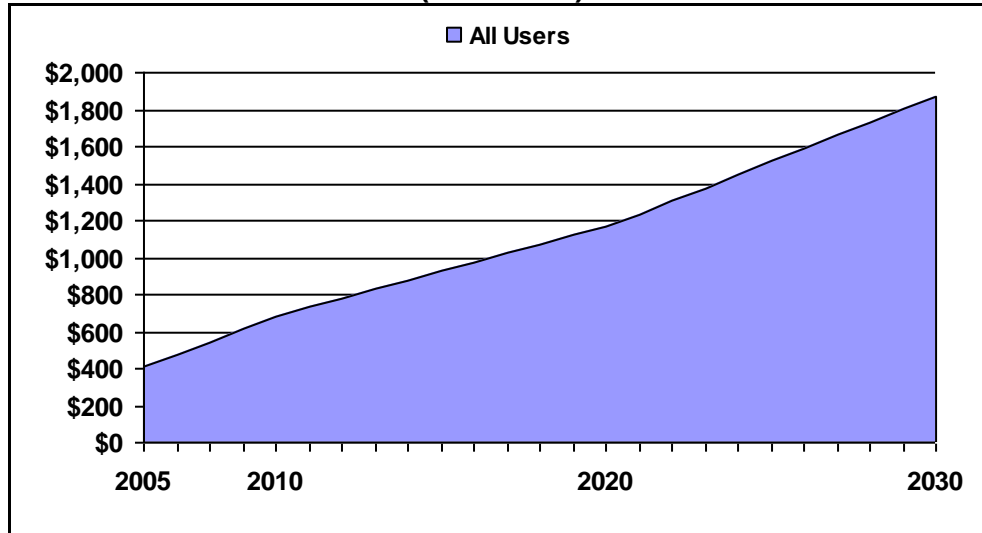
Source: Center for Health Program Development and Management, UMBC.

Table 3.59
Variance Analysis
Actual and Projected State Costs for Medicaid Waiver Services for
Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
In-Home Medicaid Waiver Services	\$298.5	\$135.5	\$288.9	\$191.3	\$442.1	\$1,356.4	354%
Community-Based Medicaid Waiver Services	\$108.1	\$50.6	\$103.9	\$86.9	\$164.7	\$514.1	375%
Total	\$406.6	\$186.1	\$392.7	\$278.2	\$606.8	\$1,870.5	360%

Source: Center for Health Program Development and Management, UMBC.

Figure 3.33
Actual and Projected State Costs for Medicaid Waiver Services for
Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)



Source: Center for Health Program Development and Management, UMBC.

Projected Total Costs for Developmental Disabilities Services

Taken all together, costs for developmental disabilities services are expected to increase 303 percent between 2005 and 2030, or from \$583 million in 2005 to \$2.3 billion, despite the expected 6 percent decline in ICF/MR costs by 2030 (Table 3.60).

Because state-only funds are held constant for in-home and community-based services, these state-funded-only services are not included in the variance analysis in Table 3.61. All of the variance is based on the growth in waiver services and the expected reduction in ICF/MR services.

Table 3.60
Actual and Projected Total State Costs for Services for
Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Dollar Change 2005-2030	Percent Change 2005-2030
		2010	2020	2030		
In-Home Services	\$382.4	\$597.4	\$1,010.4	\$1,615.4	\$1,233.0	322%
Community-Based Services	\$135.7	\$239.9	\$419.5	\$675.9	\$540.2	398%
ICF-MR	\$64.9	\$62.2	\$63.4	\$61.0	(\$3.9)	(6%)
Total	\$583.0	\$899.5	\$1,493.3	\$2,352.3	\$1,769.3	303%

Source: Center for Health Program Development and Management, UMBC.

Table 3.61
Variance Analysis
Actual and Projected Total State Costs for Services for
Persons with Developmental Disabilities:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
In-Home Services:							
Waiver Services	\$298.5	\$135.5	\$288.9	\$191.3	\$442.1	\$1,356.4	354%
Community-Based Services:							
Waiver Services	\$108.1	\$50.6	\$103.9	\$86.9	\$164.7	\$514.1	375%
Institutional Services:							
ICF/MR	\$64.9	\$10.4	(\$33.8)	(\$1.1)	\$20.5	\$61.0	(6%)
Total	\$471.5	\$196.5	\$358.9	\$277.1	\$627.4	\$1,931.5	310%

Source: Center for Health Program Development and Management, UMBC.

IV. ECONOMIC IMPACT TO THE STATE

Chapter III presents projections for the use and costs of state-funded long-term services and supports in Maryland in 2010, 2020, and 2030 for adults aged 65 and older and for persons with disabilities. Projections are given for each of five service categories: institutional, in-home, community, housing and residential, and mobility and transportation. In addition, projections are provided for mental health services for persons with serious and persistent mental illness and for services for persons with developmental disabilities. This chapter presents projections for total costs to the State of Maryland across all service categories and population groups presented in Chapter III. Total costs to the State are derived by aggregating projected costs presented in Chapter III.

Costs to the state for long-term services and supports is projected to increase more than threefold from 2005 to 2030, from \$1.99 billion to \$6.06 billion (Table 4.1). Many factors contribute to this projected tripling of costs. As the baby boom generation reaches age 65 and beyond, the sheer number of older adults will more than double, from 645,000 in 2005 to 1.3 million in 2030, while the number of persons aged 5-64 reporting disabilities is expected to reach an estimated 385,000 by 2030. The expected “compression of morbidity”²⁵² will result in a shift in the prevalence and severity of disability as people live longer. At the same time, with family caregiving and other informal care on the decline,²⁵³ the State will be hard-pressed to meet the ever-expanding need for long-term care. The preference of older adults and persons with disabilities to remain in the community, coupled with public policies that promote community-based living alternatives to institutional care, will place enormous pressure on the State’s systems for providing home- and community-based services. All of this translates into a far greater demand for long-term services and supports than ever before.

The largest percentage increase in costs to the State will be for in-home services and supports (exclusive of mental health services and services for persons with developmental disabilities), from \$94.5 million to \$416 million, a 340 percent increase. However, in-home services will represent just 7 percent of total long-term care costs in 2030 (Figure 4.1). The cost of community services will almost triple to \$600.6 million. Together, home and community services are expected to account for about 17 percent of total long-term care costs for the State in 2030.

Despite this significant increase in costs for home and community services, institutional services are expected to increase by 143 percent, from \$909.4 million in 2005 to \$2.2 billion, because of the expanding population of older adults. However, the proportion of total state costs devoted to institutional care will decrease, from 46 percent in 2005 to 36 percent in 2030, reflecting a projected reduction in the per person use of nursing home services and a preference for home- and community-based services.

²⁵² See “Disability-Related Factors Influencing Future Long-Term Care Use” in Chapter II of this report.

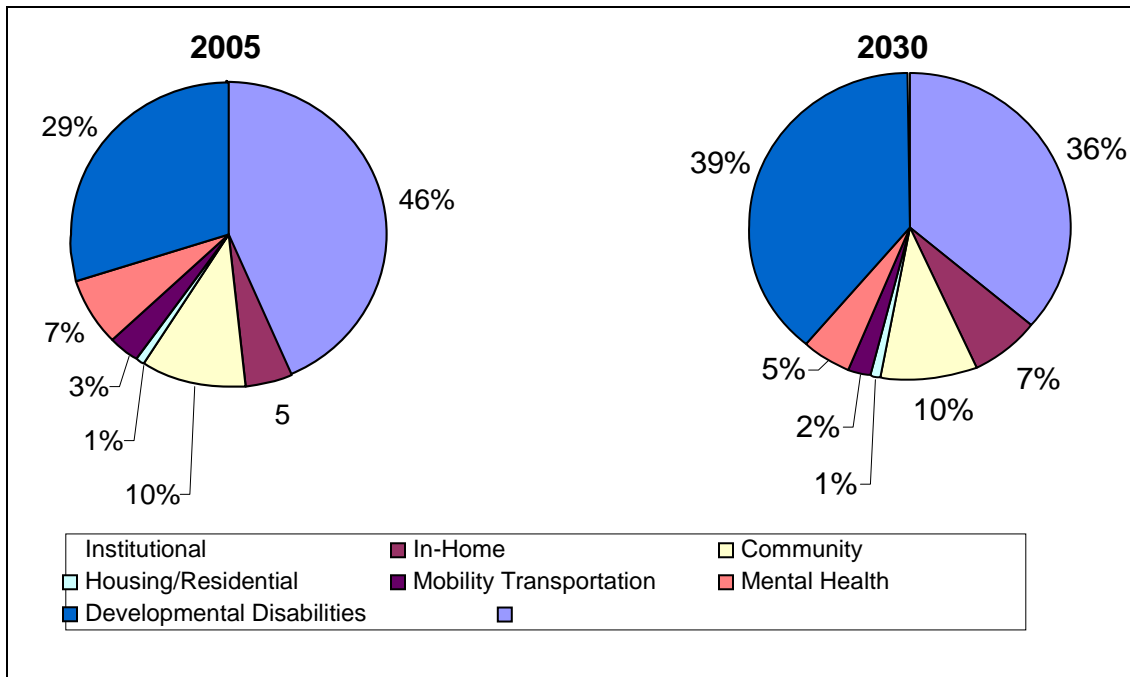
²⁵³ See “Family and Informal Sources of Care” in Chapter II of this report.

Table 4.1
Actual and Projected State Costs for Long-Term Services
and Supports by Category of Service:
Maryland, 2005 – 2030
(\$ Millions)

Service	Actual 2005	Projected			Percent Change 2005-2030
		2010	2020	2030	
Institutional	\$909.4	\$1,116.9	\$1,507.7	\$2,209.7	143%
In-Home	\$94.5	\$139.3	\$240.0	\$416.0	340%
Community	\$207.3	\$256.9	\$389.7	\$600.6	190%
Housing/Residential	\$7.9	\$10.2	\$18.1	\$32.2	309%
Mobility/Transportation	\$53.7	\$65.6	\$92.1	\$128.4	139%
Mental Health	\$132.6	\$159.1	\$228.8	\$324.9	145%
Developmental Disabilities	\$583.0	\$899.5	\$1,493.3	\$2,352.3	303%
Total	\$1,988.4	\$2,647.5	\$3,969.7	\$6,064.1	205%

Source: Center for Health Program Development and Management, UMBC.

Figure 4.1
Distribution of State Costs for Long-Term
Services and Supports by Category of Service:
Maryland, 2005 (Actual) and 2030 (Projected)



Source: Center for Health Program Development and Management, UMBC.

From 2005 to 2030, the cost of long-term services and supports for persons with developmental disabilities is expected to more than quadruple, from \$583.0 million to \$2.35 billion. By 2030, state costs for persons with developmental disabilities is expected to account for the largest share of total costs for long-term services and supports (39 percent), up from 29 percent in 2005.

State costs for long-term care for individuals with serious mental illness is expected to more than double by 2030, while declining from 7 percent of total state costs in 2005 to 5 percent in 2030. State costs for housing and residential services are projected to more than quadruple and mobility and transportation is projected to more than double by 2030.

In this analysis, the methodology used to project future costs to the State incorporates four factors: 1) growth in the population using the service, 2) the increase/decrease in the percentage of the population using the service, 3) the increase/decrease in the average number of units of service used by individuals accessing the service (e.g., number of hours, days), and 4) the change in the average cost of a unit of service.²⁵⁴ Whereas Table 4.1 shows projected total costs to the State for each service category, the variance analysis in Table 4.2 illustrates the extent to which each of these four factors contributes to the overall increase in costs. For example, the variance analysis shows that population growth alone (column 3 in Table 4.2) accounts for increased costs for institutional services of \$283.7 million and in-home services of \$42.3 million. For the seven service categories in total, population growth alone contributes an increase of \$669.7 million in total costs from 2005 to 2030. In column 5, which shows average number of units per user, the negative numbers for institutional services and community services indicate that costs attributable to units per user are \$83.4 million and \$15.7 million less than they would be at 2005 use rates, respectively. Units of institutional services used is expected to decline as more long-term care is delivered in home and community settings, even though the number of people using institutional services is expected to increase. Units of community services used is expected to decline somewhat because the rate of disability among persons aged 65 and over is projected to decrease slightly. For more discussion of the factors used to forecast costs in each of the various service categories, see the Overview to Chapter III and the Technical Notes in Appendix 3.

²⁵⁴ See the Technical Notes in Appendix 3 for a more detailed description of the methodology used in projecting future costs to the State.

Table 4.2
Variance Analysis by Category of Service for
Projected State Costs for Long-Term Services and Supports:
Maryland, 2005 – 2030
(\$ Millions)

1	2	Variance				7	8
		3	4	5	6		
Service	Actual 2005	Population Growth	Percent of Population Using Service	Average Number Units per User	Average Cost per Unit of Service	Projected 2030	Percent Change 2005-2030
Institutional	\$909.4	\$283.7	\$55.5	(\$83.4)	\$1,044.6	\$2,209.7	143%
In-Home	\$94.5	\$42.3	\$116.9	\$16.8	\$145.5	\$416.0	340%
Community	\$207.3	\$85.7	\$53.4	(\$15.7)	\$270.0	\$600.6	190%
Housing/Residential	\$7.9	\$3.4	\$8.2	(\$0.0)	\$12.7	\$32.2	309%
Mobility/Transportation	\$53.7	\$16.7	(\$2.8)	(\$3.5)	\$64.3	\$128.4	139%
Mental Health	\$132.6	\$41.4	\$4.0	\$1.2	\$145.7	\$324.9	145%
Developmental Disabilities*	\$583.0	\$196.5	\$358.9	\$277.1	\$627.4	\$2,352.3	303%
Total	\$1,988.4	\$669.7	\$594.1	\$192.5	\$2,310.2	\$6,064.1	205%

*Note: the Developmental Disabilities variance includes waiver and ICF/MR variance data only.
Source: Center for Health Program Development and Management, UMBC.

Under the assumptions stated here, State costs for long-term services and supports will increase by \$4.07 billion, from \$1.98 billion in 2005 to \$6.06 billion in 2030. Inflationary price increases in the average cost per unit of service (column 6) is expected to account for \$2.3 billion of this increase in total costs. Population growth (column 3) will account for \$669.7 million of the \$4.07 billion increase, and \$594.1 million can be attributed to the net increase in the percentage of the population using services (column 4). Even though the average number of service units used by individuals will decrease in some categories (i.e., institutional, community, and mobility/transportation), there will be a net increase of \$192.5 million attributable to units of service used (column 5).

Little, if anything, can be done to diminish inflationary pressure on the cost of services. Nor can growth in the population aged 65 and over be slowed. Hence, slowing spending growth must necessarily target the other two dimensions of the variance analysis: the percentage of the population using services and units of services used. For example, improving efficiency through better utilization management is one possibility, as well as substituting less expensive services for more expensive ones. Delivering services at less cost is another option (e.g., using caregivers who are friends or family to eliminate agency overhead and profit). Promoting and facilitating widespread use of universal design and assistive technologies can also contribute to reducing the need for more expensive, labor-intensive services.

The analysis presented in this report, based on trends in historical utilization and costs multiplied by disability and non-disability factors expected to influence future long-term care use,²⁵⁵ does not attempt to model how increased or decreased use of services in one category might affect service use in another category. For example, people prefer to receive long-term

²⁵⁵ See Technical Notes in Appendix 3.

care in their own home,²⁵⁶ and policies and programs that seek to limit nursing home stays and encourage individuals to move to community-based settings as quickly as possible are likely to reduce nursing home expenditures and increase the utilization and costs of home- and community-based services. Similarly, improved management of mental health conditions in the community setting may reduce the use of inpatient mental health facilities. Investment in new, expanded public transportation systems may eliminate the need for some older adults and persons with disabilities to be institutionalized, as new bus routes and ride services would provide greater access to community-based services such as adult day care. New affordable housing with on-site services may also diminish the need for institutional care. If more individuals had access to long-term care insurance, use of publicly-funded services is likely to decline.

Inflationary pressure on the cost of services will impact both publicly and privately provided long-term services and supports. The provision of long-term care is a labor-intensive industry, so much of the inflationary pressure will be driven by wages and the cost of hiring and training the long-term care workforce. Projected shortages of long-term care workers, especially paraprofessionals, will place upward pressure on wages.²⁵⁷

As the cost of long-term care outpaces growth in wages, assets, savings, and pensions,²⁵⁸ the number of people “at the margin” who do not qualify for publicly supported services but cannot afford the cost of long-term care themselves is likely to increase significantly. Many people “at the margin” will no longer be able to rely on family members and informal networks of caregivers due to changes in family arrangements and increasing employment among women.²⁵⁹ However, the overwhelming evidence suggests that a large percentage of those who will need long-term care through 2030 will have limited resources to pay for such care for more than a brief period. Many persons who require long-term care will be income and asset eligible for public services at the time they meet health and disability requirements for such support, while others will probably quickly spend down to eligibility. Even with current state efforts to realign and rebalance incentives for individuals to better plan for their future long-term care needs, state expenditures for long-term care are expected to grow more than threefold to \$6.06 billion by 2030.

Because eligibility for public programs in Maryland varies considerably from agency to agency and from program to program,²⁶⁰ quantifying how many people will be “at the margin” in 2010, 2020, and 2030 is not a straightforward calculation. Uniform eligibility processes across state and local programs could help to establish parity and perhaps free up resources to provide

²⁵⁶ See “Long-Term Care Preferences” in Chapter II of this report.

²⁵⁷ See “Workforce Issues” in Chapter II of this report.

²⁵⁸ See “Affordability of Long-Term Care Services and Supports” in Chapter II of this report.

²⁵⁹ See “Family and Informal Sources of Care” in Chapter II of this report.

²⁶⁰ For example, state-funded personal care is provided through four programs: the Medical Assistance Personal Care Program (MAPC) for people with chronic disabilities, the Attendant Care Program (ACP) for adults with chronic or severe physical disabilities, the Living at Home Waiver for non-elderly adults, and the Older Adults Waiver for adults over age 50. Each program has different level-of-care and income requirements for eligibility. Source: Moore, T., et al. (2006, March 24). *Maryland Personal Assistance Services Study: Final Report*. Cambridge, MA: Abt Associates, Inc.

some benefits to those “at the margin” while continuing to provide more comprehensive benefit coverage to the most needy. In addition, it is not too late to develop strategies such as public health measures that will reduce the need for long-term care or to establish programs that encourage savings and enhance personal responsibility for planning for and managing future long-term care risk. In the coming decades, the number of those “at the margin” is likely to be significant, so it is important to begin addressing how these individuals can be given access to care in the future, either through the private market, public/private partnerships, or public programs.

Engagement of the private sector will be crucial to ensuring that needed long-term care services and supports are available to individuals “at the margin.” For example, tax incentives might encourage private developers to construct affordable housing or technology companies to create and manufacture new assistive technologies. Cooperation among insurers, regulators, and employers may help make long-term care insurance more affordable. The Maryland Insurance Administration and Medicaid are poised to bring a product into the market that will provide a reason and an incentive for consumers to purchase long-term care insurance. Health plans and employers might take a more proactive role in educating Marylanders about long-term care planning, including the importance of purchasing long-term care insurance. Addressing the shortage of long-term care workers in the state would be an incentive for more providers to step forward to help address Marylanders’ long-term care needs. Foundations and the faith-based community could be tapped to build a new corps of volunteer caregivers. Organizations modeled after the Maryland Community Health Resources Commission could award start-up funds for new programs operated by nonprofit agencies and local jurisdictions.

In order for publicly funded long-term care services and supports to keep up with rapidly growing demand, a concomitant investment in program infrastructure will be needed. New, more efficient ways to deliver high quality long-term care must be conceived and developed. Creative and energetic managers and evaluators will be needed to implement the new programs and measure effectiveness. To train the future workforce, appropriate educational programs will be needed in high schools, colleges, universities, and private agencies. New workers will need to be licensed by the State. New technologies and facilities will be required, both for delivering services and for program administration. Regulatory oversight will continue to be necessary for all programs and services.

In summary, the State’s existing system for the provision of long-term services and supports is likely to be overwhelmed by the aging baby boomers and anticipated trends in the prevalence and intensity of disability. Continued incremental growth in programs and services will not suffice to meet the State’s needs in 2010, 2020, and 2030. Early and continued planning, technological innovation, identifying and training a new cadre of long-term care workers, and promoting more effective and efficient service delivery statewide is needed to meet current and projected needs.

V. LONG-TERM SERVICES AND SUPPORTS IN MARYLAND'S JURISDICTIONS

While all areas of the state will experience an increase in the number and proportion of the population aged 65 and over in the future, some regions and counties will be affected to a greater extent than others. This chapter examines projected population growth by jurisdiction, the strength of local economies and their potential ability to care for an aging population and persons with disabilities, the existing service infrastructure and the adequacy of current services, and gaps in services reported by local jurisdictions.

As the following analysis will show, the Southern Maryland Region, the Upper Eastern Shore Region, and Howard County (in Central Maryland) are expected to experience the largest percentage increases in the population aged 65 and over from 2000 to 2030. Just over 40 percent of the additional 713,723 elderly people projected to reside in Maryland in 2030 will be in the Suburban Washington Region (Frederick, Montgomery, and Prince George's Counties). Garrett County and the Lower Eastern Shore Region will have the lowest proportion of working-age adults in relation to their aging population. A number of aging Marylanders will probably continue to move out-of-state or to other regions of the state, but many are still expected to age in place and many of the very old may return home to Maryland after spending their younger retirement years elsewhere. Significant growth is expected in the number of individuals in the state with physical, self-care, and go-outside-the-home disabilities (these disability types will be defined below). Using Medicaid and SSI eligibility as indicators of poverty, the fastest growing elderly population that is poor has been in the Suburban Washington Region, particularly Montgomery County. There is great disparity in local capacity, programming, and spending for long-term services and supports for older adults and persons with disabilities across the regions and counties of the state.

With a continuing focus on transitioning to community-based long-term care in the state, more affordable housing will be needed in communities across the state, as will more nursing home beds, assisted living facilities, and continuing care retirement communities (CCRCs). The current availability of affordable housing in jurisdictions across the state has reached crisis levels, not boding well for the future. Most of the state's CCRCs and nursing home and assisted living beds are located in the more populous areas; as a result, rural areas of the state are likely to experience a shortage of these facilities in coming years. Jurisdictions report inadequate transportation programs for older adults and individuals with disabilities, which will be needed if the state is to achieve its goal to rebalance institutional and community-based care. Again and again, jurisdictions cite shortages in long-term care workers and the need for better recruitment and training, as well as more attractive pay scales and benefits.

Trends in Population Growth

Population Projections: Age 65 and Over

Statewide, the Maryland population aged 65 and over is expected to more than double, from just under 600,000 in 2000 to 1.3 million in 2030 (Table 5.1). However, some regions of

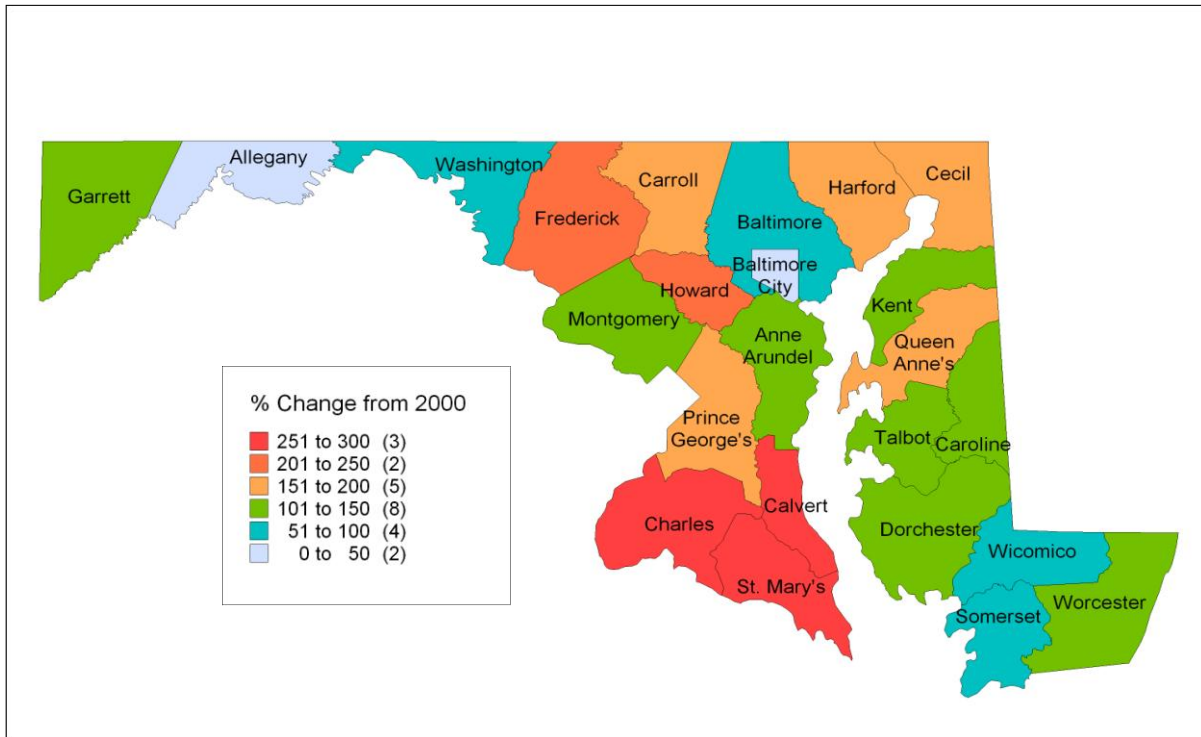
the state are expected to experience greater population growth than others by 2030. As shown in Figure 5.1, the Southern Maryland Region (Calvert, Charles, and St. Mary's Counties) is expected to experience the highest percentage increase, with the population aged 65 and over increasing by more than two-and-a-half times. Howard County and Frederick County are not far behind, with the same population more than doubling. The age 65 and older population in the Suburban Washington Region (Frederick, Montgomery, and Prince George's Counties) and the Upper Eastern Shore Region (Caroline, Cecil, Kent, Queen Anne's, and Talbot Counties) is expected to grow at a pace significantly above the state average. At the other end of the spectrum are Baltimore City and Allegany County, where the age 65 and over population is only expected to grow by about 25 percent by 2030.

**Table 5.1
Actual and Projected Population Aged 65 and Over by Jurisdiction and Region:
Maryland, 2000 – 2030**

	Actual 2000	Actual 2005	Projected 2010	Percent Change from 2000	Projected 2020	Percent Change from 2000	Projected 2030	Percent Change from 2000
State of Maryland	599,307	644,865	729,051	22%	1,003,447	67%	1,313,875	119%
Baltimore Region	301,971	313,744	345,457	14%	451,154	49%	563,648	87%
Anne Arundel County	48,820	54,337	63,398	30%	86,148	76%	109,625	125%
Baltimore County	110,335	111,070	117,580	7%	148,469	35%	180,204	63%
Carroll County	16,267	18,267	21,735	34%	31,768	95%	44,650	174%
Harford County	22,160	25,388	30,341	37%	43,230	95%	58,263	163%
Howard County	18,468	22,656	30,061	63%	46,600	152%	62,518	239%
Baltimore City	85,921	82,026	82,342	-4%	94,939	10%	108,388	26%
Suburban Washington Region	178,944	202,244	236,440	32%	346,400	94%	468,581	162%
Frederick County	18,836	21,053	25,232	34%	39,611	110%	58,886	213%
Montgomery County	98,157	108,432	125,150	27%	180,293	84%	235,556	140%
Prince George's County	61,951	72,759	86,058	39%	126,496	104%	174,139	181%
Southern Maryland Region	23,854	28,597	35,731	50%	56,176	135%	87,185	265%
Calvert County	6,627	7,907	9,769	47%	15,160	129%	23,349	252%
Charles County	9,402	11,232	13,948	48%	21,543	129%	33,411	255%
St. Mary's County	7,825	9,458	12,014	54%	19,473	149%	30,425	289%
Western Maryland Region	36,580	37,824	40,355	10%	50,507	38%	62,702	71%
Allegany County	13,429	13,171	13,297	-1%	14,947	11%	16,642	24%
Garrett County	4,461	4,836	5,541	24%	7,392	66%	9,423	111%
Washington County	18,690	19,817	21,517	15%	28,168	51%	36,637	96%
Upper Eastern Shore Region	28,858	31,319	36,339	26%	51,994	80%	71,213	147%
Caroline County	4,031	4,207	4,693	16%	6,798	69%	9,740	142%
Cecil County	8,995	10,043	11,862	32%	17,641	96%	24,606	174%
Kent County	3,708	3,874	4,452	20%	6,057	63%	8,051	117%
Queen Anne's County	5,227	5,885	7,024	34%	10,199	95%	14,603	179%
Talbot County	6,897	7,310	8,308	20%	11,299	64%	14,213	106%
Lower Eastern Shore	29,100	31,137	34,729	19%	47,216	62%	60,546	108%
Dorchester County	5,423	5,589	6,230	15%	8,499	57%	11,179	106%
Somerset County	3,503	3,622	3,865	10%	5,304	51%	6,619	89%
Wicomico County	10,823	11,276	12,354	14%	16,587	53%	21,065	95%
Worcester County	9,351	10,650	12,280	31%	16,826	80%	21,683	132%

Source: Maryland Department of Planning. (October 2006). Total population projections by age, sex, and race, 2006. Data obtained upon request.

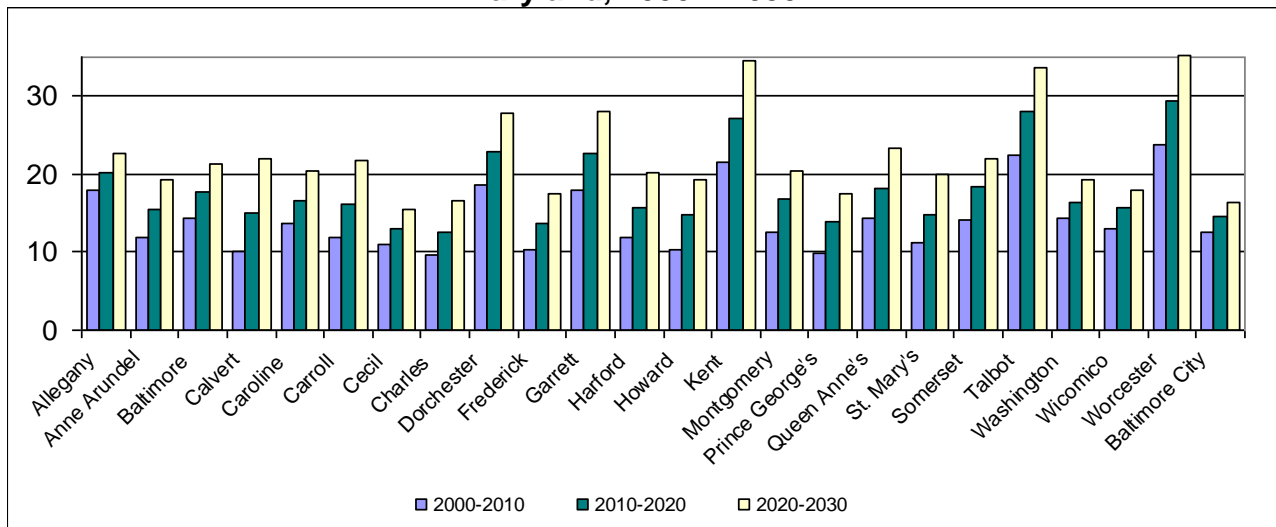
Figure 5.1
Projected Growth in the Population Aged 65 and Over by Jurisdiction:
Maryland, 2000 – 2030



Source: Maryland Department of Planning. (October 2006). Total population projections by age, sex, and race, 2006. Data obtained upon request.

Across the state, every jurisdiction will witness a steady increase in the proportion of the population that is age 65 and over (Figure 5.2). Kent, Talbot, and Worcester Counties on the Eastern Shore will see their older population increase dramatically to about one-third of all residents.

Figure 5.2
Population Aged 65 and Over as a Percentage of
Total Population by Jurisdiction:
Maryland, 2000 – 2030



Source: Maryland Department of Planning. (October 2006). Total population projections by age, sex, and race, 2006. Data obtained upon request.

Older Adult Age-Based Dependency Ratios

Older adult age-based dependency ratios demonstrate the age structure of a population by comparing the number of people 65 years of age and older (dependent class) to the number of working-aged adults (those who are 15 to 64 years old). This is a useful economic tool for 1) assessing the extent to which an economy’s working-aged adults will be “supporting” older adults in retirement, and 2) comparing relative dependency across Maryland’s jurisdictions because the size and age distribution of jurisdictional populations can vary considerably from one jurisdiction to the next.²⁶¹ This is a demographic tool and does not assume or imply that all persons over the age of 65 are “dependent.”

The age-based dependency ratio is computed by dividing the number of people in the dependent class by the number of people in the working-age group, and then multiplying the quotient by 100 to arrive at a ratio of the dependent class per 100 working-age people. A ratio of less than 100 indicates that there are more adults of working age than there are “dependent” adults. A ratio greater than 100 means that there are more “dependent” adults than there are adults of working age.

Table 5.2 shows projected age-based dependency ratios for the population aged 65 and older by county in 2010, 2020, and 2030. By 2030, Garrett County in Western Maryland and Dorchester, Kent, Talbot, and Worcester Counties on the Eastern Shore are projected to have

²⁶¹ The use of the term “dependency” does not imply dependence in activities of daily living, nor does it imply that all persons aged 65 and older are dependent.

ratios of 50 or above, meaning that there will be no more than two working-age adults for every “dependent” adult over age 65 in these counties (Figure 5.3). Those jurisdictions with the highest growth in the age 65 and over population (Calvert, Charles, St. Mary’s, and Howard Counties—see Table 5.1) will experience the largest shift in their age-based dependency ratios.

Table 5.2
Older Adult Age-Based Dependency Ratios* by Jurisdiction
Population Aged 65 and Over
Maryland, 2000 – 2030

	Actual 2000	Projected 2010	Change 2000-2010	Projected 2020	Change 2010-2020	Projected 2030	Change 2020-2030	Change 2000-2030
Maryland	17	18	1.08	24	1.34	32	1.30	1.89
Baltimore Region	18	19	1.03	24	1.31	31	1.29	1.74
Anne Arundel County	14	17	1.20	24	1.36	31	1.30	2.13
Baltimore County	22	21	0.95	27	1.30	35	1.27	1.57
Carroll County	16	18	1.09	24	1.37	33	1.36	2.03
Harford County	15	18	1.17	25	1.39	35	1.40	2.27
Howard County	11	15	1.38	22	1.50	32	1.42	2.95
Baltimore City	20	19	0.93	22	1.18	25	1.16	1.27
Suburban Washington Region	14	16	1.17	23	1.43	31	1.32	2.21
Frederick County	14	15	1.06	21	1.39	28	1.34	1.98
Montgomery County	17	19	1.12	26	1.40	34	1.31	2.05
Prince George's County	11	14	1.28	21	1.48	28	1.34	2.54
Southern Maryland Region	13	15	1.19	21	1.41	31	1.48	2.50
Calvert County	13	15	1.12	23	1.56	38	1.63	2.84
Charles County	11	14	1.22	18	1.32	27	1.44	2.32
St. Mary's County	13	16	1.22	23	1.42	34	1.44	2.50
Western Maryland Region	23	24	1.00	28	1.19	34	1.21	1.44
Allegany County	27	27	0.98	31	1.15	36	1.16	1.30
Garrett County	23	28	1.21	38	1.35	51	1.34	2.19
Washington County	21	21	0.99	25	1.18	30	1.22	1.42
Upper Eastern Shore Region	21	22	1.03	28	1.28	35	1.26	1.67
Caroline County	21	21	0.99	26	1.26	34	1.28	1.60
Cecil County	16	16	1.01	20	1.25	24	1.20	1.53
Kent County	30	33	1.09	46	1.38	64	1.40	2.11
Queen Anne's County	20	22	1.10	29	1.35	41	1.40	2.08
Talbot County	33	36	1.10	50	1.37	65	1.32	1.98
Lower Eastern Shore Region	24	25	1.06	33	1.29	41	1.24	1.71
Dorchester County	28	29	1.04	38	1.32	50	1.31	1.81
Somerset County	20	20	0.97	26	1.35	33	1.25	1.64
Wicomico County	19	19	1.00	24	1.25	28	1.18	1.46
Worcester County	32	38	1.20	51	1.34	68	1.33	2.13

* A dependency ratio is defined by the Population Reference Bureau as the ratio of persons in the ages defined as dependent to persons in the ages defined as economically productive in a population. Where more detailed data are lacking, the age-dependency ratio is often used as an indicator of the economic load the productive portion of a population must carry - even though some persons defined as "dependent" are producers and some persons in the "productive" ages are economically dependent. Dependency Ratios are calculated using different methodologies (i.e. youth dependency ratios, old-age dependency ratios, total dependency ratios). The methodology used in this report is the "Old-Age Dependency Ratio" as prescribed on the "Atlas of Canada" Natural Resources - Canada website. The "Old-Age Dependency Ratio" is generally calculated using age 65 and older as the dependent age group; however, use of older age groups is common. The formula for the "Old-Age Dependency Ratio" is:

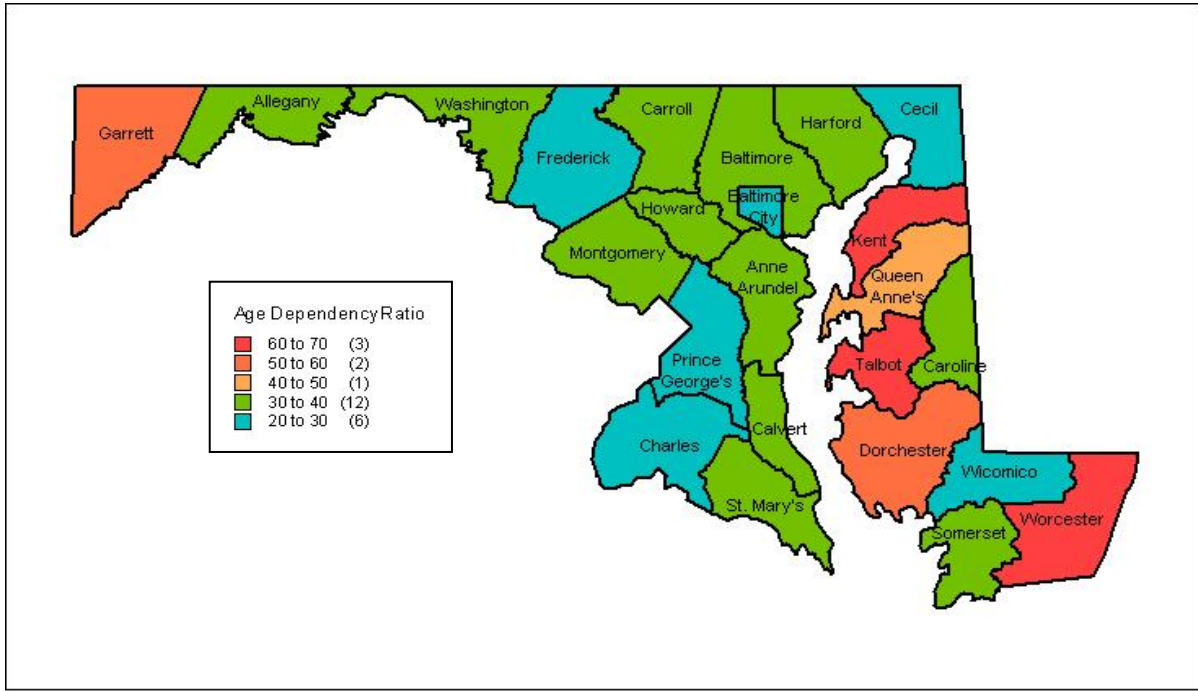
$$\text{Old-Age Dependency Ratio} = (P_{65+}/P_{15-64}) \times 100 \text{ where } P_{65+} = (\text{population age 65 years and older}) \text{ and } P_{15-64} = (\text{population age 15-64})$$

Changes in the Old-Age Dependency Ratio contained in this report were also calculated using the methodology prescribed in the Atlas of Canada. To obtain the change in ratios over time, the ratio for the most recent observation period was divided by the ratio for the least recent observation period (i.e. change in the old-age ratios of 16.9 in 2000 and 18.3 in 2010 is 1.08). A resulting value of 1.0 indicates no change in the old-age dependent ratio while a value greater than 1.0 indicates an increase in the proportion of older adults who are dependent on the working age population. A value of less than 1.0 indicates a decrease in the proportion of older adults who are dependent on the working age population.

Sources:

Dependency ratios calculated by the Center for Health Program Development and Management, UMBC.
 Methodology: Haupt, A., T.K. Kane. (2000). *Population Reference Bureau's population handbook: 4th international edition*. Washington, DC: Population Reference Bureau. <http://www.prb.org/>. The Atlas of Canada. (2007). <http://atlas.nrcan.gc.ca/site/english/maps/health/ruralhealth/agingpop/dependencyratios19912000/1>.
 Data: Maryland Department of Planning. (October 2006). Total population projections by age, sex, and race, 2006.

Figure 5.3
Older Adult Age-Based Dependency Ratios by Jurisdiction
Population Aged 65 and Over:
Maryland, 2030



Source: Center for Health Program Development and Management, UMBC. Data: Maryland Department of Planning. (October 2006). Total population projections by age, sex, and race, 2006.

Migration Into and Out of Maryland

A 2006 report examined the migration patterns of the elderly population in Maryland over the five-year period of 1995 to 2000.²⁶² The report found that the Eastern Shore experienced the most significant additions to its elderly population through migration, particularly for the “young old” (55 to 75 years). These net gains in migration came from outside Maryland as well as from other regions of the state. The largest net outflows in Maryland were from Baltimore City and Montgomery, Prince George’s, Anne Arundel, and Baltimore Counties. However, most of the elderly in these jurisdictions are expected to age in place (Table 5.3).

The report also found that for the age 75 and older population, Maryland has one of the highest net in-migration rates in the country, even though the rate is relatively modest. Many former residents move back to Maryland in their later years. Others with no former ties to the state choose to move to Maryland for health-related reasons or to be near adult children. Despite in-migration, the largest impact to the state is expected to be from elderly individuals aging in place, which has implications for health care services, housing, and future labor shortages resulting from the retirement of the older population.

²⁶² Task Force to Study Elderly and Retiree Migration Into and Out of Maryland. (2006). *The dynamics of elderly and retiree migration into and out of Maryland: A report to Governor Robert L. Ehrlich, Jr., and the Maryland General Assembly*. Baltimore, MD: Task Force to Study Elderly and Retiree Migration Into and Out of Maryland.

Table 5.3
Net Domestic Migration* by Age Group and Jurisdiction:
Maryland, 1995 – 2000

	Age 55-64	Age 65-74	Age 75-84	Age 85 & Over
Maryland	(18,363)	(9,306)	1,191	1,584
Baltimore Region	(8,554)	(3,971)	(20)	74
Anne Arundel County	(1,229)	(468)	371	84
Baltimore County	(180)	(628)	1,699	825
Carroll County	(338)	450	392	236
Harford County	(9)	64	516	282
Howard County	(1,004)	26	534	478
Baltimore City	(5,794)	(3,415)	(3,532)	(1,831)
Suburban Washington Region	(10,502)	(5,517)	985	1,424
Frederick County	38	279	609	209
Montgomery County	(6,061)	(3,141)	142	808
Prince George's County	(4,985)	(3,112)	(457)	230
Southern Maryland Region	506	457	691	177
Calvert County	349	173	259	21
Charles County	(257)	69	322	150
St. Mary's County	414	215	110	6
Western Maryland Region	61	(43)	250	220
Allegany County	94	(34)	7	74
Garrett County	170	41	75	90
Washington County	(203)	(50)	168	56
Upper Eastern Shore Region	1,421	903	242	(119)
Caroline County	149	69	20	(2)
Cecil County	70	289	203	23
Kent County	140	19	64	(35)
Queen Anne's County	462	255	(13)	(29)
Talbot County	600	271	(32)	(76)
Lower Eastern Shore Region	1,859	750	119	315
Dorchester County	101	(26)	(60)	(7)
Somerset County	212	(50)	(50)	26
Wicomico County	24	273	76	173
Worcester County	1,522	553	153	123

* "Net domestic migration" includes intrastate and interstate in-migration to Maryland jurisdictions, as well as intrastate and interstate out-migration from Maryland jurisdictions.

Source: Task Force to Study Elderly and Retiree Migration Into and Out of Maryland. (2006). *The dynamics of elderly and retiree migration into and out of Maryland: A report to Governor Robert L. Ehrlich, Jr., and the Maryland General Assembly*. Baltimore, MD: Task Force to Study Elderly and Retiree Migration Into and Out of Maryland.

Population Projections: Persons with Disabilities

According to the 2000 Census, 17.6 percent of all non-institutionalized Maryland residents reported having at least one disability. Almost 40 percent of non-institutionalized Maryland residents aged 65 and older reported having one or more of the six disability types described in the U.S. Census: sensory, physical, mental, self-care, go-outside-the-home, and employment. In this study, the physical, self-care, and go-outside-the-home disability types were thought to be most representative of ADLs and IADLs and therefore the need for long-term services and supports. Accordingly, these three disability types were used to estimate the number of Maryland residents with disabilities in 2010, 2020, and 2030.²⁶³ Table 5.4 displays actual and projected disability counts by jurisdiction. These projections assume that the percentage of the population with a physical, self-care, or go-outside-the-home disability will remain constant at the 2000 level in 2010, 2020, and 2030. This percentage is applied to population projections made by the Maryland Department of Planning. Hence, these are conservative estimates, given that the incidence of disability may rise as the population ages.

As shown in Table 5.4, 11 percent of all non-institutionalized Maryland residents aged 5 and older reported having at least one of the three disability types in 2000. The number of persons with at least one of the disabilities is expected to increase by 53 percent from 534,191 in 2000 to 818,439 in 2030. The percentage of individuals aged 5-64 with at least one of the three disability types is projected to increase by only 15 percent by 2030, whereas the percentage of individuals aged 65 and over with a disability is expected to grow by 118 percent. This differential in the percentage increase in disability within the older and younger populations is even more pronounced in many jurisdictions. For example, the percentage increase in the population aged 65 and over with a disability is expected to be 273 percent in Calvert and St. Mary's Counties, 257 percent in Charles County, and 238 percent in Howard County.

There are no reliable estimates for the percentage of the population in local jurisdictions with a developmental disability. However, jurisdictions could reasonably apply the estimate used by the Maryland Developmental Disabilities Council to local population figures. The Council estimates that about 1.8 percent of Maryland's population has a developmental disability. See the section on *Services and Supports for Persons with Developmental Disabilities* in Chapter III for more information. Similarly, estimates of prevalence of persons with a serious mental illness could be made for individual jurisdictions using the methodology in Chapter III in the section entitled *Mental Health Services*.

²⁶³ See the Technical Notes in Appendix 3 for more detail on the methodology used to calculate disability counts.

**Table 5.4
Actual and Projected Non-Institutionalized Residents with a
Physical, Self-Care, or Going-Outside-the-Home Disability:
Maryland, 2000 – 2030***

Age Group	2000 Non-Institutional Population	2000 Disability Counts (Actual)	Percent with a Physical, Self-Care or Going-Outside Disability, 2000	2010 Disability Counts (Projected)	2020 Disability Counts (Projected)	2030 Disability Counts (Projected)	Percent Change 2000-2030
Maryland							
5-64	4,241,924	335,543	7.91%	369,928	379,510	385,073	15%
65+	567,652	198,648	34.99%	239,833	331,890	433,366	118%
Total 5 and Older	4,809,576	534,191	11.11%	609,761	711,399	818,439	53%
Allegany and Garrett Counties							
5-64	75,832	7,015	9.25%	6,878	6,685	6,345	(9%)
65+	16,613	5,885	35.42%	6,139	7,321	8,543	45%
Total 5 and Older	92,445	12,900	13.95%	13,017	14,006	14,887	15%
Anne Arundel County							
5-64	393,840	25,379	6.44%	27,103	26,889	26,456	4%
65+	46,792	15,104	32.28%	19,509	26,592	33,714	23%
Total 5 and Older	440,632	40,483	9.19%	46,612	53,482	60,171	49%
Baltimore City							
5-64	502,014	70,271	14.00%	70,299	69,466	67,759	(3%)
65+	81,794	38,115	46.60%	36,259	41,971	47,954	26%
Total 5 and Older	583,808	108,386	18.57%	106,558	111,437	115,713	7%
Baltimore County							
5-64	586,298	44,006	7.51%	47,925	46,966	45,311	3%
65+	105,175	35,202	33.47%	36,951	46,991	56,943	62%
Total 5 and Older	691,473	79,208	11.45%	84,876	93,957	102,253	29%
Calvert and St. Mary's Counties							
5-64	132,717	9,741	7.34%	12,067	13,050	13,515	39%
65+	13,401	4,591	34.26%	6,894	11,040	17,114	273%
Total 5 and Older	146,118	14,332	9.81%	18,961	11,382	17,468	22%
Caroline, Dorchester, Queen Anne's, and Talbot Counties							
5-64	104,253	8,663	8.31%	9,714	10,447	10,802	25%
65+	20,491	7,067	34.49%	8,583	12,106	16,349	131%
Total 5 and Older	124,744	15,730	12.61%	18,297	22,554	27,151	73%
Carroll County							
5-64	122,000	6,878	5.64%	8,248	8,823	9,247	34%
65+	15,210	5,109	33.59%	6,818	10,067	14,117	176%
Total 5 and Older	137,210	11,987	8.74%	15,066	18,890	23,364	95%

Table 5.4 (Continued)

Age Group	2000 Non-Institutional Population	2000 Disability Counts (Actual)	Percent with a Physical, Self-Care or Going-Outside Disability, 2000	2010 Disability Counts (Projected)	2020 Disability Counts (Projected)	2030 Disability Counts (Projected)	Percent Change 2000-2030
Cecil and Kent Counties							
5-64	83,893	7,071	8.43%	8,682	10,188	11,577	64%
65+	11,851	3,656	30.85%	4,665	6,825	9,388	157%
Total 5 and Older	95,744	10,727	11.20%	13,347	17,013	20,965	95%
Charles County							
5-64	101,660	7,487	7.36%	8,999	10,437	11,460	53%
65+	8,920	3,383	37.93%	5,024	7,781	12,068	257%
Total 5 and Older	110,580	10,870	9.83%	14,023	8,038	23,528	116%
Frederick County							
5-64	159,187	8,767	5.51%	10,871	12,311	13,935	59%
65+	17,403	5,355	30.77%	7,130	11,329	16,815	214%
Total 5 and Older	176,590	14,122	8.00%	18,001	23,640	30,749	118%
Harford County							
5-64	179,754	10,171	5.66%	11,741	12,106	11,673	15%
65+	21,513	7,471	34.73%	10,174	14,532	19,569	162%
Total 5 and Older	201,267	17,642	8.77%	21,915	26,637	31,242	77%
Howard County							
5-64	208,847	9,195	4.40%	10,654	10,832	10,437	13%
65+	17,166	5,577	32.49%	9,101	14,164	18,869	238%
Total 5 and Older	226,013	14,772	6.54%	19,755	24,996	29,306	98%
Montgomery County							
5-64	711,294	40,680	5.72%	45,617	46,848	47,609	17%
65+	92,503	26,194	28.32%	33,140	48,164	62,670	139%
Total 5 and Older	803,797	66,874	8.32%	78,757	95,012	110,279	65%
Prince Georges County							
5-64	667,253	61,367	9.20%	64,794	64,584	67,034	9%
65+	59,069	21,456	36.32%	29,698	43,657	59,719	178%
Total 5 and Older	726,322	82,823	11.40%	94,492	108,241	126,753	53%
Somerset, Wicomico and Worcester Counties							
5-64	115,971	10,155	8.76%	11,103	11,793	12,208	20%
65+	22,453	8,139	36.25%	9,751	13,301	16,942	108%
Total 5 and Older	138,424	18,294	13.22%	20,853	25,094	29,150	59%
Washington County							
5-64	97,111	8,697	8.96%	10,062	11,107	11,908	37%
65+	17,298	6,344	36.67%	7,162	9,432	12,315	94%
Total 5 and Older	114,409	15,041	13.15%	17,224	20,539	24,223	61%

* The data do not allow calculation of disability counts for the same geographic regions used elsewhere in this report.

Sources: Maryland Department of Planning. (October 2006). Total household population projections by age, sex, and race, 2006. 2000 U.S. Census. (2000). PUMS five percent data file. http://ftp2.census.gov/census_2000/datasets/PUMS/FivePercent/Maryland.

Strength of Local Economies

The strength of regional and local economies will be an important factor in the extent to which local jurisdictions can accommodate the needs of persons with disabilities and an increasingly older population. Areas with strong economic growth, a skilled work force, a stable tax base, and a lower older adult age-based dependency ratio are more likely to be able to support both public and private sector growth in long-term services and supports. For example, Howard County will experience the greatest increase in its older adult age-based dependency ratio from 2000 to 2030 (Table 5.2); however, with the highest median household income (\$93,050) and the lowest unemployment rate (3.2 percent) in the state (Table 5.5), this county is positioned better than most to support the number of older adults who will require long-term care in the future. On the other extreme, by 2030, the age 65 and over population in Garrett County in Western Maryland will more than double and the older adult age-based dependency ratio will reach 51, yet the county's unemployment rate (4.8 percent) is one of the highest in the state and the median household income is one of the lowest (\$40,850). While more services will be required for the increasing elderly population, the county's economy could likely benefit if additional services create new jobs.

Table 5.5
Median Household Income and Unemployment by Jurisdiction:
Maryland, 2006-2007

	Median Household Income Est. 2006 (\$)	Unemployment Rate July 2007 (%)*
Maryland	\$66,600	4.9%
Baltimore Region	\$66,050	
Anne Arundel County	\$79,950	3.8%
Baltimore County	\$63,150	4.3%
Carroll County	\$75,050	3.8%
Harford County	\$74,600	4.2%
Howard County	\$93,050	3.2%
Baltimore City	\$37,850	6.9%
Suburban Washington Region	\$82,500	
Frederick County	\$80,650	3.4%
Montgomery County	\$87,500	3.2%
Prince George's County	\$70,250	4.5%
Southern Maryland Region	\$77,050	
Calvert County	\$87,400	3.8%
Charles County	\$78,450	3.7%
St. Mary's County	\$63,200	3.8%
Western Maryland Region	\$48,000	
Allegany County	\$38,400	5.7%
Garrett County	\$40,850	4.8%
Washington County	\$51,650	5.0%
Upper Eastern Shore Region	\$61,800	
Caroline County	\$47,200	4.7%
Cecil County	\$62,100	4.0%
Kent County	\$49,750	4.0%
Queen Anne's County	\$73,800	3.8%
Talbot County	\$54,350	3.8%
Lower Eastern Shore Region	\$48,700	
Dorchester County	\$42,500	6.6%
Somerset County	\$35,250	5.8%
Wicomico County	\$47,350	4.2%
Worcester County	\$53,100	4.0%

* Rates shown are a percentage of the labor force. Data refer to place of residence. Not seasonally adjusted.

Sources:

Maryland Department of Planning. (May 2007). *2006 Maryland statistical handbook*. Baltimore, MD: Maryland Department of Planning.
http://www.mdp.state.md.us/msdc/md_statistical_handbook06.pdf.

U.S. Department of Labor. (September 6, 2007). Unemployment rates by county in Maryland, July 2007. Washington, DC: U.S. Department of Labor, Bureau of Labor Statistics. <http://www.bls.gov/ro3/mdlaus.htm>.

The extent to which a region's elderly and disabled population will need to rely on public resources for long-term services and supports will depend partly on the relative wealth of these populations. Table 5.6 shows, by jurisdiction, the number of individuals aged 5-64 and aged 65 and over who were eligible for Medicaid in 2000 and 2006 in the Medicaid eligibility category "aged, blind, and disabled." From 2000 to 2006, the number of eligible persons increased far faster in the group aged 5-64. In many jurisdictions, the number of eligible persons aged 65 and over declined between 2000 and 2006.

Table 5.6
Number of Aged, Blind, and Disabled Medicaid Beneficiaries*
Aged 5-64 and Aged 65 and Over by Jurisdiction:
Maryland, 2000 and 2006

	Age 5-64				Age 65 and Over			
	Number Eligible 2000	Number Eligible 2006	Percent Change 2000-2006	Number Per 1000 Population 2006	Number Eligible 2000	Number Eligible 2006	Percent Change 2000-2006	Number Per 1000 Population 2006
Maryland	92,788	108,389	16.8%	21.86	52,404	51,535	(1.7%)	79.91
Baltimore Region	57,397	64,372	12.2%	28.00	26,303	24,443	(7.1%)	77.91
Anne Arundel County	5,008	6,260	25.0%	13.73	2344	2387	1.8%	43.93
Baltimore County	11199	13202	17.9%	19.59	6193	6480	4.6%	58.34
Carroll County	1,317	1,776	34.9%	11.86	830	863	4.0%	47.24
Harford County	2,174	2,893	33.1%	13.59	1097	1177	7.3%	46.36
Howard County	1,701	2,180	28.2%	8.86	1470	1731	17.8%	76.40
Baltimore City	35,998	38,061	5.7%	67.85	14369	11805	(17.8%)	143.92
Suburban Washington Region	19,454	24,250	24.7%	13.51	16,475	17,955	9.0%	88.78
Frederick County	1,878	2,174	15.8%	10.93	1178	1184	0.5%	56.24
Montgomery County	6,559	8,265	26.0%	10.03	9417	10514	11.6%	96.96
Prince George's County	11,017	13,811	25.4%	17.88	5880	6257	6.4%	86.00
Southern Maryland Region	3,502	4,324	23.5%	14.76	2,118	2,051	(3.2%)	71.70
Calvert County	695	981	41.2%	12.33	476	483	1.5%	61.09
Charles County	1,597	1,875	17.4%	14.78	858	756	(11.9%)	67.31
St. Mary's County	1,210	1,468	21.3%	16.94	784	812	3.6%	85.76
Western Maryland Region	5,199	6,329	21.7%	30.56	3,027	3,099	2.4%	81.93
Allegany County	2,107	2,497	18.5%	41.22	1315	1290	(1.9%)	97.94
Garrett County	734	776	5.7%	30.90	433	479	10.6%	99.05
Washington County	2,358	3,056	29.6%	25.18	1279	1330	4.0%	67.11
Upper Eastern Shore Region	3,335	4,250	27.4%	21.42	1,850	1,744	(5.7%)	55.69
Caroline County	743	863	16.2%	31.44	389	359	(7.7%)	85.33
Cecil County	1,370	1,954	42.6%	22.41	517	578	11.8%	57.55
Kent County	309	382	23.6%	23.91	223	218	(2.2%)	56.27
Queen Anne's County	400	475	18.8%	12.01	324	249	(23.1%)	42.31
Talbot County	513	576	12.3%	20.40	397	340	(14.4%)	46.51
Lower Eastern Shore Region	3,901	4,864	24.7%	29.53	2,631	2,243	(14.7%)	72.04
Dorchester County	749	971	29.6%	37.77	573	465	(18.8%)	83.20
Somerset County	622	727	16.9%	32.71	461	393	(14.8%)	108.50
Wicomico County	1,846	2,389	29.4%	30.37	1037	924	(10.9%)	81.94
Worcester County	684	777	13.6%	20.40	560	461	(17.7%)	43.29

* Includes all persons eligible for Medicaid in Maryland in the "aged, blind, and disabled" category.

Sources: Center for Health Program Development and Management, UMBC. (2007). Data from Maryland Department of Health and Mental Hygiene, MMIS2.

Maryland Department of Planning. (2007). Total population projections by age, sex, and race, 2005. Data provided upon request.

Table 5.7 presents, by age group, the number of recipients of Supplemental Security Income (SSI) payments in each jurisdiction of the state in 2000 and 2006. The SSI program is a cash assistance program that provides monthly benefits to low-income aged, blind, or disabled persons. Like Medicaid eligibility, it is an indication of the relative wealth of a population. While the number of SSI recipients under age 65 increased about 20 percent in all other regions of the state from 2000 to 2006, the Baltimore Region experienced an increase of only 10.4 percent. The number of SSI recipients aged 65 and over decreased somewhat in the Baltimore Region (although Baltimore and Howard Counties saw an increase), as well as in the Southern Maryland Region and on the Upper and Lower Eastern Shore. However, the number of SSI recipients aged

65 and over increased by about 10 percent in the Suburban Washington Region, with Montgomery County experiencing the largest increase.

Table 5.7
Number of SSI Recipients by Age:
Maryland, 2000 and 2006

	Age 0-64				Age 65 and Over			
	Number Recipients 2000*	Number Recipients 2006	Percent Change 2000-2006	Number Per 1000 Population 2006	Number Recipients 2000*	Number Recipients 2006	Percent Change 2000-2006	Number Per 1000 Population 2006
Maryland	63,170	71,594	13.3%	14.44	24,773	24,790	0.1%	38.44
Baltimore Region	39,486	43,605	10.4%	18.96	12,589	12,044	(4.3%)	38.39
Anne Arundel County	3,503	3,816	8.9%	8.37	994	935	(5.9%)	17.21
Baltimore County	7,696	9,508	23.5%	14.11	2,476	3,075	24.2%	27.69
Carroll County	866	953	10.0%	6.36	231	204	(11.7%)	11.17
Harford County	1,532	1,917	25.1%	9.01	389	426	9.5%	16.78
Howard County	900	1,306	45.1%	5.31	582	987	69.6%	43.56
Baltimore City	24,989	26,105	4.5%	46.53	7,917	6,417	(18.9%)	78.23
Suburban Washington Region	13,113	15,381	17.3%	8.57	8,546	9,547	11.7%	47.21
Frederick County	1,029	1,282	24.6%	6.45	305	337	10.5%	16.01
Montgomery County	4,485	5,260	17.3%	6.39	5,569	6,436	15.6%	59.36
Prince George's County	7,599	8,839	16.3%	11.45	2,672	2,774	3.8%	38.13
Southern Maryland Region	2,146	2,649	23.4%	9.04	890	836	(6.1%)	29.22
Calvert County	452	549	21.5%	6.90	215	177	(17.7%)	22.39
Charles County	959	1,248	30.1%	9.84	350	348	(0.6%)	30.98
St. Mary's County	735	852	15.9%	9.83	325	311	(4.3%)	32.85
Western Maryland Region	3,569	4,204	17.8%	20.30	951	917	(3.6%)	24.24
Allegany County	1,451	1,711	17.9%	28.24	364	329	(9.6%)	24.98
Garrett County	524	543	3.6%	21.62	151	160	6.0%	33.09
Washington County	1,594	1,950	22.3%	16.06	436	428	(1.8%)	21.60
Upper Eastern Shore Region	2,246	2,642	17.6%	13.31	703	592	(15.8%)	18.90
Caroline County	505	567	12.3%	20.66	171	144	(15.8%)	34.23
Cecil County	935	1,219	30.4%	13.98	177	163	(7.9%)	16.23
Kent County	229	233	1.7%	14.59	101	86	(14.9%)	22.20
Queen Anne's County	208	272	30.8%	6.87	101	65	(35.6%)	11.05
Talbot County	369	351	(4.9%)	12.43	153	134	(12.4%)	18.33
Lower Eastern Shore Region	2,610	3,113	19.3%	18.90	1,094	854	(21.9%)	27.43
Dorchester County	546	684	25.3%	26.60	268	208	(22.4%)	37.22
Somerset County	422	470	11.4%	21.15	200	147	(26.5%)	40.59
Wicomico County	1,166	1,472	26.2%	18.71	404	330	(18.3%)	29.27
Worcester County	476	487	2.3%	12.78	222	169	(23.9%)	15.87

* Totals for the state do not include "unknowns," SSI recipients in Maryland with an unknown county of residence.

Sources: Social Security Administration. (2007). SSI recipients by state and county, 2000 and 2006. Baltimore, MD: Social Security Administration, Office of Policy, Office of Research, Evaluation, and Statistics.

http://www.socialsecurity.gov/policy/docs/statcomps/ssi_sc/2006/.

Maryland Department of Planning. (2007). Total population projections by age, sex, and race, 2005. Data provided upon request.

Spending by a jurisdiction on long-term care is also a useful indicator for judging the jurisdiction's ability to support an aging population. In preparing this report, a service inventory was conducted of long-term care programs and services operated by local jurisdictions for persons aged 65 and older and persons with disabilities (see Appendix 9 for a listing of locally funded programs reported by jurisdictions). Jurisdictions reported long-term care spending totaling \$81.9 million in 2006 (Table 5.8). Even though some portion of these expenditures financed services to persons under age 65 with disabilities, it is useful to convert total spending to a per capita amount for the population aged 65 and over so that a comparison can be made

across jurisdictions with populations of varying sizes.²⁶⁴ Average per capita 65+ spending was \$127.08. However, the following seven counties spent more than this average amount: Anne Arundel, Howard, Frederick, Montgomery, Queen Anne's, and Worcester. At the other extreme, the following eight jurisdictions spent less than \$25 for each person aged 65 and over residing in that jurisdiction: Baltimore City and Prince George's, Charles, St. Mary's, Washington, Caroline, Talbot, and Wicomico Counties.

Table 5.8
Spending on Long-Term Care Programs and Services
Reported by Local Jurisdictions:
Maryland, FY 2006

	Total Local Expenditures (\$)*	Per Capita Spending for 65+ Population (\$)
Maryland	\$81,949,550	\$ 127.08
Baltimore Region	\$32,803,151	\$104.55
Anne Arundel County	\$10,644,130	\$195.89
Baltimore County	\$12,692,303	\$114.27
Carroll County	\$946,375	\$51.81
Harford County	\$2,506,153	\$98.71
Howard County	\$4,949,049	\$218.44
Baltimore City	\$1,065,141	\$12.99
Suburban Washington Region	\$35,818,571	\$177.11
Frederick County	\$6,257,795	\$297.24
Montgomery County	\$28,001,179	\$258.24
Prince George's County	\$1,559,597	\$21.44
Southern Maryland Region	\$975,941	\$34.12
Calvert County	\$549,447	\$69.49
Charles County	\$190,797	\$16.99
St. Mary's County	\$235,697	\$24.89
Western Maryland Region	\$1,510,085	\$39.92
Allegany County	\$893,400	\$67.83
Garrett County	\$204,102	\$42.20
Washington County	\$412,583	\$20.82
Upper Eastern Shore Region	\$2,627,170	\$83.88
Caroline County	\$84,921	\$20.19
Cecil County	\$612,765	\$61.01
Kent County	\$122,291	\$31.57
Queen Anne's County	\$1,709,033	\$290.40
Talbot County	\$98,160	\$13.43
Lower Eastern Shore Region	\$8,214,632	\$263.82
Dorchester County	**	**
Somerset County	\$50,000	\$13.80
Wicomico County	\$70,069	\$6.21
Worcester County	*** \$8,094,563	\$196.67

*Due to variances in recordkeeping and reporting, some jurisdictions may have underreported.

** Responded to service inventory, by no local expenditures reported.

*** Includes \$6 million to support a special education services program for school-age children. This amount has been subtracted from the total to calculate the per capita spending for the age 65+ population.

Sources: Center for Health Program Development and Management, UMBC. (2007). Data from service inventory of local jurisdictions. Maryland Department of Planning. (2007). Total population projections by age, sex, and race, 2005. Data provided upon request.

²⁶⁴ No county-by-county population figures are available for persons under age 65 with disabilities, nor does long-term care spending data from the local jurisdictions indicate what portion served persons aged 65 and older versus persons under age 65 with disabilities. Hence, a similar per capita calculation is not possible for persons under age 65 with disabilities.

Service Infrastructure

The existing **infrastructure** (e.g., agencies, facilities, operating equipment, labor force, local administrative direction and regulatory oversight) for delivery of long-term services and supports varies considerably across the state. Those areas of the state with more extensive facilities and programs are likely to fare better in the future, whereas those jurisdictions that are currently experiencing difficulty in meeting the long-term care needs of residents will only have more difficulty getting ahead of the impending population wave.

As discussed in the section of this report entitled *Housing and Residential Services*, affordable housing and supportive residential living arrangements are crucial to enabling elderly individuals and persons with disabilities to live successfully in the community. Many jurisdictional housing authorities report long waiting lists for Section 8 and public housing, and many waiting lists are closed.²⁶⁵ Table 5.9 provides projections for the shortage of affordable rental housing in all Maryland jurisdictions. Coupled with the need for affordable housing is the availability of transportation services if older adults and persons with disabilities are to live in community settings. Jurisdictions across the state consistently report the need for better mobility and transportation programs (see Appendix 10).

²⁶⁵ For example, Anne Arundel County had 5,346 families (4 percent elderly, 6 percent disabled) on their waiting list for Section 8 or public housing in 2006; Baltimore County had 9,987 (6 percent elderly, 27 percent disabled) in 2005; and Prince George's County had 2,215 (7 percent elderly, 13 percent disabled) in 2006.

Sources: U.S. Department of Housing and Urban Development. (2006). *PHA plan, 5-year plan for fiscal years 2005-2009: Annual plan for fiscal year 2006, Housing Commission of Anne Arundel County*. <http://hcaac.com/new/2006-agencyplan.doc>.
U.S. Department of Housing and Urban Development. (2005). *PHA plan, 5-year plan for fiscal years 2005-2009: Annual plan for fiscal year 2006, Baltimore County Housing Office*. Annual plan for fiscal year 2005. <http://www.hud.gov/offices/pih/pha/approved/pdf/05/md033v02.pdf>.
U.S. Department of Housing and Urban Development. (2006). *PHA plan, 5-year plan for fiscal years 2006-2010: Annual plan for fiscal year 2006*, Housing Authority of Prince George's County. <http://www.hud.gov/offices/pih/pha/approved/pdf/05/md015v01.pdf>.

Table 5.9
Affordable Rental Housing Shortage Projected for the Period 2005 – 2014:
Maryland
(For Families Earning Less than 30% of the Area Median Income and
Paying More than 30% of Household Income for Housing)

	Family		Seniors		Elderly Disabled		Non-Elderly Disabled		Total
	Total	SSI-Level	Total	SSI-Level	Total	SSI-Level	Total	SSI-Level	
Maryland	78,076	29,625	19,826	8,382	12,443	4,401	10,161	4,191	120,487
Baltimore Region	33,110	13,670	9,319	4,440	5,851	2,333	4,794	2,297	53,056
Anne Arundel County	6,660	2,185	1,470	496	924	261	722	226	9,757
Baltimore County	10,012	4,169	3,638	1,547	2,284	813	1,379	548	17,314
Carroll County	1,463	505	361	127	227	67	155	51	2,206
Harford County	2,446	89	550	203	345	106	275	96	3,616
Howard County	5,048	1,417	735	211	461	111	380	102	6,623
Baltimore City	7,481	5,305	2,565	1,856	1,610	975	1,883	1,274	13,540
Suburban Washington Region	35,765	11,712	7,730	2,537	4,846	1,332	4,080	1,313	52,421
Frederick County	2,505	866	558	197	350	103	272	90	3,686
Montgomery County	18,423	5,391	4,484	1,329	2,807	698	1,563	437	27,277
Prince George's County	14,837	5,455	2,688	1,011	1,689	531	2,245	786	21,458
Southern Maryland Region	3,251	1,125	617	219	388	115	402	132	4,658
Calvert County	668	208	134	43	84	22	83	25	970
Charles County	1,452	478	259	87	163	46	198	62	2,071
St. Mary's County	1,131	439	224	89	141	47	121	45	1,617
Western Maryland Region	2,116	1,226	825	496	518	259	321	178	3,779
Allegany County	525	372	241	174	151	91	79	54	996
Garrett County	178	113	65	43	41	22	28	17	311
Washington County	1,413	741	519	279	326	146	214	107	2,472
Upper Eastern Shore Region	2,108	930	678	315	427	165	294	125	3,507
Caroline County	242	129	82	46	52	24	42	21	418
Cecil County	1,006	419	230	98	145	51	139	55	1,520
Kent County	183	96	89	48	56	25	27	14	355
Queen Anne's County	336	122	103	38	65	20	43	15	547
Talbot County	341	164	174	85	109	45	43	20	667
Lower Eastern Shore Region	1,726	962	657	375	413	197	270	146	3,066
Dorchester County	231	145	110	70	69	37	44	27	454
Somerset County	183	129	64	46	40	24	32	22	319
Wicomico County	950	498	294	158	185	83	138	69	1,567
Worcester County	362	190	189	101	119	53	56	28	726

Source: Maryland Department of Housing and Community Development. (December 2005). *Maryland 10-year plan to end homelessness*. Baltimore, MD: Maryland Department of Housing and Community Development, Office of Research.

Table 5.10 shows the state's current inventory of nursing home beds by county and projected bed need in 2011. The Southern Maryland Region is projected to need an additional 208 nursing home beds by 2011, which is 65 percent of the 318 additional beds projected to be needed in the state. Projections for bed need in future decades are not available, but given expected population growth, more nursing home beds may be needed or require replacement, even with the focus on transitioning to community-based services.

Statewide, Medicaid finances almost two-thirds of nursing home care (see section on *Institutional Services*). In 2003, the percentage of nursing home days paid by Medicaid ranged from a low of 48 percent in Talbot County to a high of almost 80 percent in Somerset County and 76 percent in Baltimore City.

Table 5.10
Total Nursing Home Beds, Beds per 1,000 (Age 65+), Estimated Bed Need, and
Percent Nursing Home Days Paid by Medicaid, by Jurisdiction:
Maryland, 2006

	Total Nursing Home Beds 2006*	Beds Per 1000 Population 65+ 2006	Estimated Nursing Home Bed Need 2011	Percent Nursing Home Days Paid by Medicaid 2003
Maryland	29,916	47.97	318	62.06%
Baltimore Region	14,717	46.91	65	
Anne Arundel County	1,819	33.93	-	62.56%
Baltimore County	6,132	57.84	-	58.21%
Carroll County	957	54.06	-	53.41%
Harford County	724	28.33	61	63.42%
Howard County	568	25.14	4	57.70%
Baltimore City	4,517	58.68	-	76.39%
Suburban Washington Region	8,808	43.55	-	
Frederick County	1,094	53.89	-	58.57%
Montgomery County	4,815	43.44	-	52.37%
Prince George's County	2,899	40.30	-	60.69%
Southern Maryland Region	1,068	37.33	208	
Calvert County	302	38.22	17	59.02%
Charles County	429	37.26	67	68.53%
St. Mary's County	337	37.27	124	74.84%
Western Maryland Region	2,499	66.07	-	
Allegany County	961	78.79	-	69.13%
Garrett County	298	64.73	-	71.73%
Washington County	1,240	69.01	-	61.80%
Upper Eastern Shore Region	1,383	44.16	45	
Caroline County	200	50.51	23	63.29%
Cecil County	465	48.27	-	58.75%
Kent County	224	60.75	-	55.33%
Queen Anne's County	150	25.24	22	65.22%
Talbot County	344	48.69	-	48.51%
Lower Eastern Shore Region	1,441	46.28	-	
Dorchester County	258	48.05	-	68.57%
Somerset County	207	59.80	-	79.61%
Wicomico County	643	60.18	-	68.05%
Worcester County	333	31.19	-	68.02%

* Includes licensed, temporarily delicensed, CON-approved, and waiver beds.

Sources: Maryland Health Care Commission. (2007). *Supplements 1 and 2, COMAR 10.24.08, State health plan for facilities and services: Nursing home, home health agency, and hospice services*. Baltimore, MD: Maryland Health Care Commission. <http://mhcc.maryland.gov/statehealthplan/index.aspx>.

Maryland Department of Planning. (2007). Total population projections by age, sex, and race, 2005. Data provided upon request.

In recent years, the State has experienced dramatic growth in assisted living beds. Nationally, the number of residential care and assisted living beds doubled between 1990 and 2002, while the number in Maryland quadrupled.²⁶⁶ The state's current inventory of assisted living beds is shown in Table 5.11. More than half of the state's assisted living facilities and beds are located in the Baltimore Region. Howard County has the most assisted living beds per 1,000 population aged 65 and over (65 beds) and Carroll County follows with 42 beds per 1,000 population. The Southern Maryland Region and the Eastern Shore have the fewest beds per 1,000 population aged 65 and over.

Table 5.11
Assisted Living Beds by Jurisdiction:
Maryland, 2006

	Number of Facilities	Licensed Capacity (Beds)			
		Non-Waiver	Waiver*	Total	Beds Per 1000 Population 65+
Maryland	1,361	11,153	7,689	18,842	29.22
Baltimore Region	769	5,691	4,342	10,033	31.98
Anne Arundel County	90	838	693	1,531	28.18
Baltimore County	198	2,408	1,172	3,580	32.23
Carroll County	33	625	154	779	42.65
Harford County	47	483	181	664	26.15
Howard County	76	299	1,167	1,466	64.71
Baltimore City	325	1,038	975	2,013	24.54
Suburban Washington Region	420	3,993	1,895	5,888	29.11
Frederick County	20	452	291	743	35.29
Montgomery County	181	2,282	668	2,950	27.21
Prince George's County	219	1,259	936	2,195	30.17
Southern Maryland Region	47	479	224	703	24.57
Calvert County	10	91	25	116	14.67
Charles County	30	135	145	280	24.93
St. Mary's County	7	253	54	307	32.43
Western Maryland Region	41	343	698	1,041	27.52
Allegany County	9	73	122	195	14.81
Garrett County	6	40	31	71	14.68
Washington County	26	230	545	775	39.11
Upper Eastern Shore Region	60	444	270	714	22.80
Caroline County	11	46	98	144	34.23
Cecil County	27	161	99	260	25.89
Kent County	10	73	25	98	25.30
Queen Anne's County	5	14	35	49	8.33
Talbot County	7	150	13	163	22.30
Lower Eastern Shore Region	24	203	260	463	14.87
Dorchester County	7	12	19	31	5.55
Somerset County	-	-	-	-	-
Wicomico County	10	129	190	319	28.29
Worcester County	7	62	51	113	10.61

* Beds approved by the State for use by participants in the Older Adult Waiver. About 50-55 percent of Older Adult Waiver participants receive waiver services through an assisted living facility. Source: Center for Health Program Development and Management, UMBC. Data from Maryland Department of Health and Mental Hygiene, MMIS2.

Sources: Maryland Office of Health Care Quality. (2007). *Licensee directory: Assisted living programs*. http://dhmh.md.gov/ohcq/licensee_directory/licensee_directory.htm. Maryland Department of Planning. (2007). Total population projections by age, sex, and race, 2005. Data provided upon request.

²⁶⁶ Harrington, C., S. Chapman, et al. (August 2005). Trends in the supply of long-term-care facilities and beds in the United States. *Journal of Applied Gerontology*. 24(4), 265-282.

Table 5.12 shows the geographic distribution of Maryland's 34 CCRCs, which have a total of 15,819 independent living units, assisted living beds, and comprehensive care beds. (Note that CCRC comprehensive care beds are included in the inventory of nursing home beds in Table 5.10 and CCRC assisted living beds are included in the inventory of assisted living beds in Table 5.11.) CCRCs offer a variety of living arrangements and a continuum of care, all within the same facility or campus. CCRCs typically charge an entrance fee as well a monthly fee and are generally used by private-pay consumers. CCRCs are concentrated in the most populous and/or affluent areas of the state: 57 percent of the CCRC units/beds are in the Baltimore Region and 35 percent are in the Suburban Washington Region.

Table 5.12
Continuing Care Retirement Communities by Jurisdiction:
Maryland, 2006

	Number of Facilities	Total Units/Beds	Units within CCRCs		
			Independent Living Units	Assisted Living Beds	Comprehensive Care Beds
Maryland	34	15,819	11,278	1,976	2,565
Baltimore Region	19	9,003	6,424	1,224	1,355
Anne Arundel County	2	541	390	86	65
Baltimore County	12	6,826	4,920	885	1,021
Carroll County	2	832	718	35	79
Harford County	-	-	-	-	-
Howard County	1	294	224	26	44
Baltimore City	2	510	172	192	146
Suburban Washington Region	9	5,518	3,955	580	983
Frederick County	2	332	217	74	41
Montgomery County	5	2,354	1,407	267	680
Prince George's County	2	2,832	2,331	239	262
Southern Maryland Region	1	378	300	30	48
Calvert County	1	378	300	30	48
Charles County	-	-	-	-	-
St. Mary's County	-	-	-	-	-
Western Maryland Region	3	365	287	53	25
Allegany County	-	-	-	-	-
Garrett County	1	56	30	21	5
Washington County	2	309	257	32	20
Upper Eastern Shore Region	2	555	312	89	154
Caroline County	-	-	-	-	-
Cecil County	-	-	-	-	-
Kent County	1	275	192	45	38
Queen Anne's County	-	-	-	-	-
Talbot County	1	280	120	44	116
Lower Eastern Shore Region	-	-	-	-	-
Dorchester County	-	-	-	-	-
Somerset County	-	-	-	-	-
Wicomico County	-	-	-	-	-
Worcester County	-	-	-	-	-

Source: Maryland Department of Aging. (August 27, 2007). Data provided upon request.

Table 5.13 displays participation in the state's home- and community-based services waiver programs by jurisdiction. These programs, funded and operated by the state's Medicaid program, serve individuals throughout the state.

Table 5.13
Participation in Home- and Community-Based Services
Waiver Programs by Jurisdiction:
Maryland, 2006
(Number of Participants)

	Older Adult Waiver	Living at Home Waiver	Autism Waiver	Model Waiver	Traumatic Brain Injury Waiver
Maryland	3,619	498	916	212	22
Baltimore Region	2,185	252	439	99	12
Anne Arundel County	294	52	73	18	7
Baltimore County	527	73	123	22	1
Carroll County	122	12	19	15	-
Harford County	67	14	54	7	-
Howard County	226	18	66	17	1
Baltimore City	949	83	104	20	3
Suburban Washington Region	734	113	376	78	5
Frederick County	42	14	54	11	-
Montgomery County	380	40	186	38	4
Prince George's County	312	59	136	29	1
Southern Maryland Region	128	34	29	10	-
Calvert County	49	5	12	2	-
Charles County	58	22	11	4	-
St. Mary's County	21	7	6	4	-
Western Maryland Region	163	32	37	7	1
Allegany County	65	20	2	2	1
Garrett County	31	6	1	1	-
Washington County	67	6	34	4	-
Upper Eastern Shore Region	148	32	9	10	1
Caroline County	44	8	1	2	-
Cecil County	47	8	1	5	-
Kent County	23	2	1	-	-
Queen Anne's County	25	11	4	1	1
Talbot County	9	3	2	2	-
Lower Eastern Shore Region	173	32	25	8	3
Dorchester County	34	8	2	1	-
Somerset County	27	6	1	-	-
Wicomico County	61	15	10	5	3
Worcester County	51	3	12	2	-
Out of State*	88	3	1	-	-

* Persons residing in Maryland near the state line with an out of state postal facility code. Periodically these individuals are manually assigned to the appropriate county.

Source: Center for Health Program Development and Management, UMBC. (August 2007). Data retrieved from Maryland Department of Health and Mental Hygiene, MMIS2.

In FY 2005, Maryland received a \$10.8 million block grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services. Table 5.14 shows the distribution of block grant funds by jurisdiction. While only a portion of these funds were used to provide long-term services and supports to persons

with severe mental illness,²⁶⁷ it is useful just the same to understand the level of support for mental health services provided by the federal government and the jurisdictions receiving that funding.

**Table 5.14
Federal Block Grant Funding for Mental Health Services
Awarded to Local Jurisdictions:
Maryland, FY 2005**

	Block Grant Funding*
Maryland	\$8,101,965
Baltimore Region	
Anne Arundel County	\$1,291,000
Baltimore County	\$378,366
Carroll County	--
Harford County	\$190,000
Howard County	\$67,000
Baltimore City	\$1,542,723
Suburban Washington Region	
Frederick County	\$136,236
Montgomery County	\$791,770
Prince George's County	\$1,395,164
Southern Maryland Region	
Calvert County	\$69,542
Charles County	\$160,000
St. Mary's County	--
Western Maryland Region	
Allegany County	\$87,242
Garrett County	\$40,000
Washington County	\$80,000
Eastern Shore Region	
Caroline County	\$183,457**
Dorchester County	
Kent County	
Queen Anne's County	
Talbot County	
Cecil County	\$200,000
Somerset County	--
Wicomico County	\$184,225
Worcester County	\$335,338

* Two additional grants were awarded: a \$135,299 administrative grant to the Maryland Mental Hygiene Administration Headquarters and a \$834,603 grant to the University of Maryland, School of Medicine, Department of Psychiatry.

** A \$183,457 block grant was awarded to Mid-Shore Mental Health Systems Inc., a private, not-for-profit 501(c)(3) organization, serving Caroline, Dorchester, Kent, Queen Anne's, and Talbot Counties.

Source: SAMHSA. (September 2007). *Maryland mental health national outcome measures: CMHS uniform reporting system, 2005*. Washington, DC: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. http://download.ncadi.samhsa.gov/ken/excel/URS_Data05/MD.xls.

²⁶⁷ See Chapter III, "Mental Health Services," for a discussion of the difficulty in distinguishing funding for long-term services and supports for persons with severe mental illness from total funds for mental health services.

In the service inventory conducted for this report, local jurisdictions in Maryland reported operating nearly 300 programs that provide long-term services and supports to individuals aged 65 and older and persons aged 5-64 with disabilities. These programs, with spending totaling almost \$82 million in 2006, are funded either through local sources only or through local funds supplemented by state, federal, and private funding sources (Table 5.15). For each of these programs, Appendix 9 provides the jurisdiction, program name, service category, and funding level.

Table 5.15
Number of Programs and Spending Reported by Local Jurisdictions for
Long-Term Services and Supports:
Maryland, FY 2006

	Total Local Expenditures (\$)*	No. of Programs	Local-Only Spending (\$)**
Maryland	\$81,949,550	46	\$16,518,834
Baltimore Region	\$32,803,151	31	\$9,054,569
Anne Arundel County	\$10,644,130	4	\$4,889,710
Baltimore County	\$12,692,303	9	\$3,558,528
Carroll County	\$946,375	-	-
Harford County	\$2,506,153	4	\$117,218
Howard County	\$4,949,049	14	\$489,113
Baltimore City	\$1,065,141	-	-
Suburban Washington Region	\$35,818,571	10	\$7,056,415
Frederick County	\$6,257,795	-	-
Montgomery County	\$28,001,179	9	\$6,874,790
Prince George's County	\$1,559,597	1	\$181,625
Southern Maryland Region	\$975,941	-	-
Calvert County	\$549,447	-	-
Charles County	\$190,797	-	-
St. Mary's County	\$235,697	-	-
Western Maryland Region	\$1,510,085	1	\$22,250
Allegany County	\$893,400	-	-
Garrett County	\$204,102	-	-
Washington County	\$412,583	1	\$22,250
Upper Eastern Shore Region	\$2,627,170	2	\$190,809
Caroline County	\$84,921	-	-
Cecil County	\$612,765	1	\$175,095
Kent County	\$122,291	-	-
Queen Anne's County	\$1,709,033	1	\$15,714
Talbot County	\$98,160	-	-
Lower Eastern Shore Region	\$8,214,632	2	\$194,791
Dorchester County	-	-	-
Somerset County	\$50,000	1	\$50,000
Wicomico County	\$70,069	-	-
Worcester County	\$8,094,563	1	\$144,791

* Includes all funding for long-term services and supports contributed by the local jurisdiction. Programs may receive additional funding from other sources (i.e., federal, state, private).

** Only includes spending for programs funded solely by the jurisdiction (i.e., there is no federal, state, or private funding). Due to variances in recordkeeping and reporting, some jurisdictions may have under-reported.

Source: Center for Health Program Development and Management, UMBC. (2007). Data from service inventory of local jurisdictions.

A number of these local programs are offered in more than one jurisdiction. Table 5.16 lists programs that are offered in three or more jurisdictions in the state.

Table 5.16
Long-Term Services and Supports Programs Offered in
Three or More Local Jurisdictions:
Maryland, FY 2006

Program Name	Number of Local Jurisdictions
Transportation Services for Older Adults and Persons with Disabilities	18
Home-Delivered Meals	19
Senior Center	13
Congregate Meals	13
Ombudsman	11
Senior Health Insurance Assistance Program	11
Senior Information and Assistance Program	10
National Family Caregiver Support Program	10
Public Guardianship	10
Medicaid Waiver	9
Statewide Special Transportation Assistance Program or other transportation services	6
Senior Care	5
Senior Assisted-Living Group Home Subsidy Program	5
In-Home Care/Chore Services	5
Vulnerable Elderly Protection Program	4
Day Programs	4
Retired and Senior Volunteer Program	4
Curb Abuse In Medicaid and Medicare Program	3
Respite Care Programs	3
Supported Employment	3

Source: Center for Health Program Development and Management, UMBC. (2007). Data from service inventory of local jurisdictions.

Maryland Food Programs

The Long-Term Care Planning Act of 2006 (House Bill 1342) identifies food subsidies as a service important to long-term care planning. Other nutrition programs are noted in Chapter III in the sections on in-home and community services. The U.S. Department of Agriculture (USDA) defines “**food insecure**” households as households that, due to a lack of resources, experienced difficulty providing enough food for all members of the household at some point during the year. Based on average ratings from the 2003–2005 food security surveys, 9.4 percent of Maryland households were identified as having food insecurity, with 3.6

percent of those households having very low food security. The national average of households with food insecurity was 11.4 percent, with 3.8 percent having very low food security.²⁶⁸ The 2005 rate of food security for U.S. households with elderly persons was 6.0 percent and 6.4 percent for elderly persons living alone.²⁶⁹ For U.S. households with incomes below 130 percent of the poverty level, the 2005 food insecurity rate increases to 17.7 percent for elderly persons and 14.9 percent for elderly persons living alone.²⁷⁰

Maryland's major food assistance programs include the Federal Food Stamp Program, Home-Delivered and Congregate Meal Programs, the Maryland Senior Farmers Market Nutrition Program, and local food banks. In FY 2005, 130,000 Maryland households participated in the Federal Food Stamp Program.²⁷¹ Of these, 17.6 percent had elderly individuals and about 24 percent had disabled non-elderly individuals.²⁷²

The Maryland Department of Aging, through the state's 19 Area Agencies on Aging (AAAs), provided more than 3 million meals to older adults and people with disabilities in 2006. The meals were provided in homes or at senior centers and other sites through the Senior Nutrition Congregate Meals and Home-Delivered Meals programs. The Home-Delivered Meals program (also known as Meals on Wheels) served more than 1.3 million meals to nearly 8,000 people in FY 2006. There are currently 857 homebound elderly people on the waiting list to receive meals. In FY 2006, the Home-Delivered Meals program received \$2.7 million in federal funding and just under \$800,000 in state funding.²⁷³

In 2006, the Senior Farmers Market Nutrition program, operated through a partnership involving the Maryland Department of Aging, the Maryland Department of Agriculture, and the AAAs, provided coupons to over 9,000 low-income seniors aged 60 and over to purchase fresh fruits and vegetables at Maryland's farmers markets.²⁷⁴

Gaps in Local Services

Appendix 10 lists gaps in local services identified by local jurisdictions in the service inventory conducted for this report. Many cited an ongoing shortage of funding to serve all those who need and/or request long-term services and supports. A shortage of transportation, affordable housing, waiver slots, and respite services were listed frequently, as well as a shortage of services for persons with developmental disabilities and mental health needs.

²⁶⁸ Economic Research Service/USDA, Household Food Security in the United States, 2005/ERR-29, Prevalence of household-level food insecurity and very low food security by state, p. 56.

²⁶⁹ Ibid, p. 11.

²⁷⁰ Ibid, p. 17.

²⁷¹ Office of Analysis, Nutrition and Evaluation. (2007). *Characteristics of food stamps households: Fiscal year 2005*. p. 69.

²⁷² Ibid, p. 65.

²⁷³ Maryland Department of Aging. (2007). *Annual report, January – December 2006: Budget presentation fiscal 2008*. p. 31-32.

²⁷⁴ Ibid, p. 7.

In the service inventory conducted for this report, many local jurisdictions identified the recruitment and retention of qualified service providers as a major challenge to service provision. There is frequent burnout and turnover of direct care staff, possibly resulting from poor pay and the lack of benefits. The lack of qualified direct care service providers appears to be more pronounced in the rural areas of the Eastern Shore and Western Maryland. In addition to direct care staff, there is a need for additional professional staff at the local Departments of Social Services and volunteer corps to meet the demand for in-home services.

VI. NATIONAL TRENDS AND INNOVATIONS

Purpose

This chapter reviews long-term care programs, policies, and plans in other states and recent investigations of long-term care initiatives. The purpose is to provide background material on actions that have been implemented or are being seriously considered by other states as part of their long-term care planning process. Maryland has already embarked on some of these activities, but descriptions of other state initiatives may, nevertheless, provide useful background information on the range of possibilities when planning for the future of long-term care in the State. Where available, information regarding outcomes is presented.

Health Promotion

States are giving greater emphasis to health promotion activities to delay or avoid institutional and non-institutional long-term care. In Alabama, these efforts have included preparing and disseminating health, safety, wellness, and chronic disease self-management materials; encouraging health fairs with full-service health screenings; and establishing walking clubs.²⁷⁵ Maryland's Department of Aging also manages a program of health promotion as noted in Chapter III in the section entitled *Community Services and Supports*.

Oregon completed a long-range long-term care plan in 2006. The following health promotion recommendations were proposed.²⁷⁶

- Create an Oregon Healthy Aging Coalition, including private and public representatives, to raise awareness of the need for support of healthy aging in older adults
- Develop marketing plans to promote healthy aging
- Sponsor legislation to tax soft drinks at three cents for each unit (to be used for public health efforts to reduce obesity)
- Fund training and technical assistance focusing on evidence-based practices to support healthy aging
- Fund projects that implement selected evidence-based interventions to support healthy aging through challenge grants to counties or cities
- Expand availability of chronic disease self-management programs
- Explore health care insurance-related discounts/incentives for those who meet specific health behavior and/or preventive screening criteria
- Increase the number of worksites that offer effective health promotion programs and policies at worksites

²⁷⁵ Alabama Department of Senior Services. (2006). *State plan on aging: Fiscal years 2007-2010*. Montgomery, AL: Alabama Department of Senior Services.

²⁷⁶ Oregon Department of Human Services Seniors and People with Disabilities. (2006). *Recommendations on the future of long-term care in Oregon*. Salem, OR: Department of Human Services Seniors and People with Disabilities.

The RAND Corporation completed an evidence-based analysis of the literature on **Health Risk Appraisal (HRA)**, an approach to collecting information from individuals that identifies risk factors, provides individual feedback, and links those who are assessed with interventions that promote health, sustain function, or prevent disease.²⁷⁷ RAND determined that the studies to date demonstrate strong evidence for the benefit of HRA interventions on behavior such as exercise, physiological measures such as weight and blood pressure, and general health status. More intensive HRA interventions (for example, visits with health educators and/or workshops with follow-up contact) worked better than the simple provision of published information. Costs per patient of HRA programs were relatively low, but the cost-effectiveness has not been systematically studied. A number of assessment forms for HRA have been developed and several are available in more than one language.²⁷⁸ RAND concluded that programs that provide HRA feedback with health promotion interventions are most likely to be successful. This multivariate approach is also endorsed by the Institute of Medicine, which recently reported that major improvements in the prevention and management of chronic conditions cannot be expected unless the social conditions of patients are taken into account and there is tight integration of public health, social circumstances, and medicine.²⁷⁹

CMS is currently funding randomized demonstration projects aimed at directly measuring the costs and benefits of HRA. The projects have as major goals cost neutrality, health improvement, risk reduction, health-related behavior change, improved functioning, and reduced disability.²⁸⁰

Implications Regarding Health Promotion

- States are developing health promotion programs that are aimed at limiting future disability, thereby reducing the overall long-term care burden.
- States are also considering new ways of generating funds to use for health promotion.
- More intensive health programs that involve personal health assessments and sessions with health educators appear to be more effective than programs that rely solely on print or other educational media.

Increasing Personal Responsibility

Long-Term Care Insurance Programs

One strategic approach to managing long-term care is to give individuals the tools that facilitate planning for their own long-term care needs. As was described in Chapter II, the State Long-term Care Partnership program was designed to increase the purchase of long-term care insurance by allowing purchasers to retain more of their assets and still become or remain

²⁷⁷ RAND. (2003). *Evidence report and evidence-based recommendations: Health risk appraisals and Medicare*. Santa Monica, CA: RAND.

²⁷⁸ RAND. (2003). *Evidence report and evidence-based recommendations: Health risk appraisals and Medicare*. Santa Monica, CA: RAND.

²⁷⁹ Smedley, B. D., S. L. Syme. (1999). *Promoting health: Intervention strategies from social and behavioral research*. Washington, DC: National Academy Press.

²⁸⁰ Stapleton, D. (2006). *The Medicare Senior Risk Reduction Demonstration: Demonstration design. National Academies Workshop on Interventions to Accelerate the Decline in Disability among the Elderly*. Washington, DC: http://www.cms.hhs.gov/DemoProjectsEvalRpts/downloads/Senior_Risk_Reduction_Design.pdf.

eligible for Medicaid long-term care services. A recent Government Accountability Office (GAO) study of four State Long-term Care Partnership programs provides useful information on the types of people who use these programs and the programs' potential state/federal budgetary impact. The states that were examined by GAO were California, Connecticut, Indiana, and New York. In 2005, more than 172,000 active policies were in effect in these four states. Policyholders reported average assets greater than \$350,000 and monthly household incomes in excess of \$5,000. Less than 1 percent of active policyholders were currently accessing their private long-term care benefits. Since the four state programs began, more policyholders died (899) while receiving their private long-term care benefits than those who exhausted their benefits (251). Of the 251 policyholders in the four states that exhausted their private policy benefits, only 47 percent had accessed Medicaid by 2005. The low utilization of Medicaid among those who exhausted their private policy benefits was due to several factors: not yet having spent down income or unprotected assets, improved health that invalidated the use of Medicaid long-term care, or receipt of sufficient informal support to manage their long-term care needs.²⁸¹

In 2006, 22 states, including Maryland, were planning to establish Long-Term Care Partnership projects aimed at encouraging the purchase of long-term care insurance.²⁸² Maryland's program will begin in 2008. Michigan dedicated \$3 million in tobacco tax funding to increase citizens' knowledge of long-term care needs and the importance of planning and saving for these future needs. The program included a radio and television campaign, print media, a new web page, and a toll-free telephone number to provide individuals aged 35 to 65 with information about a variety of long-term care financing vehicles including insurance, annuities, and medical/retirement accounts.²⁸³

Through CMS funding, Florida implemented the Serving Health Insurance Needs of Elders (SHINE) program, a statewide program offering free health insurance education, counseling, and assistance to Medicare beneficiaries and their families. The program makes heavy use of approximately 450 trained volunteers, who must donate a minimum of ten hours a month. The volunteers provide information and also help Medicare recipients with applications for Medicare, Medicaid, Medicare supplemental insurance, long-term care insurance, and prescription assistance. SHINE volunteers also address Medicare fraud, beneficiary rights, and consumer protection issues.²⁸⁴

Other Approaches for Enhancing Personal Responsibility

Minnesota's plan for 2030 includes recommendations incorporating retirement/lifecycle education into the public educational curriculum so that it becomes a standard element of educational offerings. The plan recommends the following educational components: (a) greater

²⁸¹ General Accounting Office. (2005). *Overview of the Long-term care Partnership Program*. Washington, DC: General Accounting Office.

²⁸² Smith, V., K. Gifford, et al. (2006). *Low Medicaid spending growth amid rebounding State revenues: Results from a 50-State Medicaid budget survey State fiscal years 2006 and 2007*. Washington, DC: Kaiser Family Foundation.

²⁸³ Scheppach, R. (2001). *Testimony by NGA Executive Director Ray Scheppach on state innovations on long-term care*. Washington, DC: Senate Special Committee on Aging.

²⁸⁴ Florida Department of Elder Affairs. (2005). *About SHINE*. Tallahassee, FL: Florida Department of Elder Affairs.

understanding of personal and societal aging with implications for the family and community, (b) taking charge of finances, and (c) seeking professional help for financial planning. In addition, the plan calls for the expansion of information about the risks of needing long-term care and the costs and benefits of long-term care insurance, as well as improving the availability of information on how to stay healthy.²⁸⁵

Several states are training volunteer counselors who can assist Medicare beneficiaries with comparing program options and benefits and enrolling in Medicare Part D, and they are using media to encourage seniors to enroll in Medicare Part D.²⁸⁶ South Carolina established an In-home Prevention Services for Seniors program targeting older persons in 13 counties who are willing and cognitively able to respond to individualized health promotion and disease prevention plans. Outreach is provided by both public personnel and volunteers. Registered nurses conduct in-home assessments and develop individualized plans, and human services employees monitor clients through home visits. Volunteers help by installing grab bars and assisting with exercise programs. Florida has developed a Positive Aging and Self-Care Initiative, which encourages older people to learn new skills, continue to contribute as feasible to their communities, take responsibility for their health, and live life to the fullest, rather than disengage.²⁸⁷

Many state single-point-of-entry programs, described elsewhere in this chapter, provide information that supports and encourages personal responsibility with regard to long-term care.

Implications Regarding Efforts to Increase Personal Responsibility

- Available evidence suggests that individuals who purchase long-term care insurance have a low likelihood of spending down to Medicaid eligibility, in spite of the protection of assets available through such programs as the State Long-term Care Partnership program.
- States are engaged in efforts to educate people regarding the risk of future disability and need for long-term care and in programs that help individuals with decision-making regarding health and long-term care programs.

Consumer-Directed Care

Consumer direction of care is not a new concept. It originally developed out of independent living and disability rights movements.²⁸⁸ Consumer direction has been utilized in different forms, especially in the Veterans Administration system and California, since the

²⁸⁵ Minnesota Department of Human Services. (2007). *Project 2030 report*. Minneapolis, MN: Minnesota Department of Human Services.

²⁸⁶ Alabama Department of Senior Services. (2006). *State plan on aging: Fiscal years 2007-2010*. Montgomery, AL: Alabama Department of Senior Services.

²⁸⁷ Scheppach, R. (2001). *Testimony by NGA Executive Director Ray Scheppach on state innovations on long-term care*. Washington, DC: Senate Special Committee on Aging

²⁸⁸ Doty, P., J. Kasper, et al. (1996). Consumer-directed models of personal care: Lessons from Medicaid. *The Milbank Quarterly*, 74(3), 377-409.

1950's.²⁸⁹ However, the philosophy of giving the consumer more control over services and more responsibility for them has become very popular in recent years, with many state long-term care or aging services plans incorporating consumer choice.²⁹⁰

Cash and Counseling

The first large-scale, multi-state examination of consumer direction programs, “Cash and Counseling,” was initiated in 1996 with funding from the Robert Wood Johnson Foundation and the Department of Health and Human Services. The program began with three states: Arkansas, New Jersey, and Florida. The basic goal was to give eligible Medicaid beneficiaries more of an option to remain at home by receiving goods and assistance of their choice, and from persons with whom they are most comfortable. The Cash and Counseling recipients used their cash allowances to hire workers, set conditions of their employment, and make purchases that promoted a higher quality of life.²⁹¹ In 2004, 75 percent of states reported some form of consumer direction option in at least one program.²⁹² However, the most data is available from the three original Cash and Counseling states, each of which established somewhat different target populations and approaches. The Arkansas program was open to elderly and non-elderly adults with physical disabilities who could also have cognitive disabilities and who were eligible for or were receiving the State Plan Medicaid personal care services. New Jersey enrolled persons with similar demographics to those in Arkansas. Florida’s program was open to elderly and non-elderly adults with physical disabilities and children and adults with developmental disabilities who were receiving services under the state’s home- and community-based waiver. An evaluation of the Cash and Counseling program was conducted by Mathematica Policy Research in 2005.²⁹³ Eligible individuals were randomly assigned to the intervention group or a normal personal care services group. Findings from the three-state evaluation²⁹⁴ indicate that persons in Cash and Counseling were more likely to receive paid personal care and were less likely to report unmet need for personal care (Table 6.1).

²⁸⁹ Benjamin, A. E., M. L. Fennell. (2007). Putting the consumer first: An introduction and overview. *Health Services Research*. 42(1), 353-361.

²⁹⁰ Kane, R. A., R. Priester, et al. (2006). *Management approaches to rebalancing long-term care systems: Experience in eight states up to July 31, 2005*. Washington, DC: Centers for Medicare and Medicaid Services.

²⁹¹ Schore, J., L. Foster, et al. (2006). Consumer enrollment and experiences in the Cash and Counseling program. *Health Services Research*. 42(1), 446-466.

²⁹² National Association of State Units on Aging. (2004). *States' experiences implementing consumer-directed home and community services*. Washington, DC: National Association of State Units on Aging.

²⁹³ Dale, S., R. Brown. (2005). *The Effect of Cash and Counseling on Medicaid and Medicare costs: Findings for adults in three states*. Princeton, NJ: Mathematica Policy Research, Inc.

²⁹⁴ Phillips, B., B. Schneider. (2007). Commonalities and variations in the cash and counseling program across the three demonstration states. *Health Services Research*. 42(1): 397-413.
Robert Wood Johnson Foundation. (2006). *Choosing Independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ: Robert Wood Johnson Foundation.

Table 6.1
Percentage of Consumers Reporting Unmet Personal Care
Need at Nine Months: Selected States, 2005

	Non-Elderly Adults	Elderly Adults	Children
AK – Treatment	26%**	36%	N/A
AK – Control	41%	37%	N/A
FL – Treatment	27%*	43%	33%**
FL – Control	34%	47%	45%
NJ – Treatment	46%*	44%**	N/A
NJ – Control	55%	58%	N/A

* Significance levels: Treatment significantly different from control group at p. < .05 = *, < .01 = **.

Source: Robert Wood Johnson Foundation. (2006). *Choosing Independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ, Robert Wood Johnson Foundation.

Those in the Cash and Counseling group were no more likely than the controls to experience negative outcomes, and in several instances were less likely to do so (Table 6.2). Program satisfaction was also significantly higher in the intervention group than in the control group, although delayed delivery of the monetary allowances did lead to dissatisfaction among some Cash and Counseling recipients who experienced the delays.²⁹⁵ Satisfaction levels may be higher because of the potential for custom tailoring services, especially with regard to continuity, reliability, hours of service,²⁹⁶ and the fact that (unlike some agency home care providers) family providers can administer medications. Cash and Counseling enrollees were significantly less likely to report financial strain.²⁹⁷

²⁹⁵ Carlson, B. L., L. Foster, et al. (2006). Effects of Cash and Counseling on personal care and well-being. *Health Services Research*. 42(1), 467-487.

²⁹⁶ San Antonio, P. N., L. Simon-Rusinowitz, et al. (2007). Case histories of six consumers and their families on Cash and Counseling. *Health Services Research*. 42(1, Part II), 533-549.

²⁹⁷ Robert Wood Johnson Foundation. (2006). *Choosing Independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ: Robert Wood Johnson Foundation.

Table 6.2
Percentage of Consumers Reporting Care-Related
Health Problems at Nine Months:
Selected States, 2005

	Arkansas		Florida		New Jersey	
	Treatment	Control	Treatment	Control	Treatment	Control
Non-elderly adults						
Had a fall	28%	29%	15%	18%	19%**	29%
Contractures developed/worsened	26%	25%	9%	14%	25%	28%
Bedsores developed/worsened	6%	13%	4%	6%	9%	13%
Had a urinary tract infection	19%	22%	8%	12%	17%	19%
Elderly adults						
Had a fall	19%	19%	18%	20%	13%**	20%
Contractures developed/worsened	16%	20%	20%	22%	18%**	27%
Bedsores developed/worsened	8%	7%	8%	9%	7%	7%
Had a urinary tract infection	18%	21%	20%	22%	16%	16%
Children						
Had a fall	N/A	N/A	27%**	36%	N/A	N/A
Contractures developed/worsened	N/A	N/A	9%*	13%	N/A	N/A
Bedsores developed/worsened	N/A	N/A	3%*	6%	N/A	N/A
Had a urinary tract infection	N/A	N/A	3%*	6%	N/A	N/A

* Significance levels: Treatment significantly different from control group at p. < .05 = *, < .01 = **.

Source: Robert Wood Johnson Foundation (2006). *Choosing Independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ, Robert Wood Johnson Foundation.

Medicaid personal costs and total Medicaid costs were higher under Cash and Counseling than under the traditional agency model. However, the higher costs were chiefly among new enrollees to the programs (see Table 6.3 for Arkansas data) and were primarily the result of significantly more Cash and Counseling enrollees actually receiving personal care in a timely manner than was the case for the control group (Table 6.4). The cost difference for continuing users, though higher for Cash and Counseling recipients, was not statistically significant (Table 6.3). For longer-term enrollees, the increased Medicaid personal care costs were partially offset by savings in institutional and other long-term-care costs.²⁹⁸ For example, in Arkansas, Cash and Counseling enrollees were less likely to use nursing home care. Furthermore, costs can be limited by careful selection of persons who receive this form of care, discounting the allowance in relation to typical services, and recovering unspent allowances.²⁹⁹

²⁹⁸ Dale, S. B., R. Brown. (2006). Reducing nursing home use through consumer-directed personal care services. *Medical Care*. 44(8), 760-767.

²⁹⁹ Dale, S. B., R. Brown. (2006). Reducing nursing home use through consumer-directed personal care services. *Medical Care*. 44(8), 760-767.
 Feinberg, L. F., K. Wolkwitz, et al. (2006). *Ahead of the curve: Emerging trends and practice in family caregiver support*. Washington, DC: AARP.

Table 6.3
Total Medicaid Cost over Three Years: Arkansas, 2005

	Treatment	Control	Difference
New applicants	\$34,655	\$25,569	\$9,088*
Continuing users	\$34,244	\$33,799	\$445

* Significance levels: Treatment significantly different from control group at p. < .05 = *, < .01 = **.

Source: Robert Wood Johnson Foundation (2006). *Choosing Independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ, Robert Wood Johnson Foundation.

Table 6.4
**Percentage of Enrollees Receiving Paid Personal Assistance at Nine Months:
Selected States, 2005**

	Non-Elderly Adults	Elderly Adults	Children
AK – Treatment	95%**	94%**	N/A
AK – Control	68%	79%	N/A
FL – Treatment	76%**	94%	80%**
FL – Control	64%	91%	65%
NJ – Treatment	92%**	94%**	N/A
NJ – Control	79%	82%	N/A

* Significance levels: Treatment significantly different from control group at p. < .05 = *, < .01 = **.

Source: Robert Wood Johnson Foundation (2006). *Choosing Independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ, Robert Wood Johnson Foundation.

Cash and Counseling evaluation results regarding personal care workers showed that agency workers and workers hired by consumers felt they were equally prepared to do the job that was expected of them. They also reported similar rates of physical strain and injuries due to caregiving. However, directly hired Cash and Counseling workers were twice as likely as home care agency workers to report satisfaction with their compensation. As might be expected, levels of emotional stress were also similar for directly hired versus agency workers, with one exception—40 to 60 percent of directly hired workers reported some or a great deal of stress.³⁰⁰ Family caregivers are often responsible for medical care for which they have little or

³⁰⁰ Robert Wood Johnson Foundation. (2006). *Choosing Independence: An overview of the cash and counseling model of self-directed personal assistance services*. Princeton, NJ: Robert Wood Johnson Foundation.

no formal training and tend to be “on call” all of the time, which could lead to higher levels of stress.³⁰¹

In the State of Washington, consumer direction has become the dominant form of care for home- and community-based services, with 60 percent of Medicaid home care beneficiaries using consumer directed care rather than agency services. Those who select consumer direction receive case management assistance from Area Agencies on Aging, although the consumer is responsible for hiring, supervising, and finding replacements for the paid caregivers.³⁰²

New Hampshire’s consumer-directed care program, called Living with Independence, Freedom, and Equality (LIFE), funded through Medicaid, has a savings account component. The program allows persons with disabilities to use the savings that they realize from the allowance they receive to purchase equipment or finance home modifications that promote their independence.³⁰³

In Vermont, individuals who are eligible for Medicaid long-term care services are offered the option of enrolling in the Attendant Services Program (ASP), which permits individuals to hire their own personal attendants at no cost to the participant. ASP participants can hire any legal worker, including a spouse, while the Department of Aging and Independent Living staff manage human resource functions, such as timekeeping, payroll, and background checks. Therefore, ASP participants can select people with whom they feel comfortable, while the network of available workers is enhanced.³⁰⁴

Maryland provides a consumer direction option in its Medicaid optional state plan personal care program. The State provides a consumer directed attendant care service option in the Living at Home Waiver. The State also provides a self-direction option with individual budgets to persons with developmental disabilities in the New Directions waiver program (see Chapter III, *Services and Supports to Persons with Developmental Disabilities*).

In recent years, CMS has experienced a large increase in waiver applications involving consumer direction, to the point that current 1915(c) waiver applications currently include a section on individual budgets.³⁰⁵ New Mexico has recently implemented a consumer direction program for older adults and persons with disabilities, which offers considerable latitude in the types of services and goods purchased. The program emphasizes consumer access to information and training but gives responsibility to a state-contracted Financial Management Agent. This agent is responsible for setting up individual participant accounts; making expenditures that follow the approved budget; handling all payroll functions on behalf of

³⁰¹ Donelan, K., C. A. Hill, et al. (2002). Challenged to care: Informal caregivers in a changing health system. *Health Affairs*, 21(4), 222-31.

³⁰² Weiner, J. M., B. Gage, et al. (2004). *Redirecting public long-term care services: Final report*. Waverly, MA: RTI International.

³⁰³ Greene, A. M., J. O’Keeffe, et al. (2007). *Real choice systems change grant program. Progress and challenges of the FY 2004 grantees: Fifth year report*. Washington, DC: Centers for Medicare and Medicaid Services.

³⁰⁴ Vermont Department of Aging and Disabilities. (2004). *Shaping the future of long term care and independent living: 2003-2013*. Waterbury, VT: Department of Aging and Disabilities.

³⁰⁵ Centers for Medicare and Medicaid Services. (2005). Independence Plus overview. <http://www.cms.hhs.gov/independenceplus/>.

participants who hire service providers and other support personnel; providing participants with a monthly report of expenditures and budget status; and submitting to the state quarterly and annual documentation of expenditures.³⁰⁶ Other states—including Colorado, Delaware, Kansas, Louisiana, Maine, New Hampshire, New Jersey, North Carolina, South Carolina, Wisconsin, and Connecticut—are establishing programs in which the individual budget, consumer direction approach will be a central component.³⁰⁷

Individuals who have been involved in the development and monitoring of consumer-directed programs have identified several important issues to consider in any effort to increase consumer-directed care.³⁰⁸ These issues include (a) addressing problems associated with adapting the principles of consumer direction when the participant is not fully able to self-direct, through allocation of an appropriate representative to help and/or make decisions; (b) establishing a worker registry for linking participants and workers when there are no family members or other informal supports who can serve; (c) training support brokers, fiscal management agencies/intermediary care organizations, consumers, and paid workers; (d) assuring quality through regular evaluations of the program and of participant services; (e) assuring that funds are appropriately utilized and overhead is limited, and (f) overcoming the philosophical barrier associated with the traditional approaches to service delivery, in which the professional/bureaucratic agency employee is in control.

Implications Regarding Consumer-Directed Care

- Consumer-directed care is popular with recipients and with informal caregivers who can receive some financial reimbursement for their care. Outcomes are similar to or better than traditional services. Services can be custom-tailored to the client, which is difficult for agencies to match. It is reasonable to expect that this approach to service delivery would grow rapidly to the extent that it is made more widely available.
- Consumer direction likely leads to short-term cost increases, because consumers are able to quickly identify providers that are not typically available through agencies. However, because the satisfaction level is high and personal care needs are more likely to be met in the community, it is possible (and there is some preliminary evidence on this point) that the timing of nursing home admissions would be delayed, if not avoided altogether, with the potential for savings over the long-term. Furthermore, costs can be limited by careful selection of persons who receive this form of care, discounting the allowance in relation to typical services, and recovering unspent allowances.

³⁰⁶ State of New Mexico Human Services Department Medical Assistance Division. (2006). *Application for a 1915 (c) HCBS waiver*. http://www.hsd.state.nm.us/mad/pdf_files/SelfDirectedWaiverProgram/MiVia_NF_FINAL_20Sep06.pdf.

³⁰⁷ Information collected by the UMBC Center for Health Program Development and Management.

³⁰⁸ Mahoney, K. J., N. W. Fishman, et al. (2007). The future of cash and counseling: The framers' view. *Health Services Research*. 42(1), 550-566.

Doty, P., K. J. Mahoney, et al. (2007). Designing Cash and Counseling demonstration and evaluation. *Health Services Research*. 42(1, Part II), 378-396.

Feinberg, L. F., K. Wolkwitz, et al. (2006). *Ahead of the curve: Emerging trends and practice in family caregiver support*. Washington, DC: AARP.

Fanagan, S. A., P. S. Green. (1997). *Consumer-directed personal assistance services: Key operational issues for state CD-PAS programs using intermediary service organizations; Report to the U.S. Department of Health and Human Services*. Franklin, TN, The MEDSTAT Group.

- Consumer-directed care can be beneficial in addressing the shortage of long-term care workers, in that family members and neighbors, who would not otherwise be in the workforce, become paid home care workers. The result could be a reduction in the growth of future worker shortages.
- There are numerous important factors (described above) to consider in any effort to increase consumer-directed care while assuring efficiency, effectiveness, and quality.

Housing

Across the nation, in 2005, the rate of homeownership among households of individuals aged 65 and older was 79 percent, versus 77 percent in Maryland (based on the American Community Survey, which surveys a sample of households in every county).³⁰⁹ The home is usually the single largest asset of older persons, with the median property value of owner-occupied homes among older Marylanders being \$165,276.³¹⁰ Many states are incorporating housing-related programs into their long-term care plans.

Plans for Making Housing More Adaptable

The California Health and Human Services Agency developed a strategic plan for an aging population, focusing primarily on the baby boomer cohort. The plan includes several elements, summarized below.³¹¹

- Provide incentives for local governments to adopt mandatory universal design guidelines and ordinances
- Provide incentives to builders and developers to adopt visitability designs in housing funded by the state
- Strengthen support of home modification
- Increase emphasis on transportation needs in community design criteria
- Improve affordability of assisted living facilities
- Make assisted living a **Medi-Cal** program (Medi-Cal is California's Medicaid program)
- Evaluate barriers to third-party and MediCal reimbursement for residential care facilities for older adults
- Make nursing homes/institutional structures more home-like and supportive of independent living

Mississippi is developing a statewide plan for the coordination and integration of long-term care services and housing. Vermont is currently planning ten affordable and accessible supportive housing projects that will serve 308 Medicaid eligible or medically needy persons. In addition, two sites of the Vermont Program of All-inclusive Care for the Elderly (PACE) will be co-located in affordable housing sites in order to increase the ability of people to age in

³⁰⁹ Houser, A., W. Fox-Grage, et al. (2006). *Across the States: Profiles of long-term care and independent living*. Washington, DC: AARP Policy Institute.

³¹⁰ Kochera, A. (2006). *State housing profiles: A special analysis of the Census Bureau's American Community Survey*. Washington, DC: AARP Public Policy Institute.

³¹¹ California Health and Human Services Agency. (2003). *Strategic plan for an aging California population: Getting California ready for the "Baby Boomers."* Sacramento, CA: California Health and Human Services Agency.

place.³¹² Oregon has developed a plan to ensure access to affordable housing that is linked to necessary long-term care by making housing-related assistive technology available to disabled persons of all ages.³¹³

Incorporating Assisted Living into Long-Term Care Plans

The trends in assisted living were described in Chapter II. Assisted living facilities have been developed with a consumer-focus and are typically private-pay organizations. They offer home-like environments, and tend to operate on more of a hospitality model than a healthcare or long-term care model.³¹⁴ Assisted living facilities generally provide or coordinate several services, including around-the-clock staff, health and social services, housekeeping, laundry, activities, meals, and transportation. They appeal to older individuals interested in more options for later-life living, especially those elders with limited function or cognitive decline and complex medical conditions. These individuals can age in a more home-like environment than nursing homes while maintaining a higher level of independence. However, due to the diverse care needs of this population, and the generally limited on-site services available, it can be difficult to maintain a balance of independence with the need for assistance as elders become more frail. Therefore, it is important for these facilities to acknowledge that they often are serving a vulnerable population, and to be vigilant about exceeding the facility's ability to address their special and wide-ranging care needs.³¹⁵ Based on a national survey of both rural and urban assisted living facilities, Hawes and colleagues found that rural facilities: (a) were in undersupply, (b) tended to be smaller and not offer the same range of services that were available in urban areas, (c) were less likely to have nurses on staff (especially licensed practical nurses), and (d) had lower overall charges but were still not affordable by most elderly rural residents.³¹⁶

Many states are supporting the development of assisted living facilities. Maine has a state-funded assisted living program that supports 210 assisted living units. Participants in the program are required to cost-share and must meet income and asset eligibility standards. Michigan has an Affordable Assisted Housing Project that operates in two counties. The program is managed by Area Agencies on Aging, the State Housing and Development authority, and a two-county regional center. Initial program participants were waiver clients on the State Section 8 voucher waiting list.³¹⁷ **Section 8** is a federal program that provides rental

³¹² Greene, A. M., J. O'Keeffe, et al. (2007). *Real choice systems change grant program. Progress and challenges of the FY 2004 grantees: Fifth year report*. Washington, DC: Centers for Medicare and Medicaid Services.

³¹³ Greene, A. M., J. O'Keeffe, et al. (2007). *Real choice systems change grant program. Progress and challenges of the FY 2004 grantees: Fifth year report*. Washington, DC: Centers for Medicare and Medicaid Services.

³¹⁴ Mollica, R. (2003). Coordinating services across the continuum of health, housing, and supportive services. *Journal of Aging and Health*. 15(1), 165-188.

³¹⁵ Stefanacci, R. G., P. M. Podrazik. (2005). Commentary on special article; Assisted living facilities: Optimizing outcomes. *Journal of the American Geriatrics Society*. 53(3): 538-540.

³¹⁶ Hawes, C., C. D. Phillips, et al. (2005). Assisted living in rural America: Results from a national survey. *The Journal of Rural Health*. 21(2), 131-139.

³¹⁷ Scheppach, R. (2001). *Testimony by NGA Executive Director Ray Scheppach on state innovations on long-term care*. Washington, DC: Senate Special Committee on Aging

assistance for lower income households. The Department of Housing and Urban Development (HUD) pays the difference between the HUD-established allowable rent and the occupant's payment to the housing owner.

Oregon has made heavy use of publicly funded assisted living and adult family homes (small family-run businesses that usually serve five or fewer people) in its system of long-term care. Wisconsin uses both state funds and Medicaid waiver funds to provide residential care services in both assisted living facilities and board and care homes. However, emphasis is given to community options that are least institutional and more home-based. Persons who are transitioning from nursing homes are given priority for home and community services.³¹⁸ Wisconsin has added dementia care and expanded disability care in assisted living and family care homes. Quality of care in these settings has been an ongoing concern, and regulations requiring outcome-oriented training requirements and regular inspections have been established.³¹⁹ In 2002, Alabama received federal approval for the use of Medicaid waiver funds to pay for people with dementia to stay in specialty care assisted living facilities.³²⁰

States are becoming more involved in efforts to monitor compliance and quality of assisted living facilities, although consumer information that permits comparisons among facilities is rare. State regulations of the facilities tend to establish the characteristics of people who may be served (especially the health and functional requirements) and the services that facilities may offer. A small number of states are currently in the process of developing methods for rating or profiling assisted living facilities. For instance, Alabama developed a scoring system based on deficiencies identified in surveys and Maine has developed quality indicators based on the Resident Assessment Instrument, which was developed from the nursing home Minimum Data Set instrument.³²¹

Implications Regarding Housing

- States are developing mechanisms aimed at increasing housing with visitability and housing and other environments that are more accessible and meet universal design standards.
- States are implementing programs to make use of assisted living facilities and other supportive housing within their Medicaid and non-Medicaid long-term care programs.
- States are establishing approaches aimed at addressing the levels and types services and service quality provided in assisted living facilities.

³¹⁸ Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources*. Washington, DC: Administration on Aging.

³¹⁹ Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources*. Washington, DC: Administration on Aging.

³²⁰ Coleman, B., W. Fox-Grage (2003). *State Long-term care: Recent developments and policy directions*. Washington, DC: Forum for State Health Policy Leadership at the National Conference of State Legislatures.

³²¹ Molloca, R. L. (2006). *Residential care and assisted living: State oversight practices and state information available to consumers*. Rockville, MD: Agency for Healthcare Research and Quality.

Rebalancing/Diversion

For many years, states have been concerned about the number of nursing home beds within their jurisdictions because in general, more beds lead to more prevalent use of nursing homes. States have used certificate of need regulations or moratoria to limit the supply of nursing home beds for more than 30 years as a method of cost containment. Efforts to control nursing home use through targeted community services are more recent, but they have gained momentum in the current decade.³²² Several studies have suggested that the care provided through home- and community-based services can delay or avoid the need for institutional care. In 2006, approximately three-fourths of all states were planning to expand their community-based long-term care services by 2007.³²³

Single Entry Points

Many states have developed or are in the process of developing assessment and information systems that provide a single point of long-term care entry for individuals requiring assistance.²² Wisconsin's Aging and Disability Resource Centers (ADRCs) provide a one-stop single point of entry for all publicly funded long-term care services. The service is available for both Medicaid eligibles and non-Medicaid eligibles. For those who are eligible for Medicaid, the ADRCs produce an appropriate care plan and provide assistance in enrolling in a care management organization, if desired. All who contact the ADRCs have access to information on transportation, food stamps, employment, home maintenance, legal services, assistance with Medicare, Social Security, and other public services. The ADRCs offer 24-hour crisis intervention and emergency services, and they conduct outreach to both older persons and younger persons with disabilities. Long-term care facilities are required to provide information about the ADRCs.³²⁴

In 2001, the Oregon Department of Human Services was re-organized to consolidate its eight health services divisions into three clusters, with one cluster consolidating portions of the Senior and Disabled Services Division, the Mental Health and Developmental Disability Division, and the Vocational Rehabilitation Office into a Seniors and People with Disabilities Office. Both Medicaid and long-term care services are administered at the local level. Oregon created one division because the state determined that it is very difficult to ensure service integration solely through inter-agency collaboration. The system is based on the philosophy that people are entitled to home- and community-based care in the same way that they are entitled to nursing home care, so that when people are financially and physically eligible for nursing home care, they should be able to choose between the two options. Information about aging services and eligibility determination is provided through a single entry point system. To be effective in delivering home and community services, Oregon established programs to enhance the home and community infrastructure, including seamless funding within a single budget, state support for and quality control of assisted living, and extensive use of adult foster

³²² Weiner, J. M., D. G. Stevenson, et al. (1998). *Controlling the supply of long-term care providers at the state level: Occasional paper number 22*. Washington, DC: Urban Institute.

³²³ Smith, V., K. Gifford, et al. (2006). *Low Medicaid spending growth amid rebounding State revenues: Results from a 50-State Medicaid budget survey State fiscal years 2006 and 2007*. Washington, DC: Kaiser Family Foundation.

³²⁴ Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources*. Washington, DC: Administration on Aging.

homes.³²⁵ In a recent planning report, the Oregon Department of Human Services, Seniors, and People with Disabilities emphasized the importance of having a full complement of accessible home and community services as a key to permitting the appropriate residence of disabled in the community and limiting nursing home use.³²⁶

Ohio's PASSPORT Program uses Area Agencies on Aging as the single point of entry and coordination for long-term care. Funding sources include the Medicaid Home and Community Based Waiver Program, although local county tax levy funds in 60 of Ohio's 88 counties provide services that would otherwise not be available. Extensive use is made of the existing service network. The Massachusetts Aging Services Access Points program also makes extensive use of Area Agencies on Aging for access to both institutional and home and community care. It facilitates one-stop shopping for services offered through several different funding streams and serves diverse populations.³²⁷ In collaboration with the Administration on Aging, CMS has awarded 43 ADRCs to develop one-stop shopping for long-term care services.³²⁸ Maryland has recently expanded its ADRC program, Maryland Access Point, to four pilot sites.³²⁹

Pre-Admission Screening/Gatekeeping and Care Planning

In 1996, Maine established a statewide integrated pre-admission screening program, in conjunction with care planning. The program determines medical eligibility (using nurse assessors) for Medicaid and state-funded home and community services and develops a service plan that gives clients estimates of available public support for home- and community-based services and the out-of-pocket costs of different options. For eligible persons who choose to receive home care, the service plan serves as the authorization for Medicaid or state-funded home- and community-based care. Individuals can be authorized for services up to 85 percent of the cost of nursing home care. Individuals who do not meet full eligibility for services can receive them on a sliding fee scale through state funds.³³⁰

In 2001, Minnesota dramatically revised its pre-admission screening program to include assessment of needs, assistance in identifying and recommending cost-effective home- and community-based services, development of a community support plan, preliminary determination of eligibility for public program support, and transition assistance for currently institutionalized people. People requesting long-term care services must be visited within ten

³²⁵ U.S. Department of Health and Human Services. (2005). *Long-term care systems for the aged and Americans with disabilities: State profiles*. Rockville, MD: U.S. Department of Health and Human Services.

³²⁶ Oregon Department of Human Services Seniors and People with Disabilities. (2006). *Recommendations on the future of long-term care in Oregon*. Salem, OR, Department of Human Services Seniors and People with Disabilities.

³²⁷ Gage, B., J. Weiner, et al. (2004). *Redesigning long-term care systems through integrated access and services; Report prepared for the Administration on Aging*. Waltham, MA: RTI International.

³²⁸ CMS. (2006). *Invitation to apply for Y2007: Money Follows the Person Rebalancing Demonstration*. Baltimore, MD: Centers for Medicare and Medicaid Services.

³²⁹ Maryland Department of Aging. (July 2007). Personal communication.

³³⁰ Gianopoulos, C., E. J. Bolda, et al. (2001). What works? Maine's statewide uniform assessment and home care planning system tells all. *The Gerontologist*. 41(3), 309-311

working days of the request, and no individual or family member can be charged for the initial assessment or initial support plan development.³³¹ As of 2004, Minnesota spent approximately 59 percent of its Medicaid long-term care expenditures on home- and community-based services, versus 41 percent on institutional services.³³²

The New York State Office of Mental Health has established two small-scale programs to assist older individuals with mental illness. A Gatekeeper Program is designed to identify at-risk older adults in the community who are not connected to the service delivery system. Gatekeepers are non-traditional referral sources, such as building superintendents, police officers, and utility providers who come in contact with older adults as part of their work activities. New York's Physical Health-Mental Health Integration Program is designed to increase coordination, collaboration, and integration of physical and mental health services for older adults, with a focus on chronic disease, alcohol use, and depression. For both of these programs, individuals who are identified are likely to be eligible for Medicaid or near eligibility, and early identification and support can potentially delay or limit the need for more costly services. These two programs are funded through the New York State Office of Mental Health and the New York State Office for the Aging.

Nursing Home Diversion and Transition Programs

CMS has for some time been interested in rebalancing Medicaid long-term care by giving greater emphasis to home and community services than in the past. Its Real Choice Systems Change program was initiated in FY 2001, and since that time \$245 million has been awarded to states. Wisconsin's Homecoming Project was an early CMS-funded nursing home transition program. Rather than establishing a standard process for facilitating transitions, the state allowed each of eight Centers for Independent Living to establish its own approach. The average cost per transition was \$4,722. Approximately 65 percent of the total costs were for direct transition expenses, such as home modifications, rental deposits, and household items required for the move. The remaining expenses covered costs of the Centers for Independent Living and project staff. Wisconsin initially planned to focus on people aged 65 and older with physical impairments. However, of the 81 people who transitioned in this early version of the program, half were under age 65 with physical impairments, and an additional 15 people were under age 65 with a diagnosis of mental illness or developmental disability. Approximately two-thirds of those transitioned moved to their own home or to an apartment, while the remainder moved into congregate living facilities. Although information on recidivism is limited, it suggests that there have been few returns to nursing homes among persons transitioned through the Homecoming Project.³³³

³³¹ Aurbach, R., S. Reinhard. (2005). *Minnesota long-term care consultation services*. New Brunswick, NJ: Rutgers Center for State Health Policy.

³³² Houser, A., W. Fox-Grange, et al. (2006). *Across the States: Profiles of long-term care and independent living, Seventh Edition*. Washington, DC: AARP Public Policy Institute.

³³³ Eiken, S., D. Stevenson, et al. (2002). *The Home Coming Project: Wisconsin's nursing home transition demonstration, MEDSTAT*. <http://aspe.hhs.gov/daltcp/reports/WItrans.htm>.

The final report for the first seventeen states, including Maryland, to receive nursing facility transition grants under the CMS Real Choice Systems Change program was completed in August 2006. A total of 3,371 persons transitioned from nursing homes and an additional 226 persons diverted from nursing homes. However, although many successful transitions have occurred, there are numerous barriers to transitions or diversions. States have reported that these barriers were lack of affordable and accessible housing; limited appropriate home and community services and restrictive eligibility criteria for using them; limited funding for case management and relocation assistance; various administrative and bureaucratic barriers (e.g., delays in waiver eligibility determination, dealing with multiple programs); resistance to transition and independent living on the part of family members and nursing home staff; shortage of long-term care workers; and transportation issues.³³⁴

Seventeen states, including Maryland, were awarded Money Follows the Person demonstration programs, which provide Medicaid beneficiaries with home- and community-based support that will permit them to reside in the community rather than institutional settings.³³⁵ The program provides enhanced Medicaid funds for home and community services upon the transition of an individual from an institution to the community. An evaluation of an earlier version of Money Follows the Person demonstrations in states that were initially involved in the program (California, Idaho, Maine, Michigan, Nevada, Pennsylvania, Texas, Washington, and Wisconsin) found that a substantial percentage of persons who were discharged from nursing homes through the program (e.g., 65 percent in Wisconsin and 32 percent in Texas) were transitioned to residential care facilities (assisted living facilities or adult foster homes). The remainder of transfers from nursing homes in Wisconsin and Texas went to family settings or lived alone.³³⁶ Approximately half of those who transitioned out of nursing homes had been nursing home residents for six months or less.

An investigation of early Money Follows the Person programs in five states (Alaska, Connecticut, Michigan, Washington, and Wisconsin) sought to directly measure actual levels of transition (versus those that would have occurred without the program) and costs/savings. The methods for determining costs and savings varied considerably from state to state. Wisconsin, which used the most complete cost model, estimated savings of \$23 per day. As of June 2006, Alaska, which has very high nursing home costs, had transferred 130 people and estimated an annual cost savings of \$85,700 per person-year, while Connecticut estimated a cost savings of \$35,000 per person-year. Although Michigan has completed only limited cost studies of its program, available information suggests that some savings may have been realized. Thirty-two of the 112 persons transitioned from facilities required no further state services after the transition. Additionally, 50 percent received post-transition services that cost an average of \$917 per month, versus an average nursing home cost of \$3,450 per month. Washington, which has had a very aggressive diversion program, compared the actual nursing home case load in

³³⁴ O'Keffe, J., C. O'Keffe, et al. (2006). *Real Choice Systems Change grant program: FY 2001 Nursing Facility Transition Grantees; Final report to U.S. Department of Health and Human Services*. Research Triangle Park, NC: RTI International.

³³⁵ Alabama Department of Senior Services. (2006). *State plan on aging: Fiscal years 2007-2010*. Montgomery, AL: Alabama Department of Senior Services.

³³⁶ Anderson, W. L., J. M. Weiner, et al. (2006). *Money Follows the Person initiatives of the Systems Change grantees*. Research Triangle Park, NC: RTI International.

FY 2006 (12,051, down from 15,000 in FY 1997) to the nursing home case load that would have existed for the state, assuming a 3 percent annual growth rate (26,249). Although this approach does not provide specific cost savings data, it does suggest that the diversion program may well limit nursing home use.³³⁷

It should be noted that in assessing the cost savings of nursing home transition programs, most states have focused solely on the difference between the nursing home cost for a person and the combination of one-time transition costs, program administration costs, and the cost of community services. Few states have directly addressed the real impact of a transitioned institutional resident on nursing home use (e.g., would the person have been discharged without the transition services?), whether there is “backfill” in terms of the bed being directly used by a new admission, or the fact that as nursing home occupancy declines, the per diem rate for remaining persons, overall, tends to increase.³³⁸ These important interactions between service categories complicate the determination of the actual cost of changes in any long-term care program.

Louisiana is developing plans to transition individuals with developmental disabilities from large institutions to smaller group settings or the community. Part of its plan includes the closure of a 250-bed intermediate care facility for the mentally retarded (ICF/MR) and relocating the residents to small privately owned community facilities. The plan also addresses the importance of transitioning services by reallocating professional staff to provide direct services and transportation. Costs of the transition plan were funded through a \$12 million allocation from the state legislature and \$7 million from Social Services Block Grant funds. Staff working on the grant have also established plans for downsizing four large private ICF/MRs, which will ultimately reduce the large-facility ICF/MR population by approximately 400 beds.³³⁹

In 2000, Missouri authorized five “aging in place” demonstration projects that are aimed at diverting older people living in residential care facilities from nursing home admission. The projects provide a full range of mental and physical health services that can be adapted as service needs change.³⁴⁰

Reduction of Nursing Home Beds

Iowa’s Senior Living Trust provides financial assistance to nursing facilities to convert nursing home beds to assisted living beds. Participating facilities are required to serve at least

³³⁷ Hendrickson, L., S. C. Reinhard. (2006). *Money Follows the Person: State approaches to calculating cost effectiveness. Community Living Exchange: Discussion Paper funded by Centers for Medicare and Medicaid Services.* New Brunswick, NJ: Rutgers Center for State Health Policy.

³³⁸ Hendrickson, L., S. C. Reinhard. (2006). *Money Follows the Person: State approaches to calculating cost effectiveness. Community Living Exchange: Discussion Paper funded by Centers for Medicare and Medicaid Services.* Washington, DC: Rutgers Center for State Health Policy.

³³⁹ Greene, A. M., J. O’Keeffe, et al. (2007). *Real choice systems change grant program. Progress and challenges of the FY 2004 grantees: Fifth year report.* Washington, DC: Centers for Medicare and Medicaid Services.

³⁴⁰ Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources.* Washington, DC: Administration on Aging.

50 percent Medicaid clients and must be willing to eliminate a certified nursing bed for each assisted living bed.

Washington established a nursing home bed-banking system in which facilities can bank beds through two methods: (1) allowing facilities that are closing to sell the rights to their beds, or (2) giving facilities the opportunity to bank beds for alternative uses, such as conversion to assisted living beds. These bed-banking approaches limit the growth of beds or lead to actual reductions in the number of beds, because all beds that are banked continue to be counted as available in the state's calculation of bed need.³⁴¹

Indiana's state plan for aging and in-home services includes specific goals for the reduction of nursing home beds. It seeks to achieve the closure of 1,500 licensed, certified, and occupied nursing facility Title XIX beds through a combination of incentives and a direct sales effort to the nursing facility industry that will identify the beds to be closed.³⁴²

Implications Regarding Rebalancing/Diversification Programs

- Both states and CMS are actively involved in programs designed to reduce the reliance on nursing homes as the primary long-term care provider.
- Pre-admission screening, single point of entry, and money follows the person programs improve the possibility of diverting individuals from institutions and into community alternatives. Post admission identification of individuals who are willing and able to return to the community also appear to be working. However, such programs require a housing and service infrastructure that can support larger number of community residents who have substantial long-term care needs.
- One issue to be addressed in any such program is the assessment of the full cost of a transition, taking into account the backfill of nursing home beds, the possibility that nursing home costs will increase as the number of residents declines, and the cost of all supportive services in the community.

The Long-Term Care Work Force

As discussed In Chapter II and elsewhere in this report, the aging of the population and other factors are leading to increases in the numbers of people with disabilities, while the informal assistance is diminishing. The result is greater pressure on the long-term care work force. Some states are beginning to develop programs that seek to recruit or retain long-term care workers. For example, the Iowa Legislature established a Certified Nursing Assistant Recruitment and Retention Project that was funded through the Iowa Department of Human Services. The project was conducted in selected nursing homes as well as in community settings. A treatment-comparison approach was used for the facilities. The goal of the program was to reduce certified nursing assistant (CNA) turnover by addressing the needs that the workers themselves identified. The four top needs reported by the CNAs were short staffing;

³⁴¹ Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources*. Washington, DC: Administration on Aging.

³⁴² Indiana Division of Aging (2006). *Indiana state plan for aging and in-home services*. Indianapolis, IN: Indiana Family and Social Services Administration, Division of Aging.

limited wages and benefits; relationships with/lack of respect by supervisors; and limited education, training, and orientation. Among the interventions employed with the treatment group were conflict resolution training, team building and communication training, recognition programs, training on caring for Alzheimer's residents, CNA support group meetings, CNA mentor training, and training on communicating with dying residents and their families. Over the two-year project period, the average length of employment for CNAs in the treatment facilities was 19 months, versus 10 months in the comparison facilities. The treatment group also reported higher job satisfaction.³⁴³

Michigan dedicated \$1.7 million in tobacco tax funds for state long-term care workforce innovation grants that were used to establish a stakeholder commission and fund staff positions designed to address long-term care workforce capacity and quality.³⁴⁴ Middle-aged and older workers are a potentially valuable resource for sustaining the long-term care workforce. Michigan's Operation Able program (an organization specializing in recruiting, training, and redeploying workers aged 40 and over) completed an investigation of recruitment strategies that are used by long-term care facilities and the conditions needed to retain mature (age 55+) workers. Surveys were completed in long-term care settings in seven states, including Maryland. Among the major findings were the following: (a) mature workers are interested in paraprofessional health careers, (b) employers in long-term care settings have positive perceptions of mature workers, (c) there are real and perceived deterrents to hiring mature workers (e.g., perceptions that health care costs would increase, perceptions that age discrimination laws prohibit targeted recruitment, expectations about workers' reliance on public transportation, perceptions of technological illiteracy of mature workers, concerns about the cost and availability of CNA certification training, and wage expectations), and (d) frontline jobs in home health agencies are more conducive to the needs and interests of mature workers than are direct-care jobs in nursing homes. Results of the survey suggest that there are unfulfilled opportunities for attracting mature workers into long-term care positions.³⁴⁵

Vermont's state plan seeks, as funds permit, to improve wages and benefits for personal caregivers in all settings until caregivers receive a starting wage of at least \$10 per hour, along with benefits such as health insurance, sick time, and vacation leave, with wages in all settings increased annually by an inflation factor.³⁴⁶

Maryland has a program called the Legacy Leadership Institute, located at the University of Maryland (College Park) Center on Aging. In response to surveys of baby boomers, a program was designed to help them pursue sustained and intensive involvement in volunteer activities. Respondents indicated that they were interested in opportunities that

³⁴³ Iowa CareGivers Association. (2000). *Certified nursing assistant recruitment and retention project: Final report summary*. Des Moines, IA: Iowa CareGivers Association.

³⁴⁴ Scheppach, R. (2001). *Testimony by NGA Executive Director Ray Scheppach on state innovations on long-term care*. Washington, DC: Senate Special Committee on Aging.

³⁴⁵ Hwalek, M., V. Essenmacher. (2005). *Older workers in direct care: A labor force expansion study*. Detroit, MI: Operation ABLE of Michigan.

³⁴⁶ Vermont Department of Aging and Disabilities. (2004). *Shaping the future of long term care and independent living: 2003-2013*. Waterbury, VT: Vermont Department of Aging and Disabilities.

involved personal growth and lifelong learning, participation in a purposeful social network toward a clearly defined goal, and service in a well designed, meaningful role. The Legacy Leadership Institute evolved to develop programs for the recruitment, education, and retention of aged fifty-plus volunteers.³⁴⁷

It should be noted that state efforts to enhance consumer direction of care, discussed elsewhere in this chapter, can also be reasonably considered means of enhancing the long-term care work force. These programs tend to recruit caregivers who would otherwise not be in the long-term care work force.

Implications Regarding the Long-Term Care Work Force

- States are beginning to establish programs that enhance the recruitment and retention of long-term care workers, including increasing wages and benefits, providing training, and establishing recognition programs. In some cases, states are identifying new sources of funding to support these workforce enhancement programs.
- Middle-aged and older individuals are a potential resource for enhancing the long-term care workforce.
- Consumer-directed care has the potential for increasing the long-term care workforce by attracting individuals who would not otherwise be long-term care workers.

Service Integration/Care Management

Numerous states are placing greater emphasis on more effective service integration and coordination.³⁴⁸ Interdisciplinary care teams that address communication and coordination across providers and settings can help avoid potentially serious problems and improve the efficacy of acute and long-term care.³⁴⁹ The Arizona Long-Term Care System (ALTCS) was the first capitated Medicaid long-term care program to operate statewide. It provides both acute and long-term care for enrollees and is their sole source of Medicaid-funded long-term care services. Younger people, as well as persons aged 65 and older, are potentially eligible. Enrollees must qualify for a 90-day nursing home stay, although they are not required to experience a nursing home stay before being covered. Costs are controlled through aggressive screening. As an example of the very tight eligibility controls, although 97 percent of ALTCS enrollees need help with toileting and eating, only 65 percent of nursing home residents nationwide require this level of assistance.³⁵⁰ The program also incorporates financial

³⁴⁷ Wilson, L.B., et. al. (2006). Legacy leadership institutes: Combining lifelong learning with civil engagement. In L.B. Wilson and S.P. Simson, eds. *Civic engagement and the Baby Boomer generation*. New York: Haworth Press.

³⁴⁸ Alabama Department of Senior Services. (2006). *State plan on aging: Fiscal years 2007-2010*. Montgomery, AL: Alabama Department of Senior Services.

Smith, V., K. Gifford, et al. (2006). *Low Medicaid spending growth amid rebounding state revenues: Results from a 50-state Medicaid budget survey state fiscal years 2006 and 2007*. Washington, DC: Kaiser Family Foundation.

³⁴⁹ Parry, C., E. A. Coleman, et al. (2003). The care transitions intervention: A client-centered approach to ensuring effective transfers between sites of geriatric care. *Home Health Care Services Quarterly*. 22(3): 1-17.

Temkin-Greener, H., D. Gross, et al. (2004). Measuring interdisciplinary team performance in a long-term care setting. *Medical Care*. 42(5), 472-481.

³⁵⁰ Weissert, W. G., T. Lesnick, et al. (1997). Cost savings from home and community-based services: Arizona's capitated Medicaid long-term care program. *Journal of Health Politics, Policy, and Law*. 22(6), 1329-57.

incentives that encourage the utilization of lower-cost care, and it makes aggressive use of home- and community-based services. A CMS-funded evaluation of the ALTCS estimated that the capitated system saved 16 percent of the costs that would have been incurred for nursing home care if Arizona had a traditional Medicaid program.³⁵¹ Another study compared the ALTCS to other state Medicaid programs and estimated that the ALTCS produced savings of approximately 35 percent of the nursing home costs that would have been incurred without it.³⁵² The CBO has noted that the very strict eligibility requirements of the ALTCS may mean that many individuals who are significantly impaired may not qualify and may therefore be required to purchase needed long-term care, may depend more heavily on informal care, or could be making greater use of the acute care system.³⁵³

The Texas STAR+Plus program was initiated in Harris County in 1998. The program integrates acute and long-term care through a managed care system for aged and disabled Medicaid recipients. STAR+Plus is mandatory for SSI eligibles aged 21 and over and certain other Medicaid recipients. By the end of 2001, approximately half of the 54,895 enrollees were dually eligible. Enrollees can choose from several contracting HMOs, which provide all Medicaid acute and long-term care services. The dually eligible receive their acute care through Medicare. The state mandated that all Medicaid long-term care providers that were willing to accept the HMO rates under STAR+Plus and that met the HMO credentialing standards be given a managed care contract, and almost all long-term care providers joined an HMO network. Consumer satisfaction has been relatively high.³⁵⁴ Though detailed cost reports are unavailable, the program reports higher use of personal assistance services than among fee-for-service enrollees; reports also indicate increases in community-based alternative services and declines in inpatient hospital utilization. In 2001, approximately 10 percent of STAR+Plus enrollees were in nursing homes, while 15 percent were receiving home- and community-based care, and 74 percent were receiving no long-term care.³⁵⁵ Although there is evidence of overall cost savings under STAR+Plus (approximately \$17 million in one highly populated county in the first two years of operation),³⁵⁶ there is very limited information regarding long-term care savings, especially nursing home cost savings, resulting from the STAR+Plus program.³⁵⁷

³⁵¹ McCall, N., C. W. Wrightson, et al. (1996). *Evaluation of Arizona's Health Care Cost Containment System demonstration, final report*. San Francisco, CA: Laguna Research Associates.

³⁵² Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources*. Washington, DC: Administration on Aging.

³⁵³ Congressional Budget Office. (2004). *Financing long-term care for the elderly*. Washington, DC: U.S. Congress Congressional Budget Office.

³⁵⁴ Texas Department of Human Services, Managed Care Division. (2002). *STAR+Plus: A Medicaid managed care program for SSI and SSI-related recipients*. http://www.ltcu.ucla.edu/CD_retreat/Interactive_Session_Texas_StarPlus/Interactive%20Session-%20Texas%20Star+Plus.

³⁵⁵ Texas Department of Human Services, Managed Care Division. (2002). *STAR+Plus: A Medicaid managed care program for SSI and SSI-related recipients*. [http://www.ltcu.ucla.edu/CD_retreat/Interactive_Session_Texas_StarPlus/Interactive%20Session-%20Texas%20Star+Plus.ppt#287,14,STAR+PLUS Services](http://www.ltcu.ucla.edu/CD_retreat/Interactive_Session_Texas_StarPlus/Interactive%20Session-%20Texas%20Star+Plus.ppt#287,14,STAR+PLUS%20Services).

³⁵⁶ Ignagni, K. (2006). *Testimony on long-term care*. Washington, DC: House Committee on Energy and Commerce, Subcommittee on Health.

³⁵⁷ Texas Health and Human Services Commission. (2007). *Medicaid managed care review--final version* http://www.hhsc.state.tx.us/medicaid/MMCR_Main/MMCR_PDF_frontpage.htm.

Texas is in the process of expanding the program to include a hospital carve-out and to add several additional counties.³⁵⁸

The Program of All-Inclusive Care of the Elderly (PACE), developed as an alternative to traditional long-term care, addresses the functional independence of low-income seniors who are nursing home certifiable but want to remain in the community as long as possible.³⁵⁹ Enrollees in most of the PACE programs must be at least 55 years old and live within the program service area. The program provides individualized care by a team of professionals, usually at adult day care centers. The multidisciplinary team consists of a physician (often a geriatrician), nurse, social worker, ancillary therapists, as well as additional professional and non-professional staff. PACE staff members monitor their clients across primary, acute, and long-term care settings, and are involved with the planning of the client's discharge in all settings. This approach to care can address and limit the risks associated with uncoordinated care as the client's needs change. The programs usually contract with medical providers but retain responsibility for the management of services and reimbursements.³⁶⁰ PACE programs receive capitated funds from Medicare and Medicaid, which helps overcome problems with differing funding streams. The average participant is 80 years of age, with 7.9 medical conditions and 3 ADL limitations.³⁶¹ Slightly less than half of the PACE clients have a diagnosis of dementia. PACE clients tend to experience reduced utilization of nursing homes, fewer hospitalizations, relatively limited physical decline, greater use of ambulatory services, and better reported quality of life and health status than similarly situated non-recipients.³⁶² Assessments of PACE programs have demonstrated that they are generally efficacious and cost-effective models for coordinating long-term and acute care.³⁶³ PACE programs are relatively complex and difficult to establish, especially in rural areas, although models for rural PACE projects are being developed.³⁶⁴ Maryland has a PACE program operated by the Johns Hopkins Health System that serves an average of 100 participants a year.³⁶⁵

³⁵⁸ Texas Council for Developmental Disabilities. (2006). *For your information: Policy updates*. Austin, TX, Texas Council for Developmental Disabilities. <http://www.txddc.state.tx.us/resources/publications/fyi/fyi28/fyistate28.asp>.

³⁵⁹ Friedman, S. M., D. M. Steinwachs, et al. (2005). Characteristics predicting nursing home admission in the Program of All-Inclusive Care for Elderly People. *The Gerontologist*. 45(2), 157-166.

Lynch, M., C. L. Estes, et al. (2005). Chronic care initiatives for the elderly: Can they bridge the gerontology-medicine gap? *The Journal of Applied Gerontology*. 24(2), 108-124.

Mollica, R. (2003). Coordinating services across the continuum of health, housing, and supportive services. *Journal of Aging and Health*. 15(1), 165-188.

³⁶⁰ Lynch, M., C. L. Estes, et al. (2005). Chronic care initiatives for the elderly: Can they bridge the gerontology-medicine gap? *The Journal of Applied Gerontology*. 24(2), 108-124.

³⁶¹ National PACE Association. (2002). *Who does PACE serve?* <http://www.npaonline.org/webiste/article.asp?id=50>.

³⁶² Lynch, M., C. L. Estes, et al. (2005). Chronic care initiatives for the elderly: Can they bridge the gerontology-medicine gap? *The Journal of Applied Gerontology*. 24(2), 108-124.

Friedman, S. M., D. M. Steinwachs, et al. (2005). Characteristics predicting nursing home admission in the Program of All-Inclusive Care for Elderly People. *The Gerontologist*. 45(2), 157-166.

³⁶³ Gross, D. L., H. Temkin-Greener, et al. (2004). The growing pains of integrated health care for the elderly: Lessons from the expansion of PACE. *The Milbank Quarterly*. 82(2), 257-282.

Palley, H. A. (2003). Long-term care policy for older Americans: building a continuum of care. *Journal of Health and Social Policy*. 16(3), 7-18.

³⁶⁴ National PACE Association. (2002). *Setting the PACE for rural elder care: A framework for action*. <http://www.nrharural.org/pubs/pdf/PACEbrch.pdf>.

³⁶⁵ Glossner, D. Center for Health Program Development and Management, UMBC. (2007, September). Personal communication.

Utah has implemented a Long-term Care Managed Care Initiative designed to establish a comprehensive medical case management plan for Medicaid beneficiaries who require long-term care. Individuals in one of the several programs in the initiative receive state plan services including hospitalization, medical transportation, and physician/pharmacy services. In some of the programs, they also receive mental health services. Utah also offers free web-based and telephone referral services.³⁶⁶

Minnesota, New Mexico, Oregon, Vermont, and Washington have either consolidated their long-term care services or are in the process of doing so. These five states are also among the top six states in terms of their allocation of Medicaid long-term care funds to home and community care, versus institutional care, suggesting that rebalancing may be easier to accomplish within a consolidated structure.³⁶⁷ Maryland has been considering options for long-term care reform as well.

Implications Regarding Service Integration/Management

- States that have established community services integration systems, where possible, are pooling Medicare and Medicaid funds, and with careful controls on who can receive services, experience reductions in nursing home utilization and in costs.
- PACE programs can serve as models for service integration, although they are complex and their reliance on adult day care limits their potential for growth, especially in rural areas.
- States that consolidate their long-term care services appear to have moved more quickly toward rebalancing long-term care services to emphasize home and community care.

Other Issues

Benchmarking

An interesting aspect of the Minnesota plan through 2030 is the establishment of specific benchmarks. Although other states should generate their own benchmarks, based on long-term care goals and system characteristics, Minnesota's benchmarks, presented below, may be a useful starting point because they would be relatively easy to track.³⁶⁸

- Nursing home beds per 1,000 persons age 85 and older
- Percent of Medicaid dollars spent on community-based services
- Percent of Medicaid dollars spent on consumer-directed care
- Percent of providers having and using consumer satisfaction surveys
- Disability rates in the older population

³⁶⁶ Office of the Executive Director, Utah State Department of Human Services. (2005). *Utah's long-term care system*. http://www.hcbs.org/files/107/5316/EP&P_-_LTC_Paper_v7-12_vfinal.pdf.

³⁶⁷ Fox-Grage, W., B. Coleman, et al. (2006). *Pulling together: Administrative and budget consolidation of state long-term care services*. Washington, DC: AARP Public Policy Institute.

³⁶⁸ Minnesota Department of Human Services. (2007). *Project 2030 report*. Minneapolis, MN: Minnesota Department of Human Services.

- Nursing home admission rates for less disabled elderly people
- Level of satisfaction with long-term care by both providers and consumers
- Level of use of pool staff in long-term care settings
- Staff turnover rates in long-term care settings
- Availability of quality profiles for all long-term care settings
- Percentage frail elderly receiving assistance from family caregivers
- Percentage of the population having private long-term care insurance coverage

Cultural Competency

Many state planning documents and long-term care guidelines emphasize the importance of cultural competency. Language competency of workers is an especially important element of long-term care because communication is a central element of the caregiving process. The importance of being able to communicate with non-English speakers tends to be emphasized.³⁶⁹ However, it is also reasonable to consider the value of competence among long-term caregivers in communicating with the majority of current recipients of long-term care, who can communicate only in English.

Working with Health Care Professionals

Hospital discharge staff members often do not have adequate time to organize efficient or effective transfers due to financial pressures.³⁷⁰ Other barriers to effective discharge planning include the lack of financial incentives, inadequate quality measures, limited formal relationships between and among sites, and untimely management of client data transmission, which is often complicated by the Health Insurance Portability and Accountability Act (HIPAA).³⁷¹ As a result, hospital discharge planners may not always consider all alternatives for patients who require post-admission long-term care, and service providers in the next setting may not receive complete information about a client's condition, prognosis, and type of care required. Improved transitional care planning and coordination may therefore minimize adverse outcomes, promote care continuity, and plan and deliver quality care that is appropriate for meeting people's needs. Indiana is working with hospital discharge planners to prioritize individuals for access to available home- and community-based services.³⁷² Doctors are also

³⁶⁹ California Department of Mental Health. (2000). *Cultural competence plan for long-term care*. Sacramento, CA: Department of Mental Health.

Arizona Department of Health Services. (2007). *Healthy Arizona 2010 Plan*.

Long-Term Care Community Coalition. (2007). Developing a new and better long-term care system in New York State. *Assisted living consult*. New York, NY: Long-Term Care Community Coalition.

Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources*. Washington, DC: Administration on Aging.

Texas-Health-and-Human-Services-Commission. (2007). *Medicaid managed care review--final version*.

http://www.hhsc.state.tx.us/medicaid/MMCR_Main/MMCR_PDF_frontpage.htm

³⁷⁰ Parry, C., E. A. Coleman, et al. (2003). The care transitions intervention: A client-centered approach to ensuring effective transfers between sites of geriatric care. *Home Health Care Services Quarterly*. 22(3), 1-17.

³⁷¹ Coleman, B. and W. Fox-Grage. (2003). *State long-term care: Recent developments and policy directions*. Washington, DC: Forum for State Health Policy Leadership at the National Conference of State Legislatures.

³⁷² Indiana Division of Aging. (2006). *Indiana state plan for aging and in-home services*. Indianapolis, IN: Indiana Family and Social Services Administration, Division of Aging.

often the decision-makers about long-term care. In Oregon, strong efforts have been made to educate doctors about the range of long-term care alternatives.³⁷³

Information Technology

Oregon has implemented a Comprehensive Assessment Reporting Evaluation (CARE) system. The system uses laptop computers to electronically enter data. The standardized information is automatically entered into a permanent database. Local Aging and Disability staff interview clients in their homes with an instrument that focuses chiefly on health and functional capacity. Because the laptops can automatically generate a care plan and specific referrals, care plans are expected to be more consistent and equitable. The assessments will ultimately be used to determine payment levels for residential care by classifying clients into different care categories.³⁷⁴

Implications Regarding Other Issues

- In planning for the future of long-term care, there are advantages to developing specific, measurable benchmarks that are related to a state's policy and program goals. Although individual programs tend to have benchmarks, development of a state-level set may motivate change as well as allow for regular determination of progress toward meeting the benchmarks.
- States are establishing cultural competency goals for long-term care. Such goals should take into account competency for work with majority populations of long-term care users, as well as minority populations.
- States are beginning to target those healthcare workers, especially physicians and hospital discharge workers, the professionals who are most likely to play a role in long-term care decisions, as a way of diverting individuals from institutional to community care.
- Use of information technologies has the potential to improve long-term care assessment and care planning.

³⁷³ U.S. Department of Health and Human Services. (2005). *Long-term care systems for the aged and Americans with disabilities: State profiles*. Rockville, MD: U.S. Department of Health and Human Services.

³⁷⁴ Wiener, J. M., B. Gage, et al. (2004). *Redirecting public long-term care resources*. Washington, DC: Administration on Aging.

VII. SUMMARY AND IMPLICATIONS: LONG-TERM CARE PLANNING IN MARYLAND

By 2030, the youngest of Maryland's baby boomers will be 66 years old and the oldest will be 84 years old. They will have joined their older baby boomer brethren as "senior citizens." Overall, the number of Marylanders aged 65 and older will have more than doubled, from just under 600,000 in 2005 to 1.3 million in 2030. The number of persons aged 5-64 reporting disabilities will increase as well from 335,500 in 2000 to an estimated 385,000 in 2030. With medical advances and new technologies both extending and enriching lives, persons of all ages with disabilities can look forward to a longer, fuller life, although not without need for appropriate long-term services and supports.

The State's existing system for the provision of long-term services and supports is likely to be overwhelmed by the aging baby boomers and anticipated trends in the prevalence and intensity of disability. Continued incremental growth in programs and services will not suffice to meet the State's needs in 2010, 2020, and 2030. By 2030, state costs for long-term care are projected to reach \$6.06 billion, a threefold increase from 2005 costs of \$1.99 billion. These are conservative estimates based on historical trends in utilization and costs. Costs could be considerably higher if the State does not proactively plan for the future.

This report examined current long-term services and supports available to Marylanders and the adequacy of those services. Below is a discussion of factors driving the need for an improved system of long-term care in the State, gaps in current services and the kinds of services that will be most needed in the future, and implications for the State in beginning to plan for the future.

Adequacy of Current Services

To assess the adequacy of current long-term services and supports across the state, state agencies and local jurisdictions completed a detailed service inventory. The inventory requested information on long-term services and supports in five broad categories: institutional, in-home, community, housing/residential, and mobility/transportation. Information on mental health services and services for persons with developmental disabilities was obtained as well. Data was collected on program type, geographic service area, eligibility, number of participants, expenditures, and funding sources. State and local agency representatives were asked to identify gaps by indicating waiting lists, resource shortages, and other service delivery challenges for each program.

Three major factors are contributing to gaps in service availability and access and driving the need for an improved system of long-term services and supports in Maryland:

- **The State's present long-term care system is already experiencing difficulty in meeting the needs of the current population of individuals aged 65 and over and persons with disabilities. The need for more affordable housing, transportation, and other crucial community-based long-term services and supports will only be**

exacerbated by the aging of the population. Marylanders will be competing for a limited supply of programs and services. Among those aged 65 and older, the largest growth will be in the aged 85 and older cohort, which will increase by two-and-a-half times, from 66,902 in 2000 to 164,975 in 2030. Individuals aged 65-74 will more than double as the last of the baby boomers reach age 65, from 321, 285 in 2000 to 722,513 in 2030. The number of younger persons with disabilities is also expected to increase at a time when this population is seeking to exercise self-determination and lead productive, fulfilling lives.

- **Population growth and the continuously evolving physical, cognitive, and mental health status of the population—as reflected in the ability of individuals to engage in activities of daily living (ADLs) and instrumental activities of daily living (IADLs)—will require creative new approaches to restructuring the State’s long-term care system to adequately and cost-effectively meet evolving needs.** There is evidence that disability in the older population has declined and that most of the decline has been in IADLs rather than ADLs, perhaps attributable to assistive technologies, environmental modifications, and earlier detection of and improved pharmacological treatment of diseases that lead to disability. However, the decline in family caregiving and informal supports may work against other gains in managing disability. Dementia among older adults is likely to be more prevalent as the population ages.
- **Agencies and programs will most likely continue to compete for public financing for long-term services and supports at the national, state, and local levels. Measures to promote optimal outcomes and efficiency in service delivery will be crucial to help ensure that future need for long-term services and supports is met.** Currently, eligibility, coverage, and payment policies are biased toward institutional care under both Medicare and Medicaid. Eligibility rules for Medicaid-financed community-based care and institutional care do not always align, so some individuals find that they will qualify for Medicaid only if they reside in an institution. The structure and financing of Medicare and Medicaid inhibit effective coordination of services for individuals who are eligible for both programs; often the result is inefficiency and duplication of services.³⁷⁵ State and local agencies offer a myriad of long-term care programs and services financed with state-only and local funds, but eligibility rules vary by program and service availability varies by region. If the State is to achieve its goal of rebalancing institutional and community-based care, financing and delivery systems must be structured to encourage investment in infrastructure development (e.g., shared eligibility systems, service facilities, labor force, affordable and accessible housing, transportation, regulatory oversight) to support the expansion of community-based programs.

State and local agencies across Maryland identified a number of gaps in long-term services and supports in the state:

³⁷⁵ Sundquist, D., A.S. King. (December 29, 2006). *Final report and recommendations: Medicaid Commission*. Washington, DC: U.S. Department of Health and Human Services.

- **In-home and community care:** As the state’s population ages, there will be a demand for more personal care services so that individuals can remain at home or in the community. Personal care is one of the most widely used Medicaid services, with more than 4,600 beneficiaries accessing this service in FY 2006 with expenditures of \$21 million. Personal care services are also provided to individuals participating in Medicaid waiver programs. An increase in waiver slots to accommodate increasing numbers of individuals on the waiting lists for the Older Adult, Living at Home, Traumatic Brain Injury, Autism, and Model Waivers would help close the gaps. Personal care services will be needed by private-pay individuals as well, particularly as family caregiving and informal support networks decline. Adult day care will also be in great demand, as will respite services for those families who are able to care for older and disabled family members. Funding and providers are needed for residential, day, and supports services for persons with developmental disabilities, many of whom are currently on waiting lists.
- **Institutional care:** Even though there will be a greater emphasis on community-based care in the future, institutional care will still be needed for the most seriously ill and disabled. As the number of individuals aged 65 and older increases, the number requiring nursing home care is expected to increase, even though the percentage of the older adult population using nursing home care will decline. Nursing home residents will tend to be sicker, requiring more intensive care. For those who can be discharged to the community, private duty nursing will be needed, at least for a time. In addition to nursing home expenditures of \$932 million in 2006, the Maryland Medicaid program spent \$37.6 million on in-home private duty nursing for 413 beneficiaries.
- **Housing:** The availability of accessible and affordable housing is a major concern of older adults and persons with disabilities, with a shortage of 157,000 units of affordable rental housing projected over the next seven years. A larger stock of affordable and accessible housing will be needed in Maryland. Without sufficient housing and supportive residential living opportunities, the state’s efforts toward rebalancing institutional and community care will be thwarted. The severe shortage that presently exists will only be exacerbated as the state’s population ages. With property values rising and more money to be made by selling or converting buildings to upscale condominiums or apartments, many property owners may opt out of the Section 8 subsidized housing program. State programs exist to support low-income persons in assisted living facilities, but individuals served by these programs only constitute approximately 10 percent of the total licensed assisted living beds in Maryland. Additional funding will be needed for housing transition services to assist individuals moving from institutions to the community.
- **Accessible and affordable transportation:** Gaps in transportation services for older adults and persons with disabilities persist due to an ever increasing demand for services; limited service availability in certain geographic areas; difficulty in recruiting taxi and sedan services to participate in public transportation programs, particularly in rural areas; rising labor costs; and the often prohibitive cost of investing in new capital and equipment. Accessible and affordable transportation is a necessary link to other

community-based services, enabling older adults and persons with disabilities to visit the doctor, go to adult day care, do household shopping, or participate in a supported work program.

- **Mental health services:** A more comprehensive system for providing mental health services to older adults and persons with disabilities will be needed if institutionalization is to be prevented and mental health conditions are to be managed in the community. Rural areas of the state report a shortage of mental health professionals, inpatient facilities, and residential rehabilitation programs.
- **Persons with developmental disabilities:** With ever-expanding need and escalating costs, services for persons with developmental disabilities are facing serious challenges. The anticipated shortage of health care workers and attendants, as well as affordable and accessible housing, will only worsen these problems.
- **Assistive technologies:** Investment in existing assistive technologies and development of new ones (i.e., equipment, devices, software, procedures, systems) will be key to helping older adults and persons with disabilities remain independent or limit dependence on direct human assistance. In FY 2006, 3,789 Medicaid beneficiaries received “durable medical equipment” at a cost of \$5.7 million; much of this was for assistive technologies such as canes, wheelchairs, and hearing aids. Universal design and visitability in housing and other settings also hold promise for improved management of disability.
- **Shared eligibility systems and consumer information:** Eligibility determinations and enrollment in state and local programs is often a program-by-program process. Many consumers and their families do not know where to begin when evaluating long-term care options and planning for services. Consumer education, easily-accessible information, and shared eligibility systems could simplify these processes.
- **Long-term care labor force:** Maryland is facing a severe shortage of health care workers needed to close existing service gaps and to meet the impending long-term care needs of the state’s baby boomers. Disparity in wages, lack of benefits, and frequent turnover resulting from burnout are but a few of the factors contributing to the dearth of health care workers.

Services Most Needed in the Future

In the coming decades, the services that will be most needed are those that will enable older adults and persons with disabilities to continue to live independently in the community for as long as possible. Maryland’s long-term care system presently offers many of the services that will be needed, but it will be important to invest in the development of new assistive technologies and find more efficient ways to deliver labor-intensive services to an expanding population. Consumers will be seeking more control over the services provided to them, either through self-directed care or more client-agency interaction. Self-directed care (also called consumer-directed care) could have an additional benefit, in that allowing consumers to hire

friends and family as caregivers may add to the pool of long-term care workers. As consumers move to exert more control over their care, they will demand ready access to comprehensive information on the kinds of long-term care services available in the state, streamlined eligibility processes, improved quality measures, and new payment options. This, in turn, will require strategic investment in the underlying infrastructure that supports the provision of long-term care services and supports in the state.

Planning for the Future

Where should Maryland begin? This report provides a comprehensive assessment of long-term services and supports currently funded by the State, the adequacy of those services, and the kinds of services that will be most needed to meet the demands of an aging population and persons with disabilities. In beginning to plan for systemic change, goals and objectives should be prioritized within realistic timeframes, working within the context of a number of important considerations. For example:

- The size, composition, and geographic location of the populations that will be served
- The desired health and quality of life outcomes
- The feasibility of a service or program achieving desired outcomes
- Cost-effectiveness of the program or service
- Adequacy of current resources and potential new sources of funding
- Adequacy of existing infrastructure (e.g., facilities, manpower, administrative capacity) to support the service or program
- Whether a Medicaid match or other federal funding would be available
- Whether federal approval will be required
- Short- and long-term costs to the State and local jurisdictions
- The timeframe for planning, implementation, and evaluation

The following guidelines may facilitate consideration by state policy makers of any systemic change, prioritization, or realignment of existing services or development of new services:

1. **Balance institutional and community care.** For the State to succeed in transitioning more individuals to community-based settings, adequate and affordable housing, transportation, and in-home and community services will have to be available. The State might consider restructuring financing systems to ensure that “money follows the person” from institutional setting to community-based setting. In addition, infrastructure development (e.g., shared eligibility systems, service facilities, workforce, affordable and accessible housing, transportation, regulatory oversight) could be encouraged, which will be crucial to the expansion of community-based programs.
2. **Encourage personal and societal responsibility.** It will be important for individuals to take charge of their health by adopting healthy lifestyles, seeking preventive health care, and actively participating in planning for their long-term care needs. Individuals should be encouraged to consider long-term care insurance as part of their long-term care

planning. An organized public education effort would help to engage the public and promote personal responsibility in these areas.

3. **Encourage private sector involvement.** The private sector has a role in long-term care planning as well, including promoting universal design for housing, developing transportation systems to complement the public transit systems, supporting informal caregivers, and providing consumer education and supports to caregivers. The public and private sectors could work together to educate consumers about long-term care service and financing options.
4. **Promote cooperation and collaboration.** Federal cooperation and participation will be required to address transportation system needs and the dearth of affordable housing, as well as continued or expanded financing of publicly funded long-term services and supports. Cross-agency cooperation at the federal, state, and local level will be crucial to addressing current gaps in services, as will collaborative planning by government and the private sector to promote more efficient and effective service delivery.
5. **Encourage identification of specific goals for systemic change.** Development and adoption of statewide, cross-agency goals and objectives for realigning the State's long-term care delivery and financing systems, along with the establishment of measurable benchmarks for assessing progress toward those goals, may help ensure that the State is able to meet Maryland's future long-term care needs.

Involvement of stakeholders from both the public and private sectors may further enrich the planning process.

Glossary

Active life expectancy: The number of years remaining without disability.

Activities of daily living (ADLs): Basic personal activities that include bathing, eating, dressing, mobility, transferring from bed to chair, and using the toilet.

Adult day care: Also known as medical day care, and for licensing purposes known as “Day Care for the Elderly and Adults with Medical Disabilities” as authorized by sections 2-104, 14-206, and 14-304 of the Maryland Annotated Code, and regulated by section 10.12.04 of the Maryland Code of Regulations, adult day care provides a variety of services that include nursing services, physician consultation, social services, rehabilitation activities, and other services intended to improve a participant’s well being. Day care centers cannot be open 24 hours a day, nor can they provide residential services. Centers may serve elderly persons and persons with mental illness or development disabilities.

Affordability: In this report, the ability of persons who are not eligible for state or federally funded or subsidized programs to pay for required services or supports.

Americans with Disabilities Act (ADA): Signed into law in 1990, the ADA prohibits discrimination based on disability, with disability defined as “a physical or mental impairment that substantially limits a major life activity.”

Assisted living: A residential or facility-based program that provides housing and supportive services, supervision, personalized assistance, health-related services, or a combination thereof that meets the needs of individuals who are unable to perform or who need assistance in performing the activities of daily living or instrumental activities of daily living in a way that promotes optimum dignity and independence for the individuals.

Assistive technology: The set of tools (equipment, devices, software, procedures, and systems) that can enhance independence or limit dependence on direct human assistance or that can facilitate and support the delivery of required human assistance.

Baby boomers: The post-war generation of Americans born between 1946 and 1964.

Cash and Counseling: A program that provides an individualized monthly budget to recipients of Medicaid personal care services or home- and community-based services. The individualized budget is used at the recipients’ discretion to purchase personal care services, necessary products such as disposable medical supplies, or to make home modifications to help them live independently.

Chronic hospital: Maryland’s chronic hospitals provide care to medically complex patients who have an ongoing need for hospital level of care and require constant medical or nursing care. The chronic hospital is a setting in which care is provided over a more extended period of time than in the typical acute care hospital.

Compression of morbidity: The theory that illness and disability will be moved further and further toward the end of life, producing more years without disability.

Congregate Housing Services Programs (CHSP): These programs provide supportive services to residents in selected independent living communities. Residents of congregate housing facilities live in their own apartments and receive supportive services on site to help them remain independent.

Consumer-directed care: A model of service delivery designed to increase the role of consumers in identifying, purchasing, and monitoring, their services. Also called self-directed care.

Continuing care retirement communities (CCRCs): Housing communities that provide different levels of care (independent living, assisted living, and skilled nursing care) based on the needs of their residents. Residents are able to move from one setting to another while remaining in the CCRC's community. CCRCs may require a lump-sum entrance fee in addition to monthly fees.

Costs: In this report, generally refers to projected costs to the state or other level of government.

Defined benefit: A retirement plan that guarantees a specific benefit based upon several factors, including years of service and wages.

Defined contribution: A retirement plan in which the employer guarantees that a specified amount of funds and/or stocks will be placed in an employee's retirement savings account.

Developmental disability: A mental or physical impairment or combination of mental and physical impairments that can be expected to continue indefinitely and may result in limitations in performance of activities of daily living and/or instrumental activities of daily living.

Disability: This report generally defines disability as dependence in one or more ADLS or IADLs. There are many other definitions of disability.

Disability counts: Estimates of the number of persons with a disability in a specified population.

Dual eligible: An individual who is eligible for both Medicare and Medicaid.

Expenditures: In this report, generally refers to funds actually spent.

Food insecure household: Households that, due to a lack of resources, experienced difficulty providing enough food for all members of the household at some point during a given year.

Health risk appraisal: An approach to collecting information from individuals that identifies risk factors, provides individual feedback, and links those who are assessed with interventions that promote health, sustain function, or prevent disease.

Health promotion: A combination of educational and environmental supports to promote lifestyle changes that are conducive to optimal health.

Home- and community-based services waiver programs: Programs authorized under Section 1915(c) of the Social Security Act and requiring approval from the Centers for Medicare and Medicaid Services that permit a state to waive certain Medicaid requirements in order to furnish an array of home- and community-based services that promote community living for Medicaid beneficiaries and, thereby, avoid institutionalization.

Home health agency: A public or private organization that provides home health services in the patient's home either directly or through arrangements with other organizations.

Informal supports/informal care: Care and support provided by family or friends, usually without pay.

Infrastructure: In this report, refers to agencies, facilities, operating equipment, labor force, local administrative direction, and regulatory oversight in a region or state.

Instrumental activities of daily living (IADLs): Household and/or independent living skills that include taking medications, using the telephone, money management, housework, meal preparation, laundry, and shopping.

Intermediate care facility-mentally retarded (ICF-MR): A licensed facility that provides health-related care and services to persons with mental retardation or development disabilities. These individuals do not require acute or skilled nursing care, but require care and services above the level of room and board care.

Life expectancy: Average years of life remaining at any age, based upon age specific death rates.

Long-term care: An array of short or long-term medical and/or social services designed to help people who have disabilities or chronic care needs. Services may be provided in a person's home, in the community, or in residential facilities.

MediCal: California's Medicaid program.

Medical technology: Those "tools" (e.g., medicines, rehabilitation strategies, surgery) that might delay, prevent, or cure or promote recovery from chronic disease that leads to disability.

Naturally occurring retirement communities (NORCs): A demographic term that describes neighborhoods or buildings where a large segment of the residents are older adults; generally as

a result of community residents aging in place or migration of older adults into the same neighborhoods with the intention of aging in place.

Older adult age-based dependency ratio: The number of people aged 65 and over (“dependent class”) to the number of working-aged adults (those who are 15 to 64 years old). The age-based dependency ratio is computed by dividing the number of people in the dependent class by the number of people in the working-age group, and then multiplying the quotient by 100 to arrive at a ratio of the dependent class per 100 working-age people. A ratio of less than 100 indicates that there are more adults of working age than there are “dependent” adults. A ratio greater than 100 means that there are more “dependent” adults than there are adults of working age.

Older adults, seniors, the elderly: Generally refers to individuals aged 65 and over.

Partnership for Long-Term Care: Programs that promote shared responsibility for financing long-term care services and supports by linking private insurance to Medicaid.

Poverty: A set of financial thresholds defined by the federal government based upon pre-tax income, family size, and age of family members.

Rebalancing/diversion: A strategy to transition elderly and disabled individuals from institutions to home- and community-based care, rebalancing the proportion of people in institutions versus the community.

Section 8: A federal program that provides rental assistance for lower income households. The Department of Housing and Urban Development (HUD) pays the difference between the HUD-established allowable rent and the occupant's payment to the housing owner.

Simplified employee pension (SEP) plans: Retirement plans for self-employed people or owners of small companies, which allow them to accrue tax-deferred savings for retirement.

Serious mental illness: Defined by type of disorder as well as severity. Serious mental illness includes, but is not limited to, diagnoses of moderate to severe schizophrenic disorders, affective psychoses, neurotic disorders, personality disorders, anorexia nervosa, depressive disorders, bi-polar affective disorder, and Alzheimer’s disease, among others. Generally, serious mental illness is so long-lasting and severe that it seriously interferes with a person's ability to take part in major life activities.

Smart home technology: Housing designs that integrate computer and communications technologies that simplify various aspects of living and can support those with disabilities.

Technology of self-care: Assistive devices that allow an individual to manage their daily activities on their own without human intervention.

Tele-home health technology: The package of technologies that make it possible to monitor patient condition and to complete personal communication between the patient and a health provider—often with real-time video.

Transitional housing: Housing programs that assist homeless and other at-risk persons locate and maintain permanent housing.

Universal design: Housing and other environmental design features that accommodate people with a wide range of abilities.

Visitability: In housing, having features that make the home easier for people with mobility impairments to live in and visit.

401(k) plans: Tax deferred defined contribution savings plans, sponsored by employers.

APPENDICES

Appendix 1

Maryland Health Care Commission Long-Term Care and Community-Based Services Advisory Committee

Elizabeth Bowerman
LifeSpan

Mark Leeds
DHMH, Office of Health Services
Long Term Care & Community Support

Angie Boyter
Consumer

Maureen Longobardi
Maryland National Capital Homecare
Association

Frank Chase
United Seniors of Maryland

Sister Karen McNally
Stella Maris, Inc.

Joseph DeMattos
AARP, Maryland

Mary Perkins
Health Facilities Association of Maryland

Michele Douglas
Alzheimer's Association

Festus Reynolds
Maryland Transportation Administration

Chloe Giampaolo
National Family Caregivers Association

Ilene Rosenthal
Maryland Department of Aging, Housing
Services

Keith Gibb
LifeSpan

Sue Vaeth
Maryland Department of Aging, Client &
Community Services

Margaret Hadley
Holy Cross Home Care & Hospice

Caroline Varney-Alvarado
Maryland Department of Housing &
Community Development

John Kardys
Department of Human Resources

Rhonda Workman
Maryland Department of Disabilities

Wendy Kronmiller
Office of Health Care Quality

Appendix 2

Maryland Long-Term Care Planning Act of 2006 (House Bill 1342)

UNOFFICIAL COPY OF HOUSE BILL 1342

J3

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By: ~~Delegate Kullen~~ Delegates Kullen, Barve, Benson, Boteler, Bromwell, Costa, Donoghue, Elliott, Frank, Hammen, Hubbard, Kach, Kohl, Mandel, McDonough, Morhaim, Murray, Nathan-Pulliam, Oaks, Pendergrass, Rudolph, V. Turner, and Weldon

Introduced and read first time: February 10, 2006

Assigned to: Health and Government Operations

Committee Report: Favorable with amendments House

action: Adopted

Read second time: March 20, 2006

CHAPTER

1 AN ACT concerning

2 **Long-Term Care Planning Act of 2006**

3 FOR the purpose of requiring the Department of Health and Mental Hygiene and the
4 Insurance Commissioner to make a certain report to the General Assembly, on
5 or before a certain date, on the implementation of the Maryland Partnership for
6 Long-Term Care Program; requiring the Maryland Health Care Commission to
7 conduct a certain study of the long-term care delivery system in the State;
8 requiring the Commission to submit a certain reports report, on or before ~~a~~
9 certain ~~dates~~ date, to the Governor and General Assembly; and generally
10 relating to the delivery of long-term care services.

11 BY repealing and reenacting, without amendments,
12 Article - Health - General
13 Section 15-401 through 15-406
14 Annotated Code of Maryland
15 (2005 Replacement Volume and 2005 Supplement)

16 BY repealing and reenacting, with amendments,
17 Article - Health - General
18 Section 15-407
19 Annotated Code of Maryland
20 (2005 Replacement Volume and 2005 Supplement)

2

UNOFFICIAL COPY OF HOUSE BILL 1342

1 SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF
2 MARYLAND, That the Laws of Maryland read as follows:

3

Article - Health - General

4 15-401.

5 (a) In this subtitle the following words have the meanings indicated.

6 (b) "Commissioner" means the Insurance Commissioner.

7 (c) "Program" means the Maryland Partnership for Long-Term Care
8 Program.

9 15-402.

10 (a) There is a Maryland Partnership for Long -Term Care Program.

11 (b) The purposes of the Program are to:

12 (1) Provide incentives for individuals to insure against the costs of
13 providing for their long-term care needs;

14 (2) Provide mechanisms for individuals to qualify for coverage of the
15 costs of their long-term care needs under the medical assistance program without
16 first being required to substantially exhaust all their resources;

17 (3) Assist in developing methods for increasing access to and the
18 affordability of a long-term care policy; and

19 (4) Alleviate the financial burden on the State's medical assistance
20 program by encouraging pursuit of private initiatives.

21 (c) The Program shall:

22 (1) Be administered by:

23 (i) The Department; and

24 (ii) The Commissioner; and

25 (2) Provide for the financing of long-term care services by:

26 (i) Private insurance; and

27 (ii) State medical assistance.

28 15-403.

29 (a) To be eligible for the Program, an individual must:

3

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1 (1) (i) Be covered by a long-term care policy that is approved for the
2 Program by the Commissioner under § 15-404 of this subtitle; and

3 (ii) Have exhausted all benefits available under the policy that are
4 available for services to treat or manage the insured's condition; and

5 (2) Satisfy any other requirement for eligibility established by the
6 Department.

7 (b) Program eligibility may not be denied under this section for policy benefits
8 that are not available or appropriate for treating the insured's condition.

9 15-404.

10 (a) To qualify under the Program, a long-term care policy shall:

11 (1) Satisfy the requirements of Title 18 of the Insurance Article;

12 (2) Alert the purchaser to the availability of consumer information
13 public education provided by the Commissioner under § 15-406 of this subtitle;

14 (3) Provide for the keeping of records and an explanation of benefit
15 reports on insurance payments which count toward Medicaid resource exclusion; and

16 (4) Provide the management information and reports necessary to
17 document the extent of resource protection offered and to evaluate the Program.

18 (b) The Department may not approve a long-term care policy if the policy
19 requires prior hospitalization or a prior stay in a nursing home as a condition of
20 providing benefits.

21 15-405.

22 (a) When the benefits payable under the long-term care policy approved
23 under § 15-404 of this subtitle are exhausted, determination of eligibility for medical
24 assistance shall be made in accordance with subsection (b) of this section.

25 (b) In determining eligibility for medical assistance, an amount of resources
26 equal to the amount of benefits paid under the long-term care policy shall be
27 excluded from the Department's calculation of the individual's resources, to the extent
28 the payments:

29 (1) Are for services that medical assistance approves or covers for
30 recipients;

31 (2) Are for the lower of the actual charge and the amount paid by the
32 insurance company; and

33 (3) Are for nursing home care or approved home care and
34 community-based services.

1 15-406.

2 The Commissioner, through the Consumer Education and Advocacy Program,
3 shall undertake measures to educate the public as to:

- 4 (1) The need for long-term care;
- 5 (2) Mechanisms for financing long-term care;
- 6 (3) The availability of long-term care insurance; and
- 7 (4) The asset protection provided under this subtitle.

8 15-407.

9 The Department and the Commissioner shall jointly:

10 (1) Adopt regulations necessary to carry out the provisions of this
11 subtitle; (and]

12 (2) ON OR BEFORE ~~OCTOBER 1, 2006~~ JANUARY 1, 2007, REPORT TO THE
13 GENERAL ASSEMBLY, IN ACCORDANCE WITH § 2-1246 OF THE STATE GOVERNMENT
14 ARTICLE, ON THE IMPLEMENTATION OF THE PROGRAM, INCLUDING:

15 (I) THE NUMBER OF LONG-TERM CARE POLICIES APPROVED BY
16 THE DEPARTMENT FOR INCLUSION IN THE PROGRAM;

17 (II) THE MEASURES UNDERTAKEN TO EDUCATE THE PUBLIC AS
18 REQUIRED UNDER § 15-406 OF THIS SUBTITLE; AND

19 (III) ANY OTHER INFORMATION RELATED TO THE
20 IMPLEMENTATION OF THE PROGRAM THAT THE DEPARTMENT DETERMINES
21 NECESSARY; AND

22 1(2)1 (3) [On or before] BEGINNING ~~October 1, 2007~~ JANUARY 1, 2008,
23 AND ON OR BEFORE ~~OCTOBER 1~~ JANUARY 1 of each year THEREAFTER, report to the
24 General Assembly, in accordance with § 2-1246 of the State Government Article on:

- 25 (i) The effectiveness of the Program;
- 26 (ii) The impact of the Program on State expenditures for medical
27 assistance;
- 28 (iii) The number of enrollees in the Program; and
- 29 (iv) The number of long-term care policies offered in the State.

30 SECTION 2. AND BE IT FURTHER ENACTED, That:

31 (a) The Maryland Health Care Commission shall study the long-term care
32 delivery system in the State to:

1 (1) Determine the types of services and programs that the age 65 and
2 older population and individuals with disabilities will need in 2010, 2020, and 2030;
3 and

4 (2) Identify how the State should begin planning for needed services and
5 programs.

6 (b) In conducting the study, the Commission shall review:

7 (1) Population projections for the age 65 and older population and for
8 individuals with disabilities;

9 (2) The services and programs operated by State agencies for the age 65
10 and older population and for individuals with disabilities, including services and
11 programs related to housing, transportation, medical needs, and food subsidies, to
12 identify:

13 (i) ~~Duplicative services or programs;~~

14 (ii) (i) Problems with the delivery of existing services or
15 programs; and

16 (iii) (ii) The need for additional services or programs;

17 (3) The adequacy of current services and programs for the age 65 and
18 older population and for individuals with disabilities provided by each county and
19 region in the State and any gaps in services;

20 (4) The effect that the growth of the age 65 and older population will
21 have on current services and programs and the areas of the State that will be most
22 affected;

23 (5) The type of services and programs that will be most needed to
24 support individuals with disabilities and to care for the age 65 and older population in
25 2010, 2020, and 2030; and

26 (6) The affordability of the types of services and programs for the age 65
27 and older population and for individuals with disabilities who may not qualify for
28 federal, State, or local assistance; and

29 ~~(6)~~ (7) The cost to the State to provide services and programs to the
30 age 65 and older population and individuals with disabilities.

31 (c) The Commission may contract with a private entity to conduct the study
32 required under subsection (a) of this section.

33 (d) _____ The Commission shall submit
34 ~~an interim report on or before January 1,~~
35 ~~2007,~~ and a final report on or before ~~July-December 1, 2007,~~ on its findings and
36 recommendations to the Governor and, in accordance with § 2-1246 of the State
Government Article, the General Assembly.

1 SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect
2 July 1, 2006.

Appendix 3

Technical Notes

This appendix provides technical notes on the methodology used in this report for population projections, conduct of the state service inventory and the local service inventory, unduplicated counts of service users, and the cost projections for 2010, 2020, and 2030.

Population Projections

By Age Group (Table 1.1 in Chapter I; Table 5.1 in Chapter V)

The Department of Planning's (DoP's) total population projection data were analyzed to calculate the population projections for Maryland residents by age group in Chapter I, Table 1.1. Disability rates from the 2000 Census were used in conjunction with DoP household population projection data to provide estimates for the number of Maryland residents with disabilities. Disability rates by income levels are not available in census data. The DoP household population projection data and the Maryland Behavior Risk Factor Surveillance System (BRFSS), which provides disability data by income level, were used to provide estimates of Maryland residents with disabilities who may qualify for state-funded programs. While the DoP does not currently conduct discrete projections for individuals with disabilities, should it resume such estimates, local and regional adjustments to disability counts would allow for more refined disability projections.

Data considerations include:

- Maryland Department of Planning population projections contain assumptions, including impending population shifts related to the implementation of the Military's Base Realignment and Closure (BRAC) program.
- When required, the next available age or income level was used when age or income categories in the 2000 Census did not match the categories used by other data sources.

Persons with Disabilities (Table 1.2 in Chapter I; Table 5.4 in Chapter V)

While there is no standard measure of disabilities, questions related to an individual's ability to engage in activities of daily living (ADLs) and instrumental activities of daily living (IADLs) have been found to be highly related to the need for and use of the continuum of services described as "long-term services and supports." These services may range from periodic assistance with a task in the home to highly skilled nursing home or chronic hospital care. Likewise, limitations in ADLs and IADLs are related to an individual's ability to remain independent in the community. Thus, population projections of persons with disabilities are highly dependent on the identification of data sets that capture individuals' reported limitations in vital areas of daily life that are predictive of the presence of one or more disabling conditions.

Three disability data sources—the Decennial Census, the American Community Survey (ACS), and the Maryland BRFSS—were considered for use in projecting the number of Maryland residents with disabilities. A careful review of each data source for applicability to this study (age of respondents, disability measures, etc.) resulted in the selection of the 2000 Decennial Census data as the primary data source. The ACS and BRFSS were used as supplemental data sources. Data from the DoP State Data Center's 2006 Total Household Population Projection Report, which excludes Maryland's institutional

population, were also used in the disability projection analysis. The Decennial Census is administered by the U.S. Census Bureau every ten years and collects a variety of demographic, social, and economic data from households in the United States and its territories. The survey also contains disability-specific questions, which are used in this report to project the number of Maryland residents with disabilities. The survey contains six questions which identify persons with one or more (up to six) disabilities. Each disability category is explained below:

- Sensory disability is defined as conditions that include blindness, deafness, or a severe vision or hearing impairment.
- Physical disability is defined as conditions that substantially limit one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying.
- Mental disability is defined as a physical, mental, or emotional condition lasting six months or more that results in a person having difficulty learning, remembering or concentrating.
- Self-care disability is defined as a physical, mental, or emotional condition lasting six months or more that results in a person having difficulty dressing, bathing, or getting around inside the house.
- Go-outside-the-home disability is defined as a physical, mental, or emotional condition lasting six months or more that results in a person having difficulty going outside the home alone to shop or visit a doctor's office.
- Employment disability is defined as a physical, mental, or emotional condition lasting six months or more that results in a person having difficulty working at a job or business.

According to 2000 Census data, 17.6 percent of all non-institutional Maryland residents reported having at least one disability. Almost 40 percent of non-institutional Maryland residents 65 and older reported having one or more of the six disability types described in the U.S. Census. In this study, three disability types thought to be most representative of ADLs and IADLs were used to estimate the number of Maryland residents with disabilities in 2010, 2020, and 2030. Using the publicly available 2000 Decennial Census Public Use Microdata 5% (PUM5) raw data file and guidance from Census Bureau PUM5 file staff, Maryland residents who reported having either a physical, self-care, or going-outside-the-home disability were identified to create a pool of unduplicated Maryland residents by age and region. The PUM5 raw data combine smaller counties into a single geographical area; the result is Table 1.2 in Chapter I and Table 5.4 in Chapter V. The extent to which this approach captures the prevalence of persons with serious mental illness or persons with developmental disabilities is unknown.

State Service Inventory

An inventory of long-term care services and supports provided by Maryland state agencies provided much of the data used in this report. To conduct this inventory, state agencies that currently provide programs and services to Maryland residents aged 65 and older and those aged 5-64 with disabilities were identified. Contact persons were established for each agency and these individuals facilitated the collection of detailed program and service data. State agencies included in the inventory are:

- Department of Health and Mental Hygiene
- Department of Aging (MDoA)
- Developmental Disabilities Administration (DDA)
- Mental Hygiene Administration (MHA)
- Department of Disabilities (MDOD)
- Department of Human Resources (DHR)
- Department of Housing and Community Development (DHCD)
- Department of Transportation (MDOT)
- Medical Assistance Program (Medicaid)
- Office of Health Care Quality (OHCQ)

The data collection process was designed to collect data by types of service, not service provider as recipients rarely seek services in this manner. Data was collected using the following protocol:

- A data collection instrument was designed (see State Inventory Form in Appendix 4) to facilitate data collection.
- Researchers carrying out the inventory were assigned agencies for which they were responsible for collecting service and program data prior to meeting with the agency contact.
- Researchers collected preliminary service information from a variety of sources such as the internet and budget books. Information was recorded on the State Inventory Form.
- Researchers forwarded the completed State Inventory Form to their agency contact for review.
- Researchers and agency contacts met to discuss information contained in the form to identify any missing programs and make any necessary corrections.
- Data was entered into a Microsoft Access database designed by the researchers specifically for this project. Data was checked for correctness, validity, and accuracy.
- Researchers provided revised inventory forms to agency contacts for final review and corrections.
- Agency representatives were provided drafts of sections of this report containing their agency information for review and feedback.
- Additional information related to the home- and community-based waivers (Older Adult, Living at Home, Model, Traumatic Brain Injury, Autism, Community Pathways, and New Directions) and chronic care hospitals was obtained from the Maryland Medicaid Information System (MMIS2).

Local Service Inventory

A local service inventory similar to the state service inventory was conducted. The data collection effort at the local level began with the local budget officer, but the request was often forwarded to other agencies within the jurisdiction. As a result, researchers were required to contact several local agencies within the jurisdiction to obtain the information. The data were collected from various agencies, including local health departments, Area Agencies on Aging, Community Action Councils, local Departments of Social Services, and other non-profit agencies. The lack of a centralized “data source” at the local level complicated the data collection process. The data often required definitional analysis and re-aggregation by the researchers.

Data was collected using the following protocol:

- The State Inventory Form was refined to produce the local data collection instrument (see Local Inventory Form in Appendix 5). Data was collected using seven service types; in-home services, community-based services, housing and residential supports, mobility/transportation, institutional, case management, and other long-term care services and supports.

- Working with the Maryland Association of Counties, local jurisdiction budget officers were identified as the most effective and efficient method for collecting local service and program information.
- Researchers were assigned to individual jurisdictions and were responsible for working with the local jurisdiction budget officer to obtain the required information.
- Budget officers for each of the 24 jurisdictions were contacted via e-mail and mail to request information on programs and services provided to residents aged 65 and older and those aged 5-64 with disabilities.
- Budget officers were also provided an overview of this report and a list of programs identified in the state agency service inventory for reference.
- To curtail the duplication of service and budget information previously collected at the state level, the local jurisdiction service inventory distinguished between: 1) “locally funded programs,” which are funded solely by local funds, and 2) “jointly funded programs,” which are funded by local funds and supplemental funding from state, federal, or private sources.
- To determine the amount of local money spent by each of the jurisdictions to support both locally and jointly funded programs, local jurisdictions were asked to report only the FY 2006 local contribution for these programs.
- Data was entered into a Microsoft Access database for analysis.
- A report containing the jurisdictional information collected was provided to the respective budget officers and others who provided information for that jurisdiction for a final review and feedback.

Duplicated Counts of Users of a Service

In the analysis in Chapter III, tallying total unique users of services in a specified service category (i.e., institutional, in-home, and community) presented a challenge. This was because many users used multiple services. A simple sum of the number of users of each service would result in a duplicated count of users, thus overstating the number of unique users. To compensate for this, if the data allowed it, summations of users of discrete services in a given service category were unduplicated, resulting in a tally showing the number of unique users of one or more of the services in that category. Data tables in Chapter III indicate whether counts of users are “duplicated” or “unduplicated.”

Methodology for Service Cost Projections

To estimate future service costs in 2010, 2020, and 2030, historical data for 2001 to 2006 on utilization of and expenditures for state-funded long-term services and supports in each of the five service categories that are the subject of this report (institutional, in-home, community, mobility/transportation, and housing/residential) was collected, as well as for mental health services and services for persons with developmental disabilities. For most services, data from 2001 to 2006 was available and used in the analysis. Historical data, along with estimation factors specific to each service, was used to develop a regression equation for each service that was determined to best approximate anticipated future trends for that particular service. A logarithmic “best fit” regression line was the basis for calculating rates of change for estimating future use and costs.

For a limited number of services, historical data was not available (see Appendix 6 for availability of data by service). For these services, projections were based on the most recent usage and expenditure data, trended forward using the best information available on anticipated future utilization and costs. The benchmark year used in the cost projections tables in this report was 2005; if data was not available for 2005, available data was trended forward or backward to estimate 2005 expenditures. In

many cases, the Bureau of Labor Statistics (BLS) Consumer Price Indices (CPI) were used to estimate future cost per unit of service. For example, the unit cost of a day of adult day care was projected based on the CPI for medical services reported by BLS for the years 2000 through 2006.

Estimated costs were calculated for each service as follows:

- *Number of users of the service:* the projected population multiplied by the percentage of the population expected to use the service.
- *Units of service:* The number of users of the service multiplied by the units of service used by each user.
- *Total costs:* Units of service used by the entire population multiplied by the expected cost per unit of service.

For each service, costs were calculated for each of eight age groupings (age 5-14, 15-29, 30-39, 40-49, 50-64, 65-74, 75-84, and 85+). Each of four factors (population, percentage using the service, units used per user, and cost per unit) was trended separately. Estimated costs for each service for each of the seven age groupings were aggregated into two groups—under age 65 and age 65 and over. Finally, estimated costs for all the services in a category were summed to obtain final cost projections.

It is important to note that the trends for each individual age group may all be in one direction but that the trend for the total population may be in the opposite direction. That occurs because the population growth for the over age 65 group is projected to be almost twice the growth for the under age 65 group. Suppose, for example, that 1 percent of the under age 65 group uses a service and 10 percent of the over age 65 use the same service. The trend projects that the 1 percent will decrease to 0.9 percent and the 10 percent will decrease to 9 percent. However, the percentage of the total population under age 65 will shrink from 90 percent to 80 percent while the over age 65 group will grow from 10 percent to 20 percent. The percent using the service will change as shown below:

Example:		
Under age 65:	1% of 90% using in base year =	0.9%
Age 65 and over:	10% of 10% using in base year =	<u>1.0%</u>
Total Population:		1.9%
Under age 65:	0.9% of 80% using in out year =	0.72%
Age 65 and over:	9% of 20% using in out year =	<u>1.80%</u>
Total Population:		2.52%

Thus, the percentage of the total population using the service increases even though the percentage using the service within each age group decreases.

For two services (private duty nursing and home health aide), only three years of data were available, as these were new services first offered in 2004. The trend from the three years is extraordinarily high for both since there is a start-up effect. Consequently, rather than projecting a high growth rate exaggerated by the start-up effect, the trends from similar services (skilled nursing and shift home health aide) were used in projecting costs for each service.

Estimation factors specific to each service were developed to use in calculating the cost projections (Table 1). These were based on well-documented trends in the literature that are expected to affect the utilization and cost of long-term care in the future. Two types of estimation factors were used: 1) disability-related (e.g., documented declines in ADLs) and 2) other trends, such as changes in family composition and choice of care setting. The estimation factors used in this analysis reasonably reflect future trends while being conservative.

After developing cost projections using the analysis and estimation factors described above, variance analyses were performed to measure the contribution of each of the four factors (population, percent using the service, units used per user, and cost per unit) to the overall change in costs. Variance analysis allows quantifying the effect of each factor independent of the others. In essence, variance analysis allows measuring what the change in population alone, for example, would cause in total costs if all three of the other factors remained constant.

Table 1
Estimation Factors by Service Category

Service Category	Estimation Factors
Institutional Services— Nursing Homes	Baseline nursing home utilization projections for the population aged 65 and over were adjusted to reflect a net 1.5 percent annual decline in utilization rates from 2005 until 2020; thereafter, utilization rates were adjusted by a net 1.0 percent annual decline. No adjustments were made for the population under age 65.
Institutional Services— Chronic Care Hospitals	Historical utilization trend data was used to estimate future utilization; no further adjustments were made.

Service Category	Estimation Factors
In-Home Services and Supports	<p><i>Services with historical trend data:</i> To account for expected reductions in informal caregiving, population-based utilization rates for individuals age 65 and over were adjusted by a net 0.5 percent increase per year. Because the decline in informal/family care is anticipated to lead to more units of personal care services for those who receive formal personal care, an adjustment was made for a net 0.5 percent increase per year in units of personal care services from 2006 through 2020, after which a net annual increase of 0.75 percent in units of care received is assumed.</p> <p><i>Services without historical trend data:</i> Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. Utilization rates for individuals age 65 and older were adjusted first by a decrease of 0.75 percent per year because of declining disability rates, and then by a net increase of 1.5 percent per year to reflect anticipated preference shifts from institutional to home based care.</p>
Community Services and Supports	<p><i>Services with historical trend data:</i> Historical utilization trend data was used to estimate future utilization; no further adjustments were made.</p> <p><i>Services without historical trend data:</i> Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. The use rate was decreased by 1 percent per year to reflect declining disability rates, then increased by 1 percent per year to reflect increasing preference for community-based care rather than institutional care.</p>
Housing/Residential Services	<p><i>Services without historical trend data:</i> Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. The use rate was decreased by 0.5 percent per year to reflect declining disability rates, then increased by 2 percent per year to reflect increasing preference for home- and community-based care rather than institutional care.</p>
Mobility/Transportation Services	<p><i>Services with historical trend data:</i> Historical utilization trend data was used to estimate future utilization; no further adjustments were made.</p> <p><i>Services without historical trend data:</i> Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. The use rate was decreased by 1 percent per year to reflect declining disability rates.</p>
Mental Health Services	<p><i>Services with historical trend data:</i> Assumptions were made to estimate the percentage of users and costs of community-based long-term public mental health services and the percentage of total costs attributable to those users. Then, historical utilization trend data was used to estimate future utilization; no further adjustments were made.</p> <p><i>Services without historical trend data:</i> Future use rates and costs were based on the most recent data and population projections and cost per unit was inflated using the Consumer Price Index. No further adjustments were made.</p>
Services and Supports for Persons with Developmental Disabilities	<p>Historical utilization trend data, available for all services, was used to estimate future utilization; no further adjustments were made. Future state-only funding of non-Medicaid services was held constant at the FY 2006 level.</p>

**Appendix 4
State Inventory Form**

Q3. Please list all programs administered by your agency which provide long-term services and supports to Maryland residents 65 and older and Maryland residents with disabilities (e.g. people with disabilities ages 5 – 64).

<i>In-home Services (i.e. personal care, attendant care, Meals on Wheels, housekeeping/chores, respite care, supervision day or night, home repair and modifications, skilled nursing services, in-home counseling/social services, hospice, financial management, telephone reassurance, other in-home services)</i>						
Program Number	Program Name	Geographical area (statewide or limited)	Eligibility requirements	Total budget	Funding Source (check all that apply)	Number on the waiting list/Number Served
(1)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(2)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(3)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(4)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	

Q3a. Please provide information for all services your agency currently provides to Maryland residents 65 and older and Maryland residents with disabilities.

<i>In-home Services (i.e. personal care, attendant care, Meals on Wheels, housekeeping/chores, respite care, supervision day or night, home repair and modifications, skilled nursing services, in-home counseling/social services, hospice, financial management, telephone reassurance, other in-home services)</i>							
Program Number	Service		Unit of service (one hour personal care, 1 hr skilled nursing care, etc.)	# of clients served per year	Average # of units per year per client	Cost per unit of service	# of service providers (i.e. 4 personal care agencies, 3 home mod contractors)
(1)	(A)						
	(B)						
	(C)						
	(D)						

Q3b. Service Gaps: Please list the top 5 challenges your agency faces in delivering the services identified in Q3a. to Maryland residents. A list of challenge codes are provided below. Challenges *do not* need to be ranked.

<i>In-home Services (i.e. personal care, attendant care, Meals on Wheels, housekeeping/chores, respite care, supervision day or night, home repair and modifications, skilled nursing services, in-home counseling/social services, hospice, financial management, telephone reassurance, other in-home services)</i>									
Program Number	Service	Enter challenge codes below					Enter other challenges not listed in the table below		
(1)	(A)								
	(B)								
	(C)								
	(D)								

Challenge Codes

1. Lack of funding
2. Lack of qualified service providers
3. Program limited to population, funding sources, etc.

Q3. Please list all programs administered by your agency which provide long-term services and supports to Maryland residents 65 and older and Maryland residents with disabilities (e.g. people with disabilities aged 5 – 64).

Mobility/Transportation Services (medical transportation, non-medical transportation, volunteer transportation, public mobility transportation)						
Program Number	Program Name	Geographical area (statewide or limited)	Eligibility requirements	Total budget	Funding Source (check all that apply)	Number on the waiting list
(1)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(2)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(3)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(4)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	

Q3a. Please provide information for all services your agency currently provides to Maryland residents 65 and older and Maryland residents with disabilities.

Mobility/Transportation Services (medical transportation, non-medical transportation, volunteer transportation, public mobility transportation)							
Program Number	Service		Unit of service (one hour personal care, 1 hr skilled nursing care, etc.)	# of clients served per year	Average # of units per year per client	Cost per unit of service	# of service providers (i.e. 12 nurses, 3 attendants, 3 home mod contractors)
(1)	(A)						
	(B)						
	(C)						
	(D)						

Q3b. Service Gaps: Please list the top 5 challenges your agency faces in delivering the services identified in Q3a. to Maryland residents. A list of challenge codes are provided below. Challenges *do not* need to be ranked.

Mobility/Transportation Services (medical transportation, non-medical transportation, volunteer transportation, public mobility transportation)								
Program Number	Service		Enter challenge codes below					Enter other challenges not listed in the table below
(1)	(A)							
	(B)							
	(C)							
	(D)							

Challenge Codes

1. Lack of funding
2. Lack of qualified service providers
3. Program limited to population, funding sources, etc.

Q3. Please list all programs administered by your agency which provide long-term services and supports to Maryland residents 65 and older and Maryland residents with disabilities (e.g. people with disabilities ages 5 – 64).

Community Services – Out of home (clinic services, counseling services, referral services, mental health, substance abuse, medical day care, day habilitation, HIV/AIDS, senior centers, work activity center, rehabilitation)						
Program Number	Program Name	Geographical area (statewide or limited)	Eligibility requirements	Total budget	Funding Source (check all that apply)	Number on the waiting list/Number Served
(1)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(2)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(3)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(4)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	

Q3a. Please provide information for all services your agency currently provides to Maryland residents 65 and older and Maryland residents with disabilities.

Community Services – Out of home (clinic services, counseling services, referral services, mental health, substance abuse, medical day care, day habilitation, HIV/AIDS, senior centers, work activity center, rehabilitation)							
Program Number	Service		Unit of service (one hour personal care, 1 hr skilled nursing care, etc.)	# of clients served per year	Average # of units per year per client	Cost per unit of service	# of service providers (i.e. 12 nurses, 3 attendants, 3 home mod contractors)
(1)	(A)						
	(B)						
	(C)						
	(D)						

Q3b. Service Gaps: Please list the top 5 challenges your agency faces in delivering the services identified in Q3a. to Maryland residents. A list of challenge codes are provided below. Challenges *do not* need to be ranked.

Community Services – Out of home (clinic services, counseling services, referral services, mental health, substance abuse, medical day care, day habilitation, HIV/AIDS, senior centers, work activity center, rehabilitation)								
Program Number	Service	Enter challenge codes below					Enter other challenges not listed in the table below	
(1)	(A)							
	(B)							
	(C)							
	(D)							

Challenge Codes

1. Lack of funding
2. Lack of qualified service providers
3. Program limited to population, funding sources, etc.

Q3. Please list all programs administered by your agency which provide long-term services and supports to Maryland residents 65 and older and Maryland residents with disabilities (e.g. people with disabilities ages 5 – 64).

Housing (independent, assisted living, board and care, adult foster care, Continuing Care Retirement Communities, in-law apartments, shelters, group homes, subsidized housing)						
Program Number	Program Name	Geographical area (statewide or limited)	Eligibility requirements	Total budget	Funding Source (check all that apply)	Number on the waiting list/Number Served
(1)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(2)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(3)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(4)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	

Q3a. Please provide information for all services your agency currently provides to Maryland residents 65 and older and Maryland residents with disabilities.

Housing (independent, assisted living, board and care, adult foster care, Continuing Care Retirement Communities, in-law apartments, shelters, group homes, subsidized housing)							
Program Number	Service		Unit of service (one hour personal care, 1 hr skilled nursing care, etc.)	# of clients served per year	Average # of units per year per client	Cost per unit of service	# of service providers (i.e. 12 nurses, 3 attendants, 3 home mod contractors)
(1)	(A)						
	(B)						
	(C)						
	(D)						

Q3b. Service Gaps: Please list the top 5 challenges your agency faces in delivering the services identified in Q3a. to Maryland residents. A list of challenge codes are provided below. Challenges *do not* need to be ranked.

Housing (independent, assisted living, board and care, adult foster care, Continuing Care Retirement Communities, in-law apartments, shelters, group homes, subsidized housing)							
Program Number	Service	Enter challenge codes below					Enter other challenges not listed in the table below
(1)	(A)						
	(B)						
	(C)						
	(D)						

Challenge Codes

1. Lack of funding
2. Lack of qualified service providers
3. Program limited to population, funding sources, etc.

Q3. Please list all programs administered by your agency which provide long-term services and supports to Maryland residents 65 and older and Maryland residents with disabilities (e.g. people with disabilities ages 5 – 64).

<i>Institutional</i> (nursing homes, ICR/MR's, chronic care hospitals, institutions for mental diseases)						
Program Number	Program Name	Geographical area (statewide or limited)	Eligibility requirements	Total budget	Funding Source (check all that apply)	Number on the waiting list/Number Served
(1)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(2)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(3)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(4)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	

Q3a. Please provide information for all services your agency currently provides to Maryland residents 65 and older and Maryland residents with disabilities.

<i>Institutional</i> (nursing homes, ICR/MR's, chronic care hospitals, institutions for mental diseases)							
Program Number	Service		Unit of service (one hour personal care, 1 hr skilled nursing care, etc.)	# of clients served per year	Average # of units per year per client	Cost per unit of service	# of service providers (i.e. 12 nurses, 3 attendants, 3 home mod contractors)
(1)	(A)						
	(B)						
	(C)						
	(D)						

Q3b. Service Gaps: Please list the top 5 challenges your agency faces in delivering the services identified in Q3a. to Maryland residents. A list of challenge codes are provided below. Challenges *do not* need to be ranked.

<i>Institutional (nursing homes, ICR/MR's, chronic care hospitals, institutions for mental diseases)</i>								
Program Number	Service	Enter challenge codes below					Enter other challenges not listed in the table below	
(1)	(A)							
	(B)							
	(C)							
	(D)							

Challenge Codes

1. Lack of funding
2. Lack of qualified service providers
3. Program limited to population, funding sources, etc.

Q3. Please list all programs administered by your agency which provide long-term services and supports to Maryland residents 65 and older and Maryland residents with disabilities (e.g. people with disabilities ages 5 – 64).

Other long-term services and supports						
Program Number	Program Name	Geographical area (statewide or limited)	Eligibility requirements	Total budget	Funding Source (check all that apply)	Number on the waiting list/Number Served
(1)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(2)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(3)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	
(4)					<input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Local <input type="checkbox"/> Grants	

Q3a. Please provide information for all services your agency currently provides to Maryland residents 65 and older and Maryland residents with disabilities.

Other long-term services and supports							
Program Number	Service		Unit of service (one hour personal care, 1 hr skilled nursing care, etc.)	# of clients served per year	Average # of units per year per client	Cost per unit of service	# of service providers (i.e. 12 nurses, 3 attendants, 3 home mod contractors)
(1)	(A)						
	(B)						
	(C)						
	(D)						

Q3b. Service Gaps: Please list the top 5 challenges your agency faces in delivering the services identified in Q3a. to Maryland residents. A list of challenge codes are provided below. Challenges *do not* need to be ranked.

<i>Other long-term services and supports</i>								
Program Number	Service	Enter challenge codes below					Enter other challenges not listed in the table below	
(1)	(A)							
	(B)							
	(C)							
	(D)							

Challenge Codes

1. Lack of funding
2. Lack of qualified service providers
3. Program limited to population, funding sources, etc.

**Appendix 5
Local Jurisdiction Inventory Form**

Q1. Please list all programs **funded solely with Local Jurisdictional Funds**. (Program Types: A=In-home services, B=transportation services, C=community based services, D=housing, E=institutional, F=case management, G=other long-term services and supports).

Program Type (enter letter)	Program	Administered by: Contact information:	Total FY 2006 Budget	Eligibility Criteria	Total Persons Served (if available)	Waiting List? If so, number on waiting list
	a. b. c.					

Q2. Please list all **LTC Programs with Local Jurisdictional Funds Supplementing State/Federal/Private Funds**. (Program Types: A=In-home services, B=transportation service, C=community based services, D=housing, E=institutional, F=case management G=other long-term services and supports).

Program Type (enter letter)	Program	Administered by: Contact information:	Total FY 2006 Budget	Total Persons Served (if available)	Waiting List? If so, # on waiting list
	a. b. c.				

Q3. Please provide information on **GAPS in LTC Service Delivery System for Programs Funded Solely with Local Jurisdictional Funds.**

Program	Nature of GAP
a.	
b.	
c.	

Q4. Please provide information on **GAPS in LTC Services for Programs Where Local Jurisdictional Funds Supplement State/Federal/Private Funds.**

Appendix 6

Expenditures for and Users of State-Funded Long-Term Services and Supports by Service Category: Maryland, 2006

SERVICE CATEGORY/PROGRAM NAME	State/Federal FY 2006 Budget	Number of Users*
Non-DDA INSTITUTIONAL		
Long-Term Care State Plan Services (Nursing Facility)†	\$932,450,414	23,525
Chronic Care†	\$86,687,643	919
Non-DDA COMMUNITY SERVICES		
Medicaid Adult Day Care		
Long-Term Care State Plan Service (Adult Day Care) †	\$74,277,690	6,488
Adult Day Care (Office of Health Services) ††	\$2,764,671	890
Medicaid Home- and Community-Based Waiver Services		
Model Waiver†	\$1,996,609	210
Autism Waiver†	\$17,566,354	881
Traumatic Brain Injury Waiver†	\$1,678,968	19
Living at Home Waiver†	\$13,989,360	461
Older Adult Waiver†	\$55,997,492	2,781
Caregiver Services		
Respite Care Services Program††	\$1,852,348	5,863
National Family Caregiver Support Program††	\$2,468,893	13,060
General Supports and Services		
DHR Adult Services **††	\$27,591,462	3,715
Aging and Disability Resource Center††	\$450,000	14,000
Senior Center Plus ***	\$0	345
Health Promotion and Disease Prevention††	\$363,898	72,814
Senior Centers Operating Fund††	\$500,000	1,846
Senior Information and Assistance††	\$967,701	39,541
Senior Nutrition-Congregate Meals††	\$681,419	35,294
Senior Health Insurance Assistance Program††	\$892,090	26,519
Public Guardianship††	\$642,691	756
Non-DDA IN-HOME SERVICES		
Senior Care††	\$6,478,773	3,932
Senior Nutrition - Home Delivered Meals††	\$799,926	7,982
Attendant Care Program††	\$1,252,000	120
The Assistive Technology Guaranteed Loan Program††	\$1,000,000	202
In-Home Service Aide Services Purchase of Service††	\$3,144,125	3,305
Long-Term Care State Plan Services (SPS)		
Personal Care†	\$21,055,779	4,604
PDN†	\$37,622,231	413
Skilled Nursing Services†	\$951,251	739
Shift HH Aide†	\$1,329,781	59
Home Health Aide†	\$171,021	161

SERVICE CATEGORY/PROGRAM NAME		State/Federal FY 2006 Budget	Number of Users*
	DME†	\$5,719,597	3,789
	DMS†	\$19,389,133	9,561
HOUSING and RESIDENTIAL SUPPORTS			
	Homeownership for Individuals with Disabilities Program (Maryland Home Financing Program) ††	\$758,000	N/A
	Maryland Bridge Subsidy Demonstration Program††	\$700,000	18
	Accessible Homes for Seniors††	\$1,000,000	7
	Naturally Occurring Retirement Communities ††	\$500,000	N/A
	Continuing Care Retirement Communities††	\$315,982	N/A
	Senior Assisted Living Group Home††	\$2,354,929	528
	Congregate Housing††	\$2,625,248	838
TRANSPORTATION			
	Maryland Transit Administration Mobility/Para Transit Program††	\$39,000,000	5,500 active users 22,000 certified
	Maryland Transit Administration Taxi Access Program††	\$10,000,000	3,701
	Maryland Transit Administration Reduced Fare Card	N/A	N/A
	Senior Ride Demonstration Program††	\$100,000	N/A
	Statewide Special Transportation Assistance Program††	\$4,305,938	N/A
	Long-Term Care State Plan Services (Transportation) †	\$2,769,153	9,575
OTHER			
	Senior Legal Assistance††	\$367,413	2,821
DDA IN-HOME SERVICES			
	Community Support Living Arrangements ††	\$52,802,908	4,930
	Individual Support Services for individuals 22 and older††	\$29,068,744	N/A
	Community Residential Services††	\$295,991,612	N/A
	Individual Family Care for individuals in foster care††	\$4,821,374	N/A
	Family Support Services For Individuals under 22††	\$9,166,923	N/A
	New Directions Waiver†	\$38,975	100
DDA COMMUNITY SERVICES			
	Supported Employment††	\$47,167,713	3,732
	Summer Program††	\$309,944	N/A
	Resource Coordination (case mgt.) ††	\$23,702,625	17,320
	Behavioral Services††	\$5,742,706	N/A
	Day Programs††	\$86,238,039	5,645
DDA INSTITUTIONAL			
	ICF/MR†	\$63,205,988	363
MENTAL HEALTH COMMUNITY SERVICES			
	Crisis ††	\$3,199,877	1,466
	Mobile Treatment††	\$8,216,388	1,557
	Psychiatric Rehabilitation Program Children††	\$8,359,979	4,432
	Psychiatric Rehabilitation Program Adults††	\$97,549,039	9,194
	Psychiatric Day Treatment/Partial Hospitalization Children††	\$5,045,633	1,109
	Psychiatric Day Treatment/Partial Hospitalization Adult††	\$9,363,274	2,726
	Outpatient Mental Health Services Children††	\$77,448,089	39,705
	Outpatient Mental Health Services Adult††	\$59,549,635	42,504

SERVICE CATEGORY/PROGRAM NAME	State/Federal FY 2006 Budget	Number of Users*
Mental Health Targeted Case Management Children††	\$2,538,510	907
Mental Health Targeted Case Management Adult††	\$8,388,881	3,681
Residential Rehabilitation Program Adults††	\$9,650,428	3986
Residential Rehabilitation Program Children††	\$46,205	123
Respite Services Adult††	\$38,805	44
Respite Services Children††	\$706,089	221
Supported Employment Services Children††	\$13,395	20
Supported Employment Services Adults††	\$3,347,788	1,565
Baltimore Partial Capitation Project††	\$9,451,568	360
Purchase of Care Adult††	\$3,299,425	676
Purchase of Care Children††	\$40,683	10
MENTAL HEALTH INSTITUTIONAL		
IMD†	\$4,536,301	39
GRAND TOTAL	\$2,316,577,526	

Notes:

* User numbers may be duplicated.

** DHR Adult Services users for the four programs (Adult Public Guardianship, C.A.R.E., SSTA, Adult Protective Services) were reported as 566, 682, 3377, and 2562 respectively. Users of the four overlap. The project team estimates that unduplicated users are ten percent more than the largest number (3,377).

*** The Senior Center Plus program is funded directly by users, either through HCBS waiver funds (senior center plus is a covered waiver service in the Older Adult Waiver), through private pay, or through other, non-governmental sources. The program has no budget of its own.

† With the exception of the TBI Waiver (2003 – 2005) historical data from 2001 to 2006 were used in the analysis.

†† Single year data from 2006 was used in the analysis.

Appendix 7
Distribution of Medicaid Long-Term Expenditures for Aging/Disabled Services
Institutional vs. Community-Based Services, FY 2005

Distribution of Medicaid Long Term Expenditures Institutional vs. Community-Based Services, FY 2005					
STATE	Institutional LTC Services		Community-Based Services		TOTAL LTC Expenditures
	Expenditures	% of Total Medicaid LTC Dollars	Expenditures	% of Total Medicaid LTC Dollars	
Oregon	\$255,636,038	29.9%	\$600,549,989	70.1%	\$856,186,027
New Mexico	\$219,625,404	32.8%	\$450,981,337	67.2%	\$670,606,741
Alaska	\$119,071,602	37.0%	\$202,452,251	63.0%	\$321,523,853
Vermont	\$104,706,607	40.2%	\$155,953,459	59.8%	\$260,660,066
Minnesota	\$1,030,551,911	40.9%	\$1,490,266,154	59.1%	\$2,520,818,065
Washington	\$709,632,730	42.5%	\$962,010,877	57.5%	\$1,671,643,607
Wyoming	\$81,483,237	45.9%	\$95,870,119	54.1%	\$177,353,356
California ¹	\$3,689,787,337	47.4%	\$4,091,291,411	52.6%	\$7,781,078,748
Kansas	\$410,499,678	50.2%	\$407,190,529	49.8%	\$817,690,207
Maine	\$259,899,930	51.1%	\$248,859,307	48.9%	\$508,759,237
Colorado	\$499,704,437	55.6%	\$398,926,885	44.4%	\$898,631,322
Montana	\$150,878,249	56.6%	\$115,787,986	43.4%	\$266,666,235
Rhode Island	\$301,561,336	57.0%	\$227,405,738	43.0%	\$528,967,074
Texas	\$2,520,883,567	57.2%	\$1,886,590,517	42.8%	\$4,407,474,084
New York	\$9,656,047,019	57.5%	\$7,124,118,871	42.5%	\$16,780,165,890
Idaho	\$184,532,052	57.6%	\$136,040,368	42.4%	\$320,572,420
North Carolina	\$1,585,917,088	58.2%	\$1,137,797,244	41.8%	\$2,723,714,332
Wisconsin	\$1,131,221,184	58.5%	\$803,963,766	41.5%	\$1,935,184,950
West Virginia	\$446,561,234	59.1%	\$308,648,840	40.9%	\$755,210,074
Utah	\$199,949,030	60.5%	\$130,737,461	39.5%	\$330,686,491
Oklahoma	\$572,471,968	61.4%	\$360,604,674	38.6%	\$933,076,642
Massachusetts	\$1,904,767,653	62.3%	\$1,153,900,297	37.7%	\$3,058,667,950
South Dakota	\$148,769,396	62.6%	\$88,994,100	37.4%	\$237,763,496
Nevada	\$178,571,919	62.8%	\$105,762,081	37.2%	\$284,334,000
Hawaii	\$206,853,980	63.1%	\$121,012,262	36.9%	\$327,866,242
Connecticut	\$1,270,108,075	63.3%	\$737,002,996	36.7%	\$2,007,111,071
Missouri	\$1,061,577,145	63.5%	\$610,291,786	36.5%	\$1,671,868,931
Maryland	\$957,793,883	63.6%	\$547,656,963	36.4%	\$1,505,450,846
Virginia	\$914,756,439	64.6%	\$500,198,366	35.4%	\$1,414,954,805
New Hampshire	\$350,497,379	66.0%	\$180,245,777	34.0%	\$530,743,156
Iowa	\$671,274,635	66.4%	\$339,863,445	33.6%	\$1,011,138,080
Nebraska	\$412,159,736	66.5%	\$207,680,038	33.5%	\$619,839,774
Arizona ²	\$24,034,178	68.0%	\$11,311,033	32.0%	\$35,345,211
South Carolina	\$668,055,316	69.0%	\$300,093,728	31.0%	\$968,149,044
Delaware	\$180,677,623	69.9%	\$77,622,769	30.1%	\$258,300,392
Michigan	\$1,625,852,412	70.3%	\$687,639,144	29.7%	\$2,313,491,556
Arkansas	\$632,660,254	70.8%	\$260,605,028	29.2%	\$893,265,282
Illinois	\$2,135,220,646	71.2%	\$862,495,223	28.8%	\$2,997,715,869
New Jersey	\$2,295,242,670	71.6%	\$909,947,172	28.4%	\$3,205,189,842
Kentucky	\$829,036,389	72.0%	\$322,143,881	28.0%	\$1,151,180,270
Florida	\$2,529,776,700	72.9%	\$939,227,170	27.1%	\$3,469,003,870
Alabama	\$865,154,457	74.0%	\$304,733,517	26.0%	\$1,169,887,974
Louisiana	\$1,077,395,672	74.7%	\$364,347,937	25.3%	\$1,441,743,609
Tennessee	\$1,196,912,041	75.4%	\$390,044,735	24.6%	\$1,586,956,776
Indiana	\$1,578,904,250	76.1%	\$496,957,902	23.9%	\$2,075,862,152

Pennsylvania	\$4,914,610,303	76.5%	\$1,513,587,716	23.5%	\$6,428,198,019
North Dakota	\$226,019,214	77.0%	\$67,363,502	23.0%	\$293,382,716
STATE	Institutional LTC Services		Community-Based Services		TOTAL LTC Expenditures
	Expenditures	% of Total Medicaid LTC Dollars	Expenditures	% of Total Medicaid LTC Dollars	
Ohio	\$3,735,734,612	77.2%	\$1,101,026,660	22.8%	\$4,836,761,272
Georgia	\$1,540,968,459	77.3%	\$451,904,192	22.7%	\$1,992,872,651
Washington DC	\$255,543,319	83.9%	\$49,188,501	16.1%	\$304,731,820
Mississippi	\$821,447,351	87.3%	\$119,720,304	12.7%	\$941,167,655
United States	\$59,340,997,744	62.8%	\$35,158,616,008	37.2%	\$94,499,613,752

Institutional services include nursing homes services and ICF-MR services.

Community-based services include HCBS waiver services, personal care services, home health services, and Texas' Community Assistance Services program.

¹ California's reported expenditures will likely increase as the state submits more prior period adjustments. For community services, FY2001 through FY2004 expenditures were \$750 million - \$1 billion greater than the amount originally presented. For ICF/MR, adjustments increased expenditures by about \$100 million each year after data were originally presented.

² Arizona data does not include spending for most long-term care, which is provided through a managed care program.

Source: HCBS Clearinghouse for the Community Living Exchange Collaborative, Distribution of Medicaid Long-Term Expenditures, Institutional vs. Community-Based Services, FY 2005, http://hcbs.org/moreInfo.php/nb/doc/1636/Medicaid_Long_Term_Care_Expenditures_FY_2005.

**Distribution of Medicaid Long Term Expenditures for A/D services
Institutional vs. Community-Based Services, FY 2005**

STATE	Institutional LTC Services		Community-Based Services		TOTAL LTC Expenditures
	Expenditures	% of Total Medicaid LTC Dollars	Expenditures	% of Total Medicaid LTC Dollars	
Oregon	\$255,636,038	46.3%	\$296,681,684	53.7%	\$552,317,722
Alaska	\$119,071,602	48.4%	\$127,145,418	51.6%	\$246,217,020
New Mexico	\$198,501,992	48.4%	\$211,490,679	51.6%	\$409,992,671
Washington	\$583,432,004	48.7%	\$614,733,146	51.3%	\$1,198,165,150
California ¹	\$3,039,955,403	50.1%	\$3,025,105,590	49.9%	\$6,065,060,993
Texas	\$1,715,175,351	54.2%	\$1,448,299,854	45.8%	\$3,163,475,205
North Carolina	\$1,138,944,943	58.1%	\$821,916,777	41.9%	\$1,960,861,720
Minnesota	\$859,096,238	59.3%	\$589,767,112	40.7%	\$1,448,863,350
Idaho	\$129,943,097	60.2%	\$85,853,637	39.8%	\$215,796,734
New York	\$6,936,991,172	64.9%	\$3,759,063,308	35.1%	\$10,696,054,480
Vermont	\$103,761,799	65.2%	\$55,412,373	34.8%	\$159,174,172
Arizona ²	\$24,034,178	68.0%	\$11,311,033	32.0%	\$35,345,211
Kansas	\$343,499,946	68.0%	\$161,533,590	32.0%	\$505,033,536
Montana	\$138,527,941	71.3%	\$55,757,567	28.7%	\$194,285,508
Missouri	\$804,870,661	71.7%	\$317,581,290	28.3%	\$1,122,451,951
Wisconsin	\$933,846,817	72.0%	\$362,359,301	28.0%	\$1,296,206,118
Nevada	\$152,099,321	72.5%	\$57,780,499	27.5%	\$209,879,820
Arkansas	\$491,751,667	74.0%	\$172,632,457	26.0%	\$664,384,124
Colorado	\$440,978,303	75.0%	\$147,327,957	25.0%	\$588,306,260
Oklahoma	\$450,927,928	76.2%	\$140,919,436	23.8%	\$591,847,364
West Virginia	\$391,460,606	76.7%	\$119,084,866	23.3%	\$510,545,472
Maine	\$204,130,654	76.9%	\$61,186,915	23.1%	\$265,317,569
Massachusetts	\$1,691,661,390	77.0%	\$505,176,542	23.0%	\$2,196,837,932
Connecticut	\$1,050,418,002	78.5%	\$288,161,326	21.5%	\$1,338,579,328
Iowa	\$422,522,418	78.7%	\$114,627,139	21.3%	\$537,149,557
New Jersey	\$1,729,696,109	78.8%	\$464,391,071	21.2%	\$2,194,087,180
Virginia	\$685,936,776	78.9%	\$183,385,330	21.1%	\$869,322,106
Illinois	\$1,447,065,304	79.1%	\$381,429,429	20.9%	\$1,828,494,733
Wyoming	\$63,148,012	80.0%	\$15,829,799	20.0%	\$78,977,811
Nebraska	\$352,715,974	80.6%	\$85,110,379	19.4%	\$437,826,353
Ohio	\$2,730,681,039	81.6%	\$617,063,179	18.4%	\$3,347,744,218
Washington DC	\$176,347,294	81.9%	\$39,051,452	18.1%	\$215,398,746
South Carolina	\$506,621,835	81.9%	\$111,650,859	18.1%	\$618,272,694
Kentucky	\$721,289,302	82.2%	\$156,385,790	17.8%	\$877,675,092
Maryland	\$894,708,199	82.6%	\$188,837,240	17.4%	\$1,083,545,439
Hawaii	\$198,248,475	82.7%	\$41,396,710	17.3%	\$239,645,185
Michigan	\$1,605,073,452	84.7%	\$290,509,041	15.3%	\$1,895,582,493
Louisiana	\$651,716,193	84.7%	\$117,670,235	15.3%	\$769,386,428
Georgia	\$1,440,713,705	87.6%	\$204,087,310	12.4%	\$1,644,801,015
Florida	\$2,228,586,334	87.9%	\$308,101,725	12.1%	\$2,536,688,059
Delaware	\$154,856,126	87.9%	\$21,331,053	12.1%	\$176,187,179
Alabama	\$837,906,396	88.4%	\$109,697,972	11.6%	\$947,604,368
Rhode Island	\$294,493,348	89.1%	\$36,202,211	10.9%	\$330,695,559
New Hampshire	\$348,149,110	89.5%	\$40,749,387	10.5%	\$388,898,497
South Dakota	\$127,472,842	89.7%	\$14,710,061	10.3%	\$142,182,903
Utah	\$142,435,498	90.3%	\$15,307,134	9.7%	\$157,742,632

Pennsylvania	\$4,337,387,401	90.5%	\$455,599,126	9.5%	\$4,792,986,527
Indiana	\$1,260,639,232	92.3%	\$105,702,275	7.7%	\$1,366,341,507
STATE	Institutional LTC Services		Community-Based Services		TOTAL LTC Expenditures
	Expenditures	% of Total Medicaid LTC Dollars	Expenditures	% of Total Medicaid LTC Dollars	
North Dakota	\$160,740,375	95.0%	\$8,468,352	5.0%	\$169,208,727
Mississippi³	\$612,337,281	96.7%	\$20,884,434	3.3%	\$633,221,715
Tennessee	\$907,550,560	98.9%	\$9,969,413	1.1%	\$917,519,973
United States	\$47,237,755,643	72.9%	\$17,594,430,463	27.1%	\$64,832,186,106

Institutional services include nursing facility services.
Community-based services include home health services, personal care services, HCBS waiver services for older adults and people with physical disabilities, and Texas' Community Assistance Services program.

¹ California's reported expenditures will likely increase as the state submits more prior period adjustments. For personal care, FY2001 through FY2004 expenditures were \$500 - \$800 million greater than the amount originally presented.

² Arizona data does not include spending for most long-term care, which is provided through a managed care program.

³ Mississippi did not submit waiver-specific expenditures reports in FY2005, so community-based expenditures do not include the waivers for older adults and people with physical disabilities.

Source: HCBS Clearinghouse for the Community Living Exchange Collaborative, Distribution of Medicaid Long-Term Expenditures, Institutional vs. Community-Based Services, FY 2005, http://hcbs.org/moreInfo.php/nb/doc/1636/Medicaid_Long_Term_Care_Expenditures_FY_2005.

**Distribution of Medicaid Long Term Expenditures for MR/DD services
Institutional vs. Community-Based Services, FY 2005**

STATE	Institutional LTC Services		Community-Based Services		TOTAL LTC Expenditures
	Expenditures	% of Total Medicaid LTC Dollars	Expenditures	% of Total Medicaid LTC Dollars	
Arizona ¹	\$0	n/a	\$0	n/a	\$0
Alaska	\$0	0.0%	\$66,320,549	100.0%	\$66,320,549
Oregon	\$0	0.0%	\$303,626,385	100.0%	\$303,626,385
Vermont	\$944,808	1.0%	\$93,730,942	99.0%	\$94,675,750
New Hampshire	\$2,348,269	1.8%	\$129,373,461	98.2%	\$131,721,730
Rhode Island	\$7,067,988	3.6%	\$191,203,527	96.4%	\$198,271,515
Michigan	\$20,778,960	5.0%	\$397,130,103	95.0%	\$417,909,063
New Mexico	\$21,123,412	8.1%	\$239,136,221	91.9%	\$260,259,633
Hawaii	\$8,605,505	10.0%	\$77,393,107	90.0%	\$85,998,612
Alabama	\$27,248,061	12.3%	\$195,035,545	87.7%	\$222,283,606
Maryland	\$63,085,684	15.0%	\$357,903,837	85.0%	\$420,989,521
Minnesota	\$171,455,673	17.0%	\$838,064,158	83.0%	\$1,009,519,831
Montana	\$12,350,308	17.1%	\$60,030,419	82.9%	\$72,380,727
Wyoming	\$18,335,225	19.3%	\$76,593,348	80.7%	\$94,928,573
Colorado	\$58,726,134	20.1%	\$232,982,576	79.9%	\$291,708,710
South Dakota	\$21,296,554	22.3%	\$74,284,039	77.7%	\$95,580,593
West Virginia	\$55,100,628	22.5%	\$189,563,974	77.5%	\$244,664,602
Maine	\$55,769,276	22.9%	\$187,672,392	77.1%	\$243,441,668
Kansas	\$66,999,732	23.7%	\$215,962,833	76.3%	\$282,962,565
Massachusetts	\$213,106,263	24.9%	\$642,246,937	75.1%	\$855,353,200
Washington	\$126,200,726	26.7%	\$347,277,731	73.3%	\$473,478,457
Georgia	\$100,254,754	29.4%	\$240,981,965	70.6%	\$341,236,719
Wisconsin	\$197,374,367	32.0%	\$420,385,734	68.0%	\$617,760,101
Delaware	\$25,821,497	32.5%	\$53,603,630	67.5%	\$79,425,127
Nebraska	\$59,443,762	32.7%	\$122,274,755	67.3%	\$181,718,517
Florida	\$301,190,366	32.7%	\$619,286,347	67.3%	\$920,476,713
Connecticut	\$219,690,073	33.9%	\$428,887,905	66.1%	\$648,577,978
Utah	\$57,513,532	33.9%	\$112,076,753	66.1%	\$169,590,285
Nevada	\$26,472,598	35.6%	\$47,981,582	64.4%	\$74,454,180
Oklahoma	\$121,544,040	35.6%	\$219,685,238	64.4%	\$341,229,278
Pennsylvania	\$577,222,902	35.7%	\$1,039,396,059	64.3%	\$1,616,618,961
California ²	\$649,831,934	38.2%	\$1,050,006,600	61.8%	\$1,699,838,534
Kentucky	\$107,747,087	41.1%	\$154,428,570	58.9%	\$262,175,657
Tennessee	\$289,361,481	43.2%	\$380,075,322	56.8%	\$669,436,803
Virginia	\$228,819,663	44.0%	\$291,768,427	56.0%	\$520,588,090
New York	\$2,719,055,847	44.7%	\$3,365,055,563	55.3%	\$6,084,111,410
Indiana	\$318,265,018	45.2%	\$386,151,992	54.8%	\$704,417,010
Missouri	\$256,706,484	46.8%	\$292,275,546	53.2%	\$548,982,030
South Carolina	\$161,433,481	47.0%	\$182,399,186	53.0%	\$343,832,667
Idaho	\$54,588,955	52.6%	\$49,149,206	47.4%	\$103,738,161
North Dakota	\$65,278,839	52.9%	\$58,068,712	47.1%	\$123,347,551
Iowa	\$248,752,217	53.5%	\$216,333,966	46.5%	\$465,086,183
New Jersey	\$565,546,561	57.2%	\$422,511,983	42.8%	\$988,058,544
North Carolina	\$446,972,145	61.0%	\$286,101,708	39.0%	\$733,073,853
Arkansas	\$140,908,587	61.6%	\$87,972,571	38.4%	\$228,881,158
Illinois	\$688,155,342	62.2%	\$418,648,223	37.8%	\$1,106,803,565

Louisiana	\$425,679,479	63.3%	\$246,677,702	36.7%	\$672,357,181
Texas	\$805,708,216	65.6%	\$422,256,285	34.4%	\$1,227,964,501
STATE	Institutional LTC Services		Community-Based Services		TOTAL LTC Expenditures
	Expenditures	% of Total Medicaid LTC Dollars	Expenditures	% of Total Medicaid LTC Dollars	
Ohio	\$1,005,053,573	67.5%	\$483,963,481	32.5%	\$1,489,017,054
Washington DC	\$79,196,025	88.7%	\$10,135,846	11.3%	\$89,331,871
Mississippi³	\$209,110,070	100.0%	\$0	0.0%	\$209,110,070
United States	\$12,103,242,101	41.6%	\$17,024,072,941	58.4%	\$29,127,315,042

Institutional services include ICF-MR services

Community-based services include HCBS waiver services for people with mental retardation and developmental disabilities.

¹ Arizona data does not include spending for most long-term care, which is provided through a managed care program.

² California's reported expenditures will likely increase as the state submits more prior period adjustments. For the MR/DD waiver, FY2001 through FY2004 expenditures were \$200 - \$500 million greater than the amount originally presented. For ICF/MR, adjustments increased expenditures by about \$100 million each year after data were originally presented.

³ Mississippi did not submit waiver-specific expenditures reports in FY2005, so community-based expenditures are not known.

Source: HCBS Clearinghouse for the Community Living Exchange Collaborative, Distribution of Medicaid Long-Term Expenditures, Institutional vs. Community-Based Services, FY 2005, http://hcbs.org/moreInfo.php/nb/doc/1636/Medicaid_Long_Term_Care_Expenditures_FY_2005.

Appendix 8

Funding from Local Jurisdictions for Services for Persons with Developmental Disabilities:^{*} Maryland, 2006

Program	County	Service Category	Local Funds	Persons Served
Developmental Disabilities Division - Baltimore Co. Health Department*	Anne Arundel	Community/DD	\$164,204	410
Developmental Disabilities Resource Coordinator	Cecil	Case Management/DD	\$26,675	290
Medical Day Care Program for severely developmentally disabled	Prince George's	Community/DD	\$64,286	9
Supported Employment	Frederick	Community/DD	\$164,193	41
Supported Employment for developmentally disabled/dually diagnosed	Prince George's	Community/DD	\$69,496	43
ARC	Carroll	Community	\$225,420	452
ARC of Howard County	Howard	Community	\$74,080	277
ARC of Southern Maryland	Calvert	Community	\$332,222	N/A
ARC/Senior Support Services	Howard	Community	\$6,180	20
The Arc Northern Chesapeake Region	Harford	Community	\$1,348,747	400
The Arc Northern Chesapeake Region Vocational and Respite Care Services	Harford	Community	\$81,500	130
School based services for educational disabilities	Frederick	Community	\$1,243,716	600
Scott Key Center Day Program	Frederick	Community	\$896,047	72
Community Residential Services	Montgomery	Community	\$3,269,679	684
Community Support Living Arrangements	Montgomery	Community	\$770,857	256
Day and Vocational Program – Change Inc.	Carroll	Community	\$225,420	115
Day and Vocational Program – Target Inc	Carroll	Community	\$225,420	101
Day Program	Kent	Community	\$37,050	20
Day Programs (day habilitation and supported employment)	Montgomery	Community	\$574,944	495
Friends Aware - Disability Advocacy Group	Allegany	Community	\$60,000	N/A
Humanim*	Howard	Community	\$61,720	184
Individual Support Services for clients 22 and older	Montgomery	Community	\$41,437	283

^{*} Source: Center for Health Program Development and Management, UMBC. Interviews with local jurisdictions, 2007.

Program	County	Service Category	Local Funds	Persons Served
Purchase of Care (purchase of service)	Montgomery	Community	\$110,730	350
Supported Employment*	Montgomery	Community	\$1,164,052	634
The Harford Center, Inc.	Harford	Community	\$432,143	67
Worcester Development Center Services - Day Program	Worcester	Community	\$323,000	N/A
Mental Health Services for People with DD and/or MR*	Montgomery	Other long-term supports and services	\$1,121,232	409
Total			\$13,114,450	

Appendix 9

Locally and Jointly Funded Programs by Jurisdiction: Maryland, 2006

The following tables list locally and jointly funded programs in each of Maryland’s local jurisdictions that provide long-term services and supports to individuals age 65 and over and persons with disabilities. These programs were identified through a service inventory (see the Local Jurisdiction Service Inventory Template in Appendix 5) and follow-up interviews with local jurisdictions conducted in 2007. The tables below include, where available, FY 2006 local costs for each program and the numbers of persons served. The data show that very few (14 percent) of the programs identified are supported solely with local funds.

The vast majority of local programs are jointly funded by state, federal, and/or other private sources; just 14 percent of the programs identified are locally-funded only. There is tremendous variation in the number and types of programs offered by the state’s local jurisdictions, depending on local need and available resources.

Table 1 – Allegany County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Friends Aware - Disability Advocacy Group	Community	\$60,000	N/A
Medical and job training transportation	Mobility/Transportation	\$100,000	N/A
Prescription medications for low income residents	Community	\$50,000	533
Senior Center/Alzheimer's Services	Community	\$683,400	N/A

Table 2 – Anne Arundel County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Adult Public Guardianship	Community	\$67,171	6
*Case Management	Case Management	\$541,810	N/A
Congregate Program	Community	\$1,252,144	2300
Curb Abuse in Medicare and Medicaid Program	Community	\$10,455	N/A
Foster Grandparent	Community	\$296,200	N/A
Friendly Visitor	In-Home	\$24,497	38
Home Delivered Meals	In-Home	\$330,680	N/A
Housing	Housing	\$708,790	80
Information and Assistance	Other long-term supports and services	\$366,737	N/A
Medicaid Waiver	Community	\$322,902	322
National Family Caregiver Support Program	Community	\$162,377	1,300
Ombudsman	Institutional	\$136,682	276
Preventative Health	Community	\$610,858	N/A
*Respite Care	In-Home	\$147,000	N/A
Retired and Senior Volunteer Program	Community	\$110,500	N/A
Senior Care	Community	\$894,100	435
*Senior Center	Community	\$2,020,800	139,000
Senior Health Insurance Assistance Program	Community	\$66,807	N/A
Statewide Special Transportation Assistance Program	Mobility/Transportation	\$370,600	N/A
Telephone Reassurance	In-Home	\$9,491	20
*Transportation	Mobility/Transportation	\$2,180,100	4,300
Vulnerable Elderly Protection Program	Community	\$13,429	N/A
	*Total Local-Only Funds	\$4,889,710	

Table 3 – Baltimore City

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Medicaid Waiver for Older Adults Case Management	Case Management	\$176,048	703
Senior Assisted Living Group Home Subsidy Program	Housing	\$54,671	31
Senior Center	Community	\$141,877	2,500
TaxiCard Program and Senior Center Transportation	Mobility/Transportation	\$325,000	3,500
CARES Administrative Costs	Community	\$240,351	N/A
Services for the Aging	Community	\$127,194	N/A

Table 4 – Baltimore County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Adult Day Care – OHS	Community	\$101,305	46
Adult Evaluation and Review Services	Case Management	\$1,423,169	1,840
Adult Foster Care	Community	\$150,000	29
*Adult Medical Day Care	Community	\$93,017	46
Adult Services	Case Management	\$326,000	1,000
Advocacy, Center Connection, etc.	Community	\$780,959	8,723
Assisted Living	Housing	\$250,402	35 people/80 facility inspections
Caregivers	Community	\$343,142	4,388
Congregate Meals	Community	\$803,869	401,084
Nutrition Services Incentive Program	Community	\$196,302	
Senior Nutrition	Community	\$99,260	
Home Delivered Meals	In-Home	\$424,492	
Curb Abuse in Medicare and Medicaid Program	Community	\$18,265	1,613
*Developmental Disabilities Division - Baltimore Co. Health Department	Community	\$164,204	410
Elder Abuse	Other long-term supports and services	\$89,409	734
Emergency Fund/Homelessness and Housing Services	Housing	\$105,000	400

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Health Screening	Community	\$36,419	N/A
In-Home Care Program	In-Home	\$133,000	82
Maryland Health Insurance Program	Community	\$30,000	124,000
Medicaid Waiver	In-home	\$631,442	718
*Medical Assistance Personal Care Provider Training	Other long-term supports and services	\$600	48
Mental Health Geriatric Service Team	In-home	\$141,990	53
*Nursing Supervision of Department of Social Services In-Home Aides	Other long-term supports and services	\$28,087	249
Ombudsman	Institutional	\$278,269	734
*Programs & Vol. Services	Community	\$386,894	N/A
Public Guardianship	Other long-term supports and services	\$82,337	137
Retired and Senior Volunteer Program (RSVP)	Community	\$88,631	2,074
Rural Transportation Program	Mobility/Transportation	\$137,220	N/A
Senior Aides	Community	\$658,402	108
Senior Care	Community	\$957,967	591
*Senior Center Network	Community	\$1,582,377	13,499
Senior Information and Assistance	Community	\$123,777	55,837
*Seniors in Need	In-home	\$72,534	153
*Special Geriatric Services	Community	\$263,521	852
Statewide Health Insurance Program (SHIP)	Community	\$68,403	9,339
Statewide Special Transportation Assistance Program (SSTAP)	Mobility/Transportation	\$579,781	N/A
*Transportation	Mobility/Transportation	\$967,294	N/A
Vulnerable Elderly Protection Program	Community	\$74,563	N/A
	*Total Local-Only Funds	3,558,528	

Table 5 – Calvert County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
ARC of Southern Maryland	Community	\$332,222	N/A
Christmas in April of Calvert County	Housing	\$12,000	25
Congregate Meals	Community	\$47,054	1,249
Health Promotion and Disease Prevention	Other long-term supports and services	\$4,909	2,174
Home Delivered Meals	In-Home	\$5,748	157
National Family Caregiver Support Program	Community	\$6,606	43
Older Adult Waiver	Community	\$6,120	42
Personal Care	In-Home	\$3,989	3
Senior Health Insurance Assistance Program	Community	\$4,102	889
Senior Legal Assistance	Other long-term supports and services	\$918	30
Senior Lift (low income fare ticket program)	Mobility/Transportation	\$48,000	N/A
Southern Maryland Tri-County Community Action	Community	\$73,790	N/A
Transportation	Mobility/Transportation	\$3,989	66

Table 6 – Caroline County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Home Delivered Meals	In-home	\$24,201	101
Senior Center	Community	\$60,720	165

Table 7 – Carroll County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Outpatient Community Mental Health Center - Granite House	Community	\$75,000	840
Psychiatric Rehabilitation – Granite House	Community		100
Residential and Supportive Living Rehabilitation – Granite House	In-home		63
Congregate Meals	Community	\$50,940	848
Day and Vocational Program – Change Inc.	Community	\$225,420	115
Support Services – Change Inc.	In-home		150
Transportation – Change Inc.	Mobility/Transportation		100
Day and Vocational Program – Target Inc	Community	\$225,420	101
Support Services – Target Inc	In-home		27
Transportation – Target Inc	Mobility/Transportation		118
Medical Assistance Personal Care Program	Other long-term supports and services	\$15,355	38
Ombudsman	Institutional	\$12,431	220
Senior Health Insurance Assistance Program	Community	\$7,958	551
Senior Inclusion Program	Community	\$55,391	10
Senior Program Information and Assistance	Other long-term supports and services	\$53,040	8,918 services
ARC	Community	\$225,420	452

Table 8 – Cecil County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Developmental Disabilities Resource Coordinator	Case Management	\$26,675	290
*Healthy Lifestyles Fitness Center	Community	\$175,095	100
Medicaid Personal Care	In Home	\$46,920	25
National Family Caregiver Support Program	Community	\$7,805	210
Volunteer Development	Community	\$24,777	500
Public Guardianship	Community	\$32,064	5
Senior Care	Community	\$41,202	100
Health Services	Community	\$1,800	75
Consumer Protection	Community	\$3,906	150
Health Education and Screening	Community	\$5,952	250
Nutrition Education	Community	\$7,490	28
Recreation	Community	\$2,810	100
Senior Information and Assistance	Community	\$8,810	1000
Senior Nutrition, Congregate Meals	Community	\$57,347	325
Senior Assisted Living Group Home	Community	\$13,451	25
Shopping for Seniors	In Home	\$17,017	25
Older Adults Waiver	In Home	\$32,835	32
Home Delivered Meals	In Home	\$48,510	114
Ombudsman	Institutional	\$24,184	115
Senior Legal Assistance	Other long term supports and services	\$3,311	105
SHIP	Other long term supports and services	\$22,175	750
Splashing Seniors	Community	\$8,629	142
*Total Local-Only Funds		\$175,095	

Table 9 – Charles County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Dialysis and Senior Center Plus Subscription Service (Transportation)	Mobility/Transportation	\$140,597	100
Senior Center Plus	Community	\$50,200	57

Table 10 – Dorchester County

No programs reported.

Table 11 – Frederick County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Demand Response Transportation for Senior Citizens and People with Disabilities	Mobility/Transportation	\$297,139	41,527 trips
Medicaid Waiver	Community	\$9,186	30
Montevue Home Assisted Living	Other long-term supports and services	\$1,520,995	58
Ombudsman	Institutional	\$10,858	N/A
Public Guardianship	Community	\$43,377	22
Respite Long-term Care Rehabilitation	Institutional	\$1,933,970	N/A
School based services for educational disabilities	Community	\$1,243,716	600
Scott Key Center Day Program	Community	\$896,047	72
Senior Care	Community	\$138,314	200
Supported Employment	Community	\$164,193	41

Table 12 – Garrett County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Congregate Meals	Community	\$27,000	375
Home Delivered Meals	In-home	\$41,250	275
Senior Information and Assistance	Community	\$6,500	400
Senior Center Operating	Community	\$65,000	500
Statewide Special Transportation Assistance Program	Mobility/Transportation	\$64,352	42,194 trips

Table 13 – Harford County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Alliance Case Management	Case Management	\$5,000	12
Alliance SHP Chronic Homeless	Housing	\$133,500	34
Curb-to-curb transportation services	Mobility/Transportation	\$110,786	18,110 rides
Harford Family House HSP	Housing	\$81,962	22
*Homeless Case Management	Case Management	\$75,000	274
*In-Home Aide Program	In-home	\$25,000	1
Kelleher Adult Day Care Center Transportation Services	Mobility/Transportation	\$24,000	95
Meals on Wheels	In-home	\$10,500	25
Medicaid Waiver	Case Management	\$27,081	42
National Family Caregiver Support Program	Community	\$21,949	1,892
Ombudsman	Institutional	\$3,792	70 complaints
*Public Guardianship	Community	N/A	N/A
Senior Health Insurance Assistance Program	Community	\$4,739	2,535
Statewide Special Transportation Assistance Program	Mobility/Transportation	\$103,236	18,110
The Arc Northern Chesapeake Region	Community	\$1,348,747	400
The Arc Northern Chesapeake Region Vocational and Respite Care Services	Community	\$81,500	130
The Harford Center, Inc.	Community	\$432,143	67
*Transit Coordinator	Mobility/Transportation	\$17,218	32
	*Total Local-Only Funds	\$117,218	

Table 14 – Howard County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
*Adaptive Living, Inc.	Housing	\$12,500	9
Adult Public Guardianship	Community	\$51,343	12
Aging and Disability Resource Center - MAP - Senior I & A	Community	\$218,817	36,415
Aging in Place - Home Modification - Home Assessments	Housing	\$161,177	600
*ARC of Howard County	Community	\$74,080	277
*ARC/Senior Support Services	Community	\$6,180	20
Caregiver Services	Community	\$18,847	4,112
Congregate Meals	Community	\$334,981	970
*Family and Children's Service/Eldercare	In-home	\$60,000	172
Food Bank and Pantry	Community	\$48,174	300
Health Promotion, Education, Wellness Programming, Evidence Based Programs	Other long-term supports and services	\$62,735	N/A
Housing Monitor Program	Housing	\$116,112	264
*HSC	Community	\$131,500	25
*HUD Supportive Housing Program	Housing	\$47,633	62
*Humanim	Community	\$61,720	184
Maryland Energy Assistance Program (MEAP)	Community	\$50,000	1,839
*Meals on Wheels	In-home	\$11,250	23
Medicaid Waiver for Older Adults	Case Management	\$206,338	230
*Metropolitan Washington Ear	Other long-term supports and services	\$2,500	29
Ombudsman	Institutional	\$144,338	130
*On Our Own	Community	\$15,000	132
ParaTransit Services	Mobility/Transportation	**\$2,614,413	N/A
*Radio Reading Network	Other long-term supports and services	\$5,000	N/A
Senior Adult Group Housing Subsidy	Housing	\$49,500	81
Senior Center Plus	Community	\$315,661	85
Senior Health Insurance Assistance Program – CAMM	Community	\$67,500	N/A
*St. John's Economic Development Corporation (SSEDC)	Community	\$25,000	0
*William Bailey Fund	Community	\$8,000	33
*Winter Growth	Housing	\$28,750	28,623 days - nights respite
	* Total Local-Only Funds	\$489,113	

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Table 15 – Kent County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Day Program	Community	\$37,050	20
Home Delivered Meals	In-home	\$27,175	81
Senior Center	Community	\$44,798	316
Shopping for Seniors	Community	\$13,268	20

Table 16 – Montgomery County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Adult Evaluation and Review Services	Case Management	\$511,000	986
Adult Protective Services and Case Management Services	Community	\$858,000	744
Adult Public Guardianship	Community	\$255,500	75
Autism Waiver	Community	\$561,450	172
*Call N' Ride	Mobility/Transportation	\$2,800,000	4,100
*Chore Services	In-home	\$125,000	56
Community Residential Services	Community	\$3,269,679	684
Community Support Living Arrangements	Community	\$770,857	256
Congregate Meals	Community	\$100,300	4,564
*Connect A Ride	Mobility/Transportation	\$932,780	1,627
Day Programs (day habilitation and supported employment)	Community	\$574,944	495
Friendly Visitor	In-home	\$79,000	5,108
Home Delivered Meals	In-home	\$62,666	692
Individual Support Services for clients 22 and older	Community	\$41,437	283
In-Home Aide Services Purchase of Services Program	Community	\$3,510,000	476
*Mental Health Services for People who are deaf or hearing impaired	Other long-term supports and services	\$88,916	36
*Mental Health Services for People with DD and/or MR	Other long-term supports and services	\$1,121,232	409
My Turn	Other long-term supports and services		42
National Family Caregiver Support Program	Community	\$293,000	5,000
Older Adult Waiver	Community	\$500,077	387
Ombudsman	Institutional	\$191,125	698
*Project Lifesaver	Other long-term supports and services	\$70,000	N/A

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Purchase of Care (purchase of service)	Community	\$110,730	350
Representative Payee	Other long-term supports and services	\$76,400	109
Respite Care Services Program	Community	\$978,808	1,412
Senior Assisted Living Group Home Subsidy Program	Housing	\$1,189,000	225
*Senior Connection	Mobility/Transportation	\$99,600	540
Senior Health Insurance Assistance Program	Community	\$100,500	4,444
Senior Outreach Mental Health	Other long-term supports and services	\$521,000	1,137
Senior Program Information Assistance	Other long-term supports and services	\$465,600	1,271
Social Services to Adults	Other long-term supports and services	\$740,250	730
*Supported Employment	Community	\$1,164,052	634
*Supportive Housing Rental Assistance Program	Housing	\$473,210	75
Medical Assistance Outreach	Other long-term supports and services	\$983,000	5,300
RSVP	Community	\$34,809	612
Program Transportation	Mobility/Transportation	\$748,000	N/A
Escorted Transportation	Mobility/Transportation	\$18,000	N/A
Special Needs Services for Individuals with Disabilities	Community	\$940,145	N/A
Seniors and Therapeutic Recreation Programs	Community	\$1,418,000	9,620
Senior Dental Services	Other long-term supports and services	\$565,000	700
Emergency and contingency supports (includes summer camps, after care	Other long-term supports and services	\$575,977	N/A
Outreach and Advocacy for Individuals with Disabilities	Other long-term supports and services	\$82,135	N/A
	*Total Local Only-Funds	\$6,874,790	

Table 17 – Prince George's County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Assisted Living Programs with psycho geriatric nursing	Community	\$117,773	6
Congregate Meals	Community	\$27,961	3,006
Enhanced Client Service (nursing) for community housing placements	Other long-term supports and services	\$75,000	N/A
Home Delivered Meals	In-home	\$50,950	504
*Information, Assistance and Referral Services for Individuals with disabilities	Other long-term supports and services	\$181,625	N/A
Medical Day Care Program for severely developmentally disabled	Community	\$64,286	9
Ombudsman	Institutional	\$31,396	2,891
PATH program to help secure housing for chronically homeless and individuals with mental illness	Other long-term supports and services	\$62,872	N/A
Public Guardianship	Other long-term supports and services	\$46,392	69
Residential housing with psycho geriatric nursing services	Community	\$61,335	10
Senior Assisted Living Group Home Subsidy Program	Housing	\$2,650	45
Senior Employment	Community	\$131,900	118
Senior Health Insurance Assistance Program	Community	\$33,271	6,935
Senior Information and Assistance	Community	\$29,309	82,440 units of service
Shelter Plus Program	Community	\$333,472	N/A
Supported Employment for developmentally disabled/dually diagnosed	Community	\$69,496	43
Telephone Reassurance	Community	\$4,249	145
Transitional Age Youth Program	Community	\$224,048	N/A
Vulnerable Elderly Protection Program	Community	\$11,612	N/A
	* Total Local-Only Funds	\$181,625	

Table 18 – Queen Anne's County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Adult Public Guardianship	Community	\$16,682	
Assisted Living	Housing	\$32,335	50
Case Management	Case Management	\$32,483	12
Case Manager	Case Management	\$84,775	48
Chore Services	In-home	\$10,140	3
Community Care/Home Maker	In-home	\$20,333	9
Congregate Meals	Community	\$311,867	442
Curb Abuse in Medicaid and Medicare	Community	\$18,591	112
Home Delivered Meals	In-home	\$171,988	82
*Housing Services	Housing	\$15,714	5
Legal Assistance	Community	\$2,442	20
Medicaid Waiver	Community	\$113,920	25
Medication Management	Community	\$1,500	N/A
National Family Caregiver Support Program	Community	\$39,533	1,106
Nutrition Counseling	Community	\$500	29
Nutrition Education	Community	\$3,250	67
Ombudsman	Institutional	\$16,682	12
Personal Care/Chore Services Personal Care	Community	\$25,012	15
Physical Fitness	Community	\$3,750	327
Senior Centers	Community	\$230,605	836
Senior Health Insurance Assistance Program	Community	\$12,623	629
Senior Information and Assistance	Community	\$107,444	1,200
Statewide Special Transportation Assistance Program	Mobility/Transportation	\$420,182	495
Vulnerable Elderly Protection Program	Community	\$16,682	N/A
	* Total Local-Only Funds	\$15,714	

Table 19 – Somerset County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
*Meals on Wheels and other aging programs	In-home	\$50,000	600
	* Total Local-Only Funds	\$50,000	

Table 20 – St. Mary's County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Congregate Meals	Community	\$114,607	786
Home Delivered Meals	In-home	\$109,283	354
Homemaker & Personal Care	In-home	\$1,380	10
National Family Caregiver Support Program	Community	\$3,150	140
Nutrition Education, Health Education, Medicine Management, Physical Fitness	Community	\$900	1,046
Ombudsman	Institutional	\$866	25
Senior Center	Community	\$2,755	1,502
Senior Information and Assistance	Community	\$2,756	20,654

Table 21 – Talbot County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Home Delivered Meals	In-home	\$38,060	83
Senior Center	Community	\$60,100	206

Table 22 – Washington County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Adult Foster Care	Community	\$47,268	23
Congregate Meals	Community	\$23,893	786
Meals on Wheels	In-home	\$81,080	786
National Family Caregiver Support Program	Community	\$16,560	N/A
Ombudsman	Institutional	\$16,066	391
Public Guardianship	Community	\$33,737	
Retired and Senior Volunteer Program (RSVP)	Community	\$23,595	1,000
Rose-Alzheimer's Demonstration Grant	Community	\$23,000	563
Senior Assisted Living Group Home Subsidy Program	Housing	\$7,628	N/A
Senior Program Information and Assistance	Community	\$24,876	3,933
Senior Health Insurance Assistance Program	Community	\$35,757	
Senior Care	Community	\$31,873	N/A
*Senior Living Alternative	Housing	\$22,250	15
Utility terminations and evictions prevention	Housing	\$25,000	3,258
	* Total Local-Only Funds	\$22,250	

Table 22 – Wicomico County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Commission on Aging	Community	\$500	N/A
Meals on Wheels	In-home	\$69,569	115 meals per day

Table 24 – Worcester County

Program Name	Service Category	FY 2006 Local Funds	Participants Served in FY 2006
Home Delivered/Congregate Meals	In-home/Community	\$51,950	N/A
MAP Aging Program	Community	\$123,967	N/A
Mental Health Program	Community	\$303,296	N/A
Prescription Drug Pharmacy Assistance	Community	\$7,500	N/A
*Senior Center	Community	\$144,791	N/A
Senior Care, Senior Information and Assistance, Senior Centers, Worcester Adult Medical Day Care	Community	\$207,072	N/A
Senior Ride	Mobility/Transportation	\$80,034	N/A
Statewide Special Transportation Assistance Program	Mobility/Transportation	\$32,999	N/A
Special Education Programs	Community	\$6,022,867	N/A
Targeted Case Management	Case Management	\$329,537	N/A
Worcester Development Center Services - Day Program	Community	\$323,000	N/A
	* Total Local-Only Funds	\$144,791	

Appendix 10

Gaps in Services Identified by Maryland's Local Jurisdictions*

Jurisdiction	Service Category	Service Gaps Identified by Jurisdiction
Baltimore Region		
Anne Arundel County	Community	<ul style="list-style-type: none"> • Not enough health vendors or funding for case managers and in-home aides.
Baltimore County	Community and In-home	<ul style="list-style-type: none"> • Increased demand for adult services. • Increased availability of in-home services and supports.
Carroll County	Community	<ul style="list-style-type: none"> • Lack of administrative and program funds to staff programs and provide services to Older Adult Waiver, Senior Care Program, and the Guardianship Program participants. • Shortage of personal care, in-home service workers, case managers, and other support staff. • Need to increase monthly Senior Assisted Living Group Home subsidy to meet rising housing fees.
Harford County	In-home	<ul style="list-style-type: none"> • Program funds needed to serve eligible clients in the In-Home Aide Services Program and those on the waiting list.
	Community	<ul style="list-style-type: none"> • Funds needed to provide supported employment services to the county's transitioning youth in the Arc Northern Chesapeake Region program.
	Mobility/Transportation	<ul style="list-style-type: none"> • State and local funds do not meet the need for non-ADA transportation services. BRAC is expected to increase demand for service.
Howard County	Community	<ul style="list-style-type: none"> • Lack of resources available to assist private payers' access to community-based long-term care services.
	Housing	<ul style="list-style-type: none"> • Inadequate funding to meet demand for low-income housing. • Limited number of rental properties willing to accept Section 8 vouchers.
	All	<ul style="list-style-type: none"> • Lack of funds, resources, and providers to meet service demand. • Services are not available for persons who are just short of financial eligibility guidelines. • Lack of expedited eligibility for Medicaid services (one-stop shopping). • Lack of coordination among service providers. • Lack of resources for dental and vision services, home modification and repair, special shoes, door-to-door transportation, and housing subsidies.
Baltimore City		<ul style="list-style-type: none"> • No gaps indicated.
Suburban Washington Region		
Frederick County	Community and In-home	<ul style="list-style-type: none"> • Frederick County could not administer the state-mandated Public Guardianship program with state support. • Additional state and federal support is needed to administer all programs. • Program funding has remained level for several years, yet service demand increases.
	Transportation	<ul style="list-style-type: none"> • Transportation services.
	Housing	<ul style="list-style-type: none"> • Diversity of work and housing options, affordable housing.
	Other	<ul style="list-style-type: none"> • Increased public awareness and advocacy for persons with disabilities. • Psychiatric supports. • Few retirement programs assist for the aging population. • Emergency preparedness and supports

* Source: Center for Health Program Development and Management, UMBC. (2007). Data from service inventory of local jurisdictions. See Appendix 5 for the inventory form.

Jurisdiction	Service Category	Service Gaps Identified by Jurisdiction
Montgomery County	Community, In-home, and Housing	<ul style="list-style-type: none"> • Demand for service exceeds available funds for the In-Home Aide Services Purchase of Service Program and the Respite Care Services Program. • Large increase in the waiting list for the Social Services to Adults Program (250 in 2006-2007). • Role and issues confronting informal caregivers need to be examined. • Additional funds needed to meet demand for the Home Delivered Meals and Congregate Meals Programs (increase numbers served, provide required specialty meals, additional congregate housing and adult day care centers). • Increased services for persons with mental and somatic illnesses (i.e. assisted living facility, extended program eligibility).
	Transportation	<ul style="list-style-type: none"> • Difficulty recruiting volunteer transportation providers, lack of volunteers for high demand programs.
Prince Georges County	In-home	<ul style="list-style-type: none"> • Additional funding to reduce waiting list for the Home Delivered Meal Program.
	Housing	<ul style="list-style-type: none"> • Decrease number of persons on the Senior Assisted Living Home Subsidy Program; increase the subsidy amount to cover the increasing cost of assisted living facilities. • Limited affordable housing options for individuals with disabilities, including mental illness. Provide tax break incentives to landlords and rent subsidies for consumers.
	Community	<ul style="list-style-type: none"> • Increase Senior Employment Program slots to reduce numbers on waiting list.
Southern Maryland Region		
Calvert County		<ul style="list-style-type: none"> • No gaps identified.
Charles County	Community	<ul style="list-style-type: none"> • Senior Center Plus participants request more days and hours of service, more frequent/reliable transportation, and reduced costs and daily participant fees.
	Transportation	<ul style="list-style-type: none"> • Insufficient funding to meet the transit needs of the community.
St. Mary's County		<ul style="list-style-type: none"> • No gaps identified.
Western Maryland Region		
Allegany County		<ul style="list-style-type: none"> • No gaps identified.
Garrett County	Community	<ul style="list-style-type: none"> • Programs for the elderly have been particularly difficult to maintain due to increasing aging population, and food, utility, and fuel costs. • The method of funding supported employment in DDA is problematic as they fund a crew not the individual. • Difficult to recruit staff as salaries are lower than state or county employees. • Concerns about group home census loss which results in lost funding.
Washington County	Community	<ul style="list-style-type: none"> • More Medicaid Waiver slots are needed. • Need more funding for programs and staff. Non-profit staff are paid less than state and county employees; difficult to recruit staff. • Increased need for long-term care services for persons with no long-term care savings and older adults migrating to Maryland.
	Housing	<ul style="list-style-type: none"> • Shortage of affordable housing for rent and purchase, specifically for persons with disabilities and older adults. • Insufficient number of affordable assistive living facilities. • More Medical Assistance Senior Living Alternative Program slots and funding for Medical Assistance non-waiver and "gray area" individuals.
Upper Eastern Shore Region		
Caroline County	In-home	<ul style="list-style-type: none"> • Additional funds are needed to reduce the waiting list for home-delivered meals.
	Community	<ul style="list-style-type: none"> • Additional funds are needed to serve individuals who are on the state waiver registry.
	Transportation	<ul style="list-style-type: none"> • Limited transportation for elderly and individuals with disabilities.

Jurisdiction	Service Category	Service Gaps Identified by Jurisdiction
Cecil County	Community	<ul style="list-style-type: none"> • Additional service providers and staff are needed to meet service demands (i.e. respite care providers and case management, information and assistance and shopping personnel). • Increased funding for volunteer programs (i.e. drivers).
	In-home	<ul style="list-style-type: none"> • Additional funding to reduce the Older Adult Waiver registry and to administer the program.
	Housing	<ul style="list-style-type: none"> • Additional funding to supplement Assisted Living Subsidy and make more affordable.
Kent	Community	<ul style="list-style-type: none"> • Additional funds are needed to serve individuals who are on the Older Adult Waiver registry.
	Transportation	<ul style="list-style-type: none"> • Limited public transportation for the elderly and individuals with disabilities.
	Other	<ul style="list-style-type: none"> • More outreach is needed to educate older adults about available services and supports and to provide service referrals.
Queen Anne's		<ul style="list-style-type: none"> • No gaps identified.
Talbot	Community	<ul style="list-style-type: none"> • Additional funds are needed to serve individuals who are on the Older Adult Waiver State registry.
	Transportation	<ul style="list-style-type: none"> • Limited public transportation for the elderly and individuals with disabilities.
	Other	<ul style="list-style-type: none"> • More outreach is needed to educate older adults about available services and supports and to provide service referrals.
Lower Eastern Shore Region		
Dorchester		<ul style="list-style-type: none"> • No gaps identified.
Somerset	In-Home	<ul style="list-style-type: none"> • Waiting list for our meals on wheels program.
	All	<ul style="list-style-type: none"> • Limited resources, rural county, geographical location, lack of health care providers, lack of assisted-living facilities, lack of geriatric health professionals, affordability of services, large population of below poverty seniors, transportation, senior mobility, affordable housing.
Wicomico		<ul style="list-style-type: none"> • No gaps identified.
Worcester	In-home	<ul style="list-style-type: none"> • Access to in-home/non-clinic addiction and mental health services for individuals, and access to service for individuals with no insurance coverage. • Limited funds and providers for in-home personal care and chore services.
	Community	<ul style="list-style-type: none"> • Increase current number of MAP program staff. Funds for staff and other expenses once MAP grant ends in 2008. • Cost of adult medical day program and limited number of grant/sliding scale slots in this county. • Need for additional DD services such as respite care provide and home health providers, specialized medical providers, adaptive equipment, and recreational activities.
	Transportation	<ul style="list-style-type: none"> • Evening and weekend transportation, and transportation for appointments, social events, etc., are needed for persons who cannot use public transportation.
	Housing	<ul style="list-style-type: none"> • Limited funds available for needed housing repairs. • Limited financial assistance to participants to defray assisted living costs. • Lack of appropriate housing, including shelters, for individuals with mental illness.
	Other	<ul style="list-style-type: none"> • Limited resources for dental care.

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