



# The Hilltop Institute

*analysis to advance the health of vulnerable populations*

## Medicaid Long-Term Services and Supports in Maryland:

**FY 2008 to FY 2011  
Volume 1**

**A Chart Book**

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*Prepared for:  
Maryland Department of Health and Mental Hygiene*

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## Maryland Medicaid Long-Term Services and Supports Overview

The Medicaid Long-Term Services and Supports in Maryland Chart Book, Volume 1, provides an overview of the number of Marylanders using long-term services and supports in state fiscal years (FYs) 2008 through 2011, and the cost to Medicaid to finance these services. Medicaid programs and services addressed in this chart book are:

- *The Living at Home Waiver*
- *The Medical Day Care Services Waiver*
- *The Older Adults Waiver*
- *Medical Assistance Personal Care Program*

Each of the three waivers provides community-based services and supports to individuals with low incomes and functional limitations. The waiver programs serve people who would otherwise require the services of a nursing facility, enabling them to return to or remain in the community. The waiver programs are authorized under Section 1915(c) of the Social Security Act and approved by the federal Centers for Medicare and Medicaid Services.

This chart book also provides information about Maryland Medicaid participants residing in nursing facilities. It summarizes demographic, service utilization, acuity, expenditure, and length of stay data for FYs 2008 through 2011.

## Overview *continued*

### **Maryland Medicaid Home- and Community-Based Services**

#### ***Living at Home Waiver***

The Living at Home Waiver, which had 850 funded slots in FY 2011, provides services and supports in home and community-based settings that enable people with physical disabilities to continue living in their own homes. Enrollees in the Living at Home Waiver must be aged 18 to 64 years at the time of enrollment.

In FY 2011, a total of 822 individuals were enrolled in the Living at Home Waiver. Medicaid expenditures for the waiver participants totaled \$51.2 million in FY 2011, of which \$38.4 million (7 out of every 10 dollars) were spent on waiver services. Agency and non-agency attendant care services were two of the most widely used waiver services; 79% of Living at Home Waiver participants received agency-provided attendant care and 38% received non-agency attendant care services. On-going case management services were provided to 98% of all Living at Home Waiver participants, at a cost of \$2.9 million. Expenditures for non-waiver Medicaid services, such as medical equipment and supplies, managed care organization capitation payments, and inpatient services, totaled \$12.8 million in FY 2011.

#### ***Medical Day Care Services Waiver***

The Medical Day Care Services Waiver, a single-service waiver program, began operating on July 1, 2008. Prior to that date, medical day care was a State Plan service. Under this waiver, approved medical day care agencies provide health, social, and related support services in an organized setting to individuals aged 16 years and older who reside in the community and meet a nursing facility level of care. Individuals who

## Overview continued

were receiving medical day care as a State Plan service prior to July 1, 2008, but were not enrolled in another waiver, were transitioned into the Medical Day Care Services Waiver program. There were 4,800 funded Medical Day Care Services Waiver slots in FY 2011.

In FY 2011, 4,622 individuals were enrolled in the Medical Day Care Services Waiver. Total FY 2011 Medicaid expenditures for Medical Day Care Services Waiver participants were \$107.2 million, of which \$59.7 million were for medical day care services. In FY 2011, 31 percent of Medical Day Care Services Waiver participants received Medical Assistance personal care services, at a cost of \$8.7 million.

### **Older Adults Waiver**

The Older Adults Waiver provides services to enrolled participants in their own homes or in assisted living facilities. Older Adults Waiver participants must be aged 50 or older at the time of enrollment. In FY 2011, there were 3,750 funded waiver slots. This waiver is administered by the Maryland Department of Aging and a network of 19 Area Agencies on Aging with oversight provided by Medicaid.

FY 2011 Medicaid expenditures for Maryland's 3,814 Older Adults Waiver participants totaled \$127.6 million. Expenditures for the provision of waiver-based services totaled \$104.9 million, with personal care services accounting for \$54.5 million. Medicaid expenditures for non-waiver services, such as durable medical supplies and Medicare cost share, totaled \$22.7 million.

## Overview continued

### ***Medical Assistance Personal Care Program***

The Medical Assistance Personal Care (MAPC) Program provides assistance with activities of daily living (ADLs) to Medicaid recipients who have a chronic illness, medical condition, or disability. Services are provided by self- or agency-employed providers who are approved and monitored by a nurse case monitor from a local health department. Personal care services are provided in the individual's home, community residence, or employment site and include assistance with ADLs and household services related to medical needs, such as food shopping and escorts to medical appointments. The frequency of service delivery is determined by the individual's assessed need.

In FY 2011, 5,147 individuals received Medical Assistance personal care, at a cost of \$29.6 million. Of these, 1,438 received this service while enrolled in the Medical Day Care Services Waiver, at a cost of \$8.7 million. The remaining Medical Assistance personal care recipients were not enrolled in the Medical Day Care Services Waiver. Expenditures for this “non-Medical Day Care Services Waiver” Medical Assistance personal care population totaled \$69 million.

## Overview *continued*

### ***Money Follows the Person***

Money Follows the Person (MFP) is a federal demonstration program that provides enhanced federal medical assistance funds to states to provide qualified home- and community-based services to persons who transition from an institutional setting back into the community. The MFP demonstration provides funding for expenses related to the persons' transition to the community and receives an enhanced federal match on qualified services provided to that person for up to 365 days of participation in the program. Typically, MFP participants transition to the community through one of the waivers and continue with uninterrupted waiver services at the completion of the MFP year. Within this chart book, certain MFP participant totals and expenditures are included in their respective waivers.

### ***Medicaid Nursing Facility Residents***

In FY 2011, there were 22,333 Medicaid nursing facility residents, a decrease of 1.8% from the previous fiscal year. Forty-seven percent of nursing facility residents aged 65 and older required a “heavy” or “heavy special” reimbursement rate, compared to 37% of residents under the age of 65. The largest percentages—40% of residents under age 65 and 44% of residents aged 65 years and older—had a moderate reimbursement level.

Medicaid expenditures for the nursing facility residents totaled \$1.15 billion, of which nearly three-fourths were for services provided to nursing facility residents aged 65 years and older. At \$7,979, the FY 2011 average per member per month (PMPM) expenditures for nursing facility residents younger than 65 years were higher than the \$5,610 PMPM expenditures for those aged 65 years and older. Per member per month is the ratio of the Medicaid home- and community-based or nursing facility expenditures divided by the number of persons receiving home- and community-based services or in a nursing facility on a monthly basis.

## Key Findings

This chart book summarizes demographic, service utilization, and expenditure data for FYs 2008 through 2011. The data are presented through a series of figures that illustrate trends in long-term services and supports utilization with accompanying narrative text.

Notable trends in the data include:

- The number of individuals receiving home- and community-based services through the Living at Home, Older Adults, Medical Day Care Services Waivers, and Medical Assistance personal care in FY 2011 was 14,405, up 10% from 13,061 in FY 2010.
- The unduplicated number of nursing facility residents in FY 2011 was 22,333, down 1.8% from 22,731 in FY 2010.
- Total Medicaid spending for the three home- and community-based waivers exceeded \$286.1 million in FY 2011—an increase of 8% from \$265.0 million in FY 2010, while total Medicaid expenditures for nursing facility residents increased 2%—from \$1.13 billion in FY 2010 to \$1.15 billion in FY 2011.
- FY 2011 PMPM total Medicaid expenditures for waiver participants varied by waiver. Living at Home Waiver participants had the highest PMPM cost at \$5,904 (up \$374 PMPM from FY 2010), followed by the Older Adults Waiver at \$3,333 (up \$60 PMPM from FY 2010), and the Medical Day Care Services Waiver at \$2,338 (up \$7 PMPM from FY 2010).
- Medicaid PMPM expenditures for nursing facility residents were \$6,082 in FY 2011, an increase of \$220 PMPM over the previous year.



## Chart Book Organization

The data in this chart book are presented in two sections:

- **Maryland Long-Term Services and Supports Users:** This section includes data on the number of Maryland Medicaid home- and community-based services waiver participants, nursing facility residents, and Medical Assistance personal care recipients, with breakdowns by age, race, gender, and region of residence. It also contains data on the number of individuals on the Maryland Waiver Interest Lists, settings from which individuals entered the waiver programs, and prior Medicaid coverage. Comparisons across care settings are provided where appropriate.
- **Medicaid Expenditures and Service Utilization:** This section provides data on Medicaid waiver expenditures and utilization for Medicaid waiver, non-waiver, and pharmacy services that are used by waiver participants, as well as utilization and expenditures for individuals receiving Medical Assistance personal care. This section also contains information about Medicaid expenditures and Medicaid services that individuals may receive while residing in a nursing facility. All presented data pertain to the level of care, diagnoses, and average length of stay for nursing facility residents.

## Data Sources

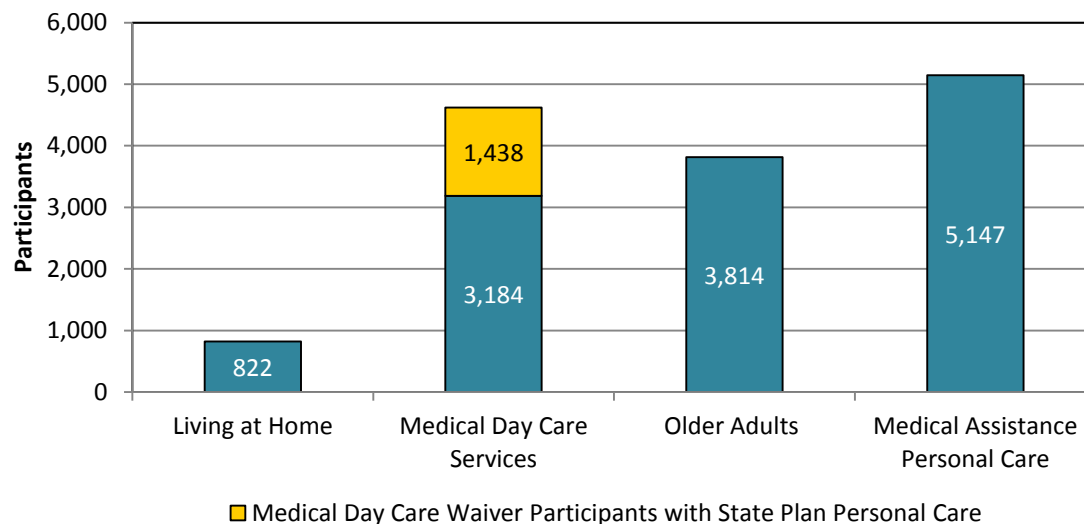
The information in this chart book was derived from the following data sources:

- **Maryland Department of Health and Mental Hygiene (DHMH) Medicaid Management Information System (MMIS2):** This system contains data for all individuals enrolled in Maryland's Medicaid program during the relevant fiscal year, including Medicaid eligibility category and fee-for-service (FFS) claims. Hilltop warehouses and processes monthly all MMIS2 data.
- **DHMH Decision Support System (DSS):** This system provides summary reports based on MMIS2 files and functions as a data resource for figures in this chart book.
- **Maryland Office of Health Care Quality, Minimum Data Set (MDS3.0):** The MDS3.0 is a federally mandated assessment instrument that is conducted for each nursing facility resident upon admission and at least quarterly thereafter. Hilltop collects MDS3.0 data for Maryland nursing facilities on a routine basis.
- **DHMH Long-Term Care and Waiver Services:** This includes Living at Home Waiver and Older Adults Waiver Interest Lists and waiver administrative costs data.
- **U.S. Census Bureau:** This source includes 2011 Modified Race Data, prepared by the Maryland Department of Planning, Projections and Data Analysis, State Data Center, May 2012.

# **Chapter 1.**

## **Maryland Long-Term Services and Supports Users**

**Figure 1. Long-Term Services and Supports Users, Home- and Community-Based Services, FY 2011**



In FY 2011, over 14,400 Marylanders received Medicaid-paid home- and community-based services in the three waivers and through the Medical Assistance Personal Care Program.

**Figure 2. Number of Home- and Community-Based Services Users and Nursing Facility Residents, FY 2008 – FY 2011**

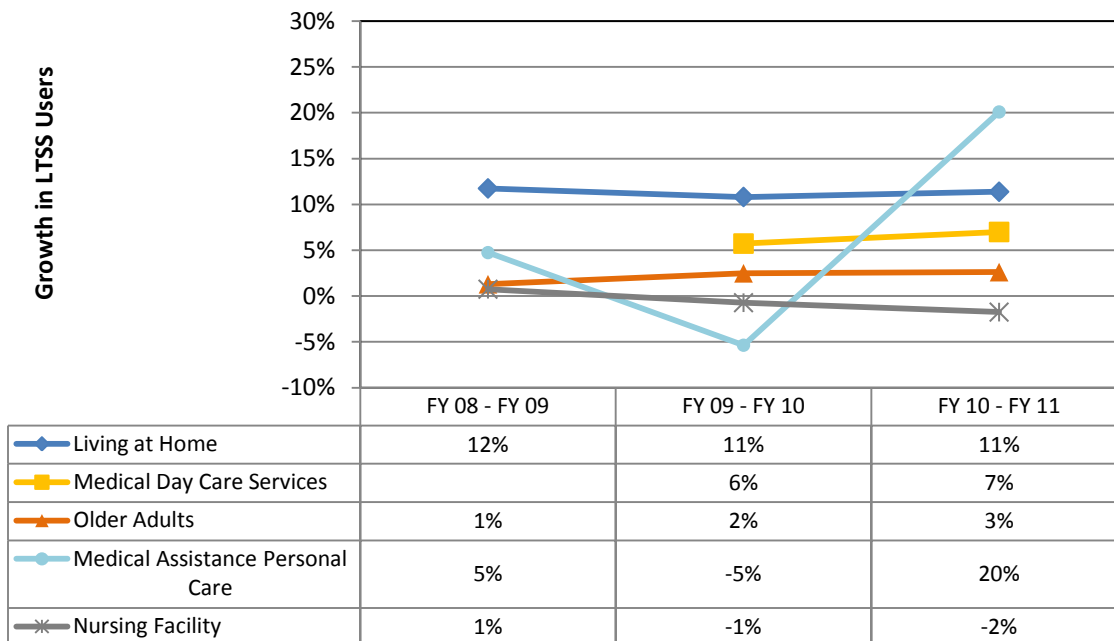
	FY 08	FY 09	FY 10	FY 11
Living at Home	596	666	738	822
Medical Day Care Services*		4,086	4,320	4,622
Older Adults	3,581	3,627	3,717	3,814
Medical Assistance Personal Care	4,324	4,529	4,286	5,147
<b>Total Home- and Community-Based Services Users</b>	<b>8,501</b>	<b>12,908</b>	<b>13,061</b>	<b>14,405</b>
Nursing Facility Residents	22,727	22,897	22,731	22,333

\*Effective July 1, 2008, medical day care was converted from a State Plan service to a waiver service.

Source: DSS

In FY 2011, over one-third (39%) of Maryland’s long-term services and supporters users received home – and community-based services, compared to 36% in FY 2009.

**Figure 3. Growth in Number of Long-Term Services and Supports Users, FY 2008 – FY 2011**



Overall, year-over-year growth rates for home- and community-based waiver participants consistently outpaced growth rates for nursing facility residents.

The Living at Home Waiver consistently had the highest percentage of participant growth among the waivers.

\*Effective July 1, 2008, medical day care was converted from a State Plan service to a waiver service.

Source: DSS

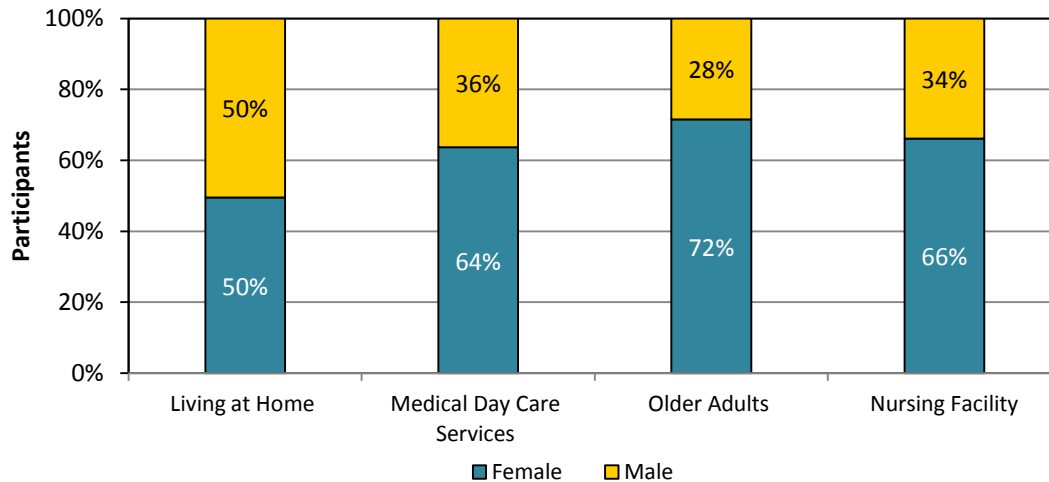
**Figure 4. Medicaid Waiver Participants and Nursing Facility Residents, by Age Group, FY 2011**

	Living at Home *	Medical Day Care Services	Older Adults	Medical Assistance Personal Care	Nursing Facility
<b>0-21</b>	1%	1%	0%	3%	0%
<b>22-49</b>	52%	15%	0%	18%	5%
<b>50-64</b>	45%	19%	16%	22%	16%
<b>65-74</b>	2%	18%	22%	16%	16%
<b>75-84</b>	0%	31%	28%	26%	25%
<b>85+</b>	0%	16%	33%	15%	38%
<b>Total</b>	100%	100%	100%	100%	100%

\* Participation in the Living at Home Waiver is limited to persons under age 65 at the time of enrollment.

Age-specific waiver criteria resulted in a variety of participant ages across the three waivers. In FY 2011, the majority (424, or 52%) of the Living at Home Waiver participants were aged 22-49. Participants in the Medical Day Care Services Waiver and the Older Adults Waiver were older, with 3,020 (or 65%) and 3,189 (or 84%), respectively, being aged 65 or older.

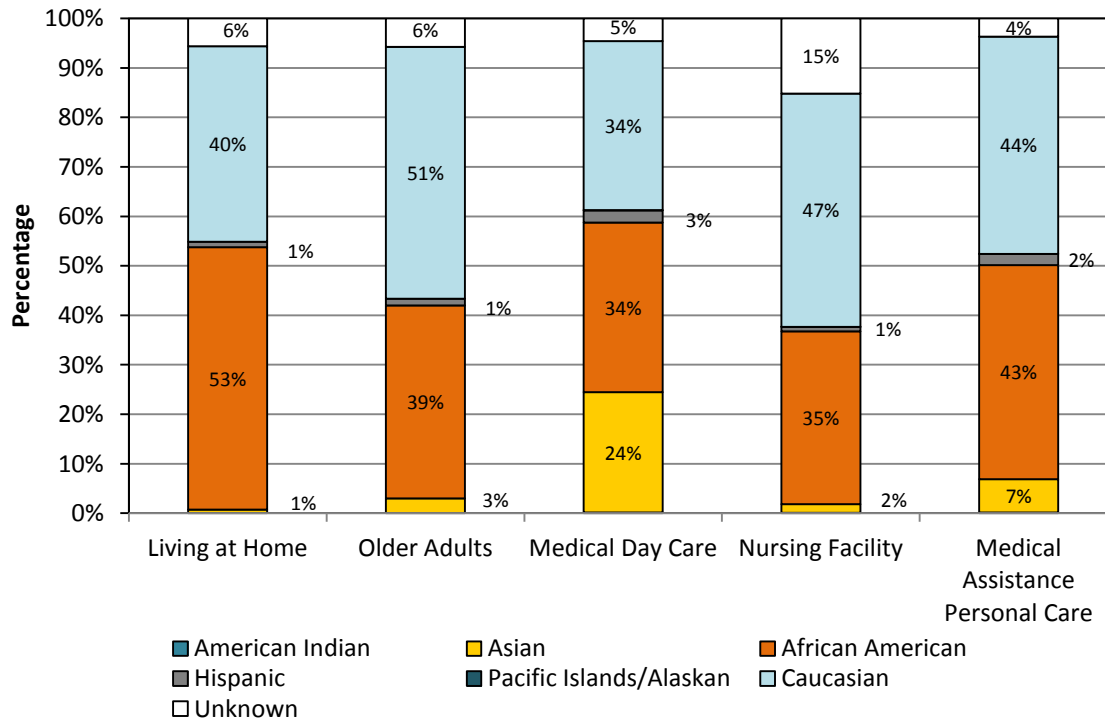
**Figure 5. Medicaid Waiver Participants and Nursing Facility Residents, by Gender, FY 2011**



The majority of users of nursing facility and home- and community-based services were female. In FY 2011, females outnumbered males by a ratio of nearly 2 to 1 in the Medical Day Care Services Waiver and in nursing facilities, and by almost 3 to 1 in the Older Adults Waiver. In the Living at Home Waiver, the gender distribution was equal.

Source: DSS

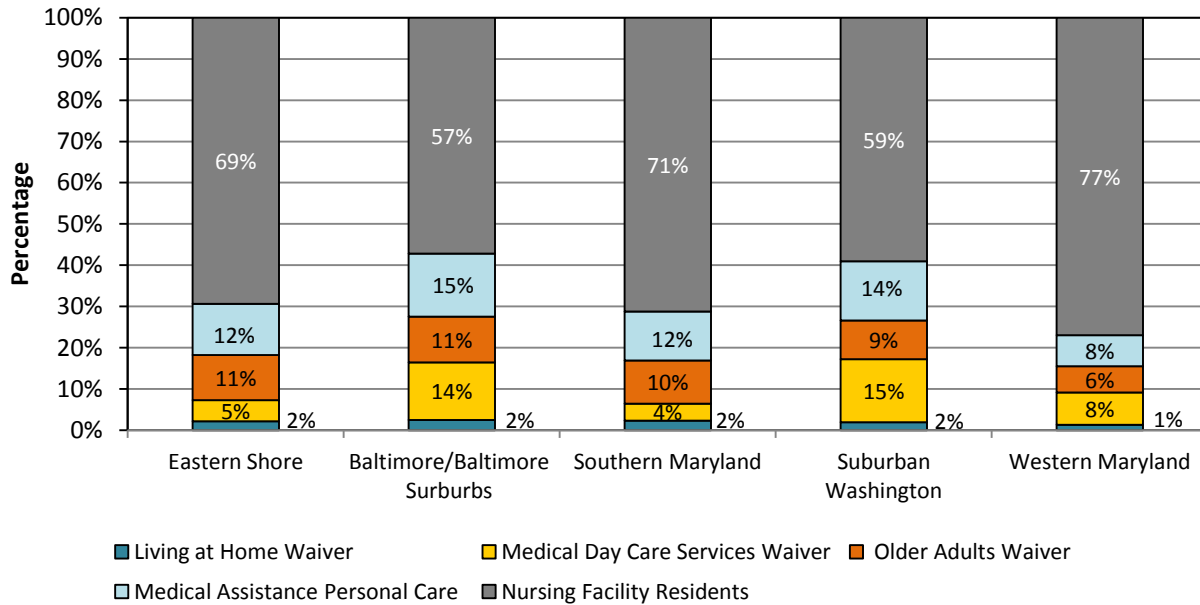
**Figure 6. Medicaid Waiver Participants and Nursing Facility Residents, by Race, FY 2011**



Caucasians continued to make up the largest percentage of nursing facility residents. The Living at Home Waiver was more heavily populated by African American participants.

Source: DSS

**Figure 7. Number of Medicaid Waiver Participants, Medical Assistance Personal Care Recipients, and Nursing Facility Residents, by Region, FY 2011**



In FY 2011, the distribution of institutional and home-and community-based services users varied by geographical region. Western Maryland had the highest percentage of nursing facility residents, while the Baltimore/Baltimore Suburbs region had the lowest percentage of nursing facility residents.

With the exception of the Living at Home Waiver participants, the distribution of waiver participants and Medical Assistance personal care recipients varied by region, with the greatest variation being noted in the Medical Day Care Services Waiver.

**Regions:**

Suburban Baltimore: Anne Arundel County, Baltimore County, Baltimore City, Carroll County, Harford County, Howard County.

Eastern Shore: Caroline County, Cecil County, Dorchester County, Kent County, Queen Anne’s County, Somerset County, Talbot County, Wicomico County, Worcester County.

Southern Maryland: Charles County, Calvert County, St. Mary’s County.

Western Maryland: Allegany County, Garrett County, Washington County.

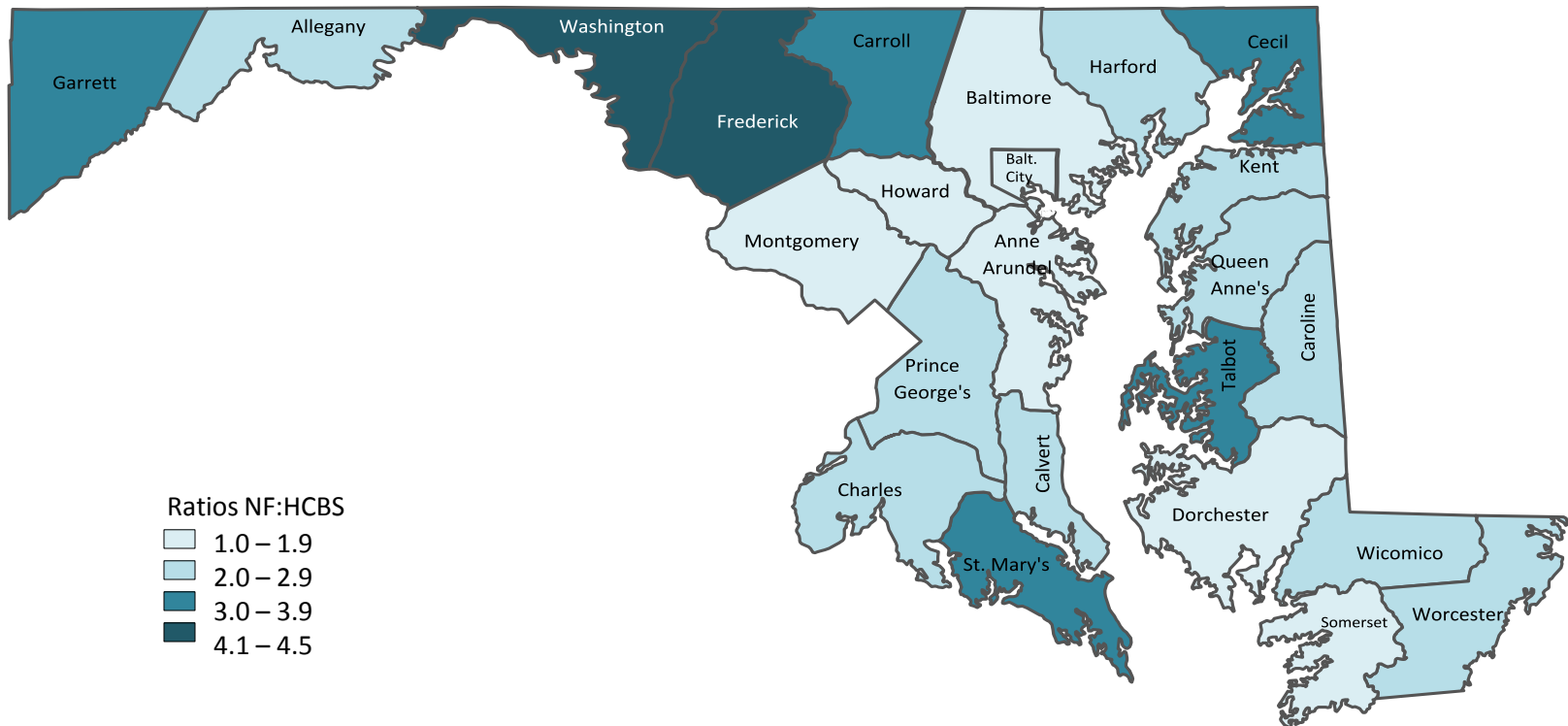
Washington Suburban: Montgomery County, Prince George’s County, Frederick County.

\*Region was not available for all waiver participants and nursing facility residents.

**Source:** MMIS2



**Figure 8. Ratio of Nursing Facility Residents to Waiver Participants and Medical Assistance Personal Care Recipients per Capita,\* by County, FY 2011**



The number of nursing facility residents per 10,000 people in Washington and Frederick Counties outpaced the number of persons per capital receiving home- and community-based services by a ratio of 4 to 1. In some counties (e.g., Howard, Baltimore, Anne Arundel, etc.), the per capita ratio of nursing facility residents to home- and community-based services recipients was more even with a ratio of 1 to 1.

\* County was not available for all waiver participants and nursing facility residents.

**Note:** Census Bureau and MMIS nursing facility residence counts are based on the location of the nursing facility.

**Sources:** DSS and U.S. Census Bureau

**Figure 9. Newly Enrolled Waiver Participants by Pre-Waiver Setting,\*  
by Waiver, FY 2011**

Pre-Waiver Setting	Living at Home		Medical Day Care		Older Adults	
	Number	Percentage	Number	Percentage	Number	Percentage
Chronic Hospital	1	1%	6	1%	1	0%
Rehabilitation Hospital	0	0%	3	0%	0	0%
Institution for Mental Diseases	0	0%	0	0%	1	0%
Nursing Facility	139	90%	52	5%	403	56%
Other	15	10%	1,007	94%	309	43%
<b>Total</b>	<b>155</b>	<b>100%</b>	<b>1,068</b>	<b>100%</b>	<b>714</b>	<b>100%</b>

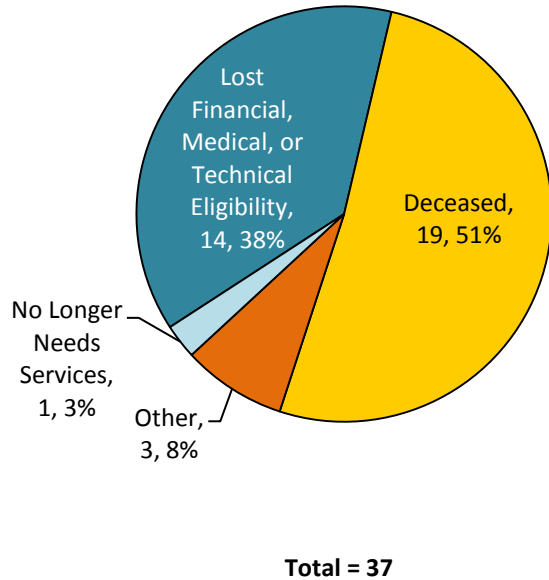
\* *Pre-waiver setting* refers to the setting in which the participant resided prior to enrolling in the waiver. To determine an individual's pre-waiver setting, Hilltop examined MMIS claims for the three months prior to waiver enrollment to determine whether claims were filed for a chronic hospital, rehabilitation hospital, institution for mental disease (IMD), intermediate care facility for individuals with intellectual disabilities (ICF/ID), or nursing facility (NF) stay; if so, new waiver participants were classified accordingly. Waiver participants without chronic or rehabilitation hospital, IMD, ICF/ID, or NF claims were classified as coming from "other" settings which may include as assisted or congregate living setting or one's own home.

Source: MMIS2

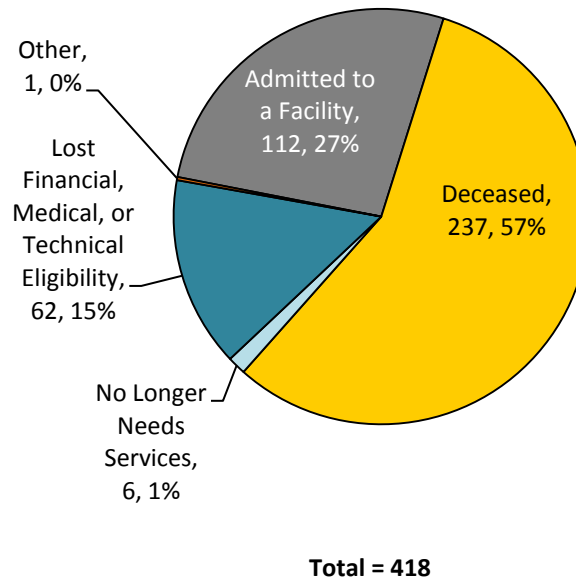
The majority (90%) of Living at Home Waiver participants resided in a nursing facility in the three months prior to enrolling in the waiver as only persons residing in a nursing facility were able to enroll in the waiver. Over half (56%) of the Older Adults Waiver participants resided in a nursing facility in the three months prior to enrollment.

**Figure 10. Reason for Leaving the Living at Home and Older Adults Waivers, FY 2011**

**Living at Home**



**Older Adults**

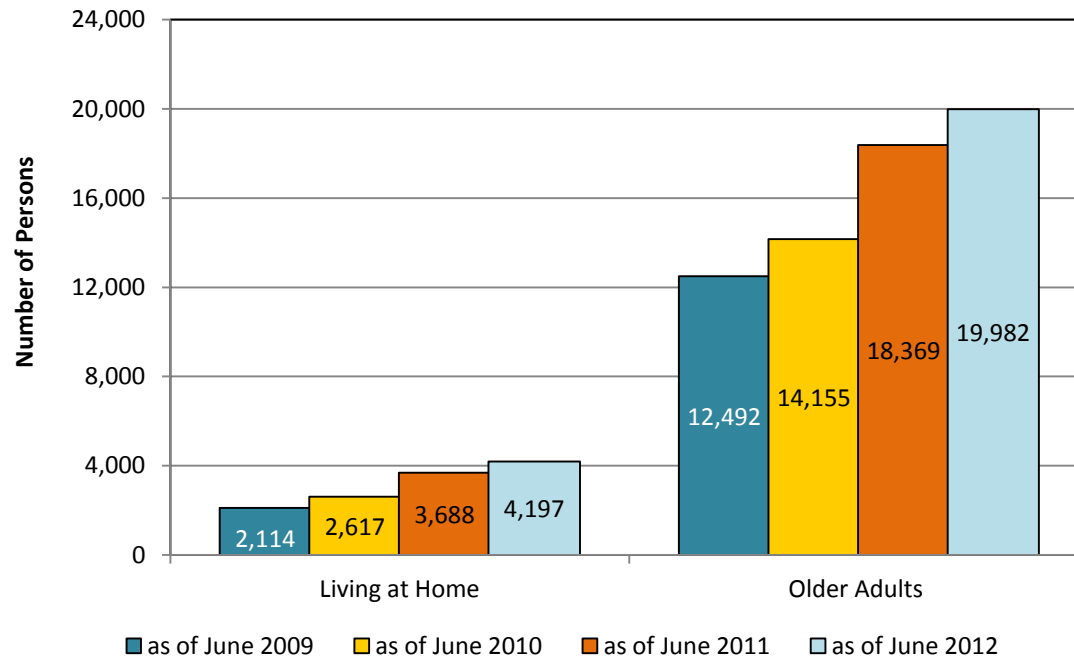


In FY 2011, 37 (4.5%) of the 822 Living at Home Waiver participants, and 418 (10.9%) of the 3,814 Older Adults Waiver participants, were disenrolled from their respective waivers.

**Note:** Waiver participants leaving the waivers in each of the fiscal years were identified by examining participants' Medicaid waiver eligibility spans, which run from the beginning date of waiver eligibility to the last date of waiver eligibility. For participants with more than one waiver eligibility span, the last eligibility span was used. Waiver participants whose last eligibility end date occurred during the given fiscal year are represented in this chart. Individual lengths of stay were calculated from the beginning date of the participant's last waiver eligibility span to the last day of each fiscal year (June 30). Each participant was categorized by reason for disenrollment. Common reasons for loss of technical eligibility include age and/or change in state and/or county of residence.

**Source:** MMIS2

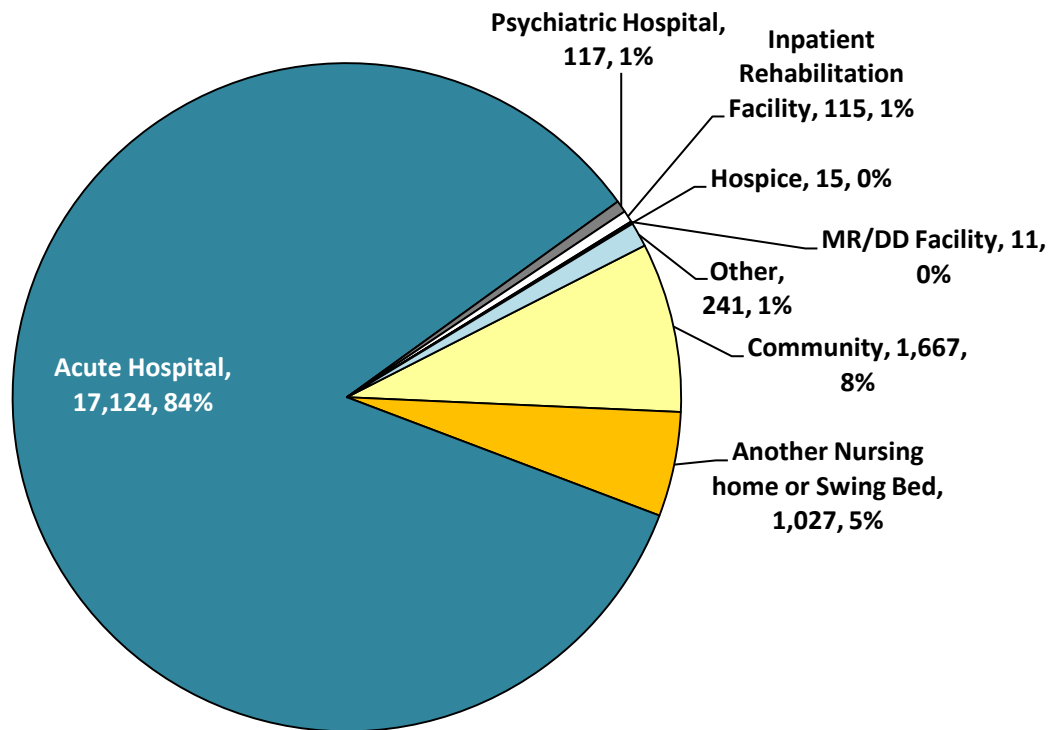
**Figure 11. Number of Persons on the Living at Home and Older Adults Waiver Interest Lists**



Many Marylanders have indicated an interest in participating in the Living at Home and Older Adults Waivers. There was a combined total of 24,179 individuals on the interest lists as of June 2012, an increase of 10% since June 2011.

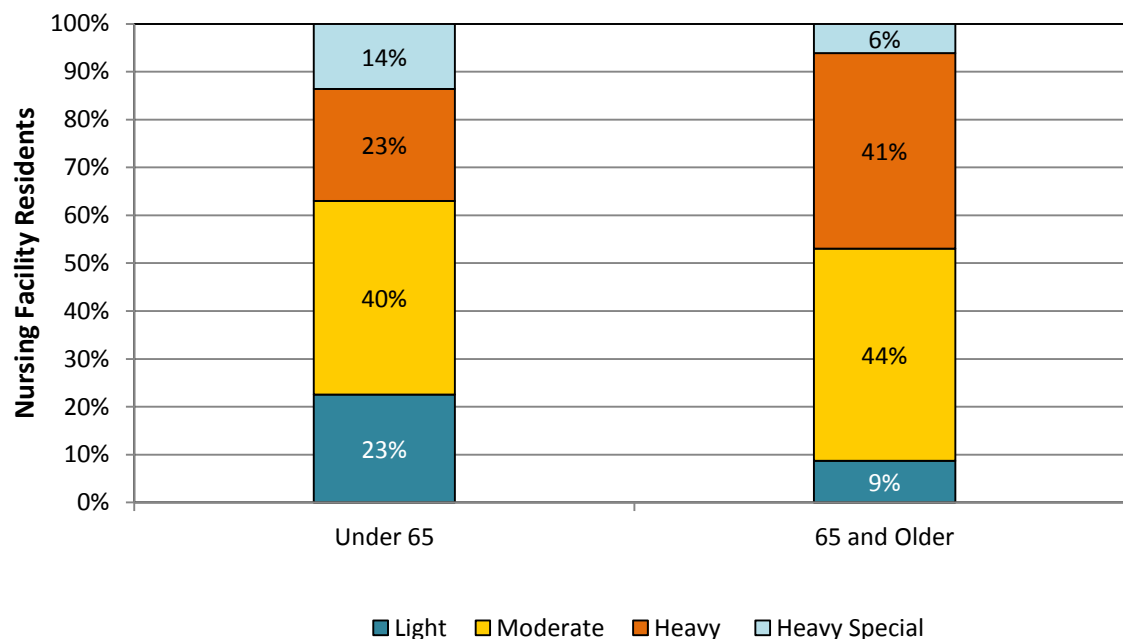
Source: DHMH Long-Term Care and Waiver Services

**Figure 12. Newly Admitted Nursing Facility Residents, by Pre-Nursing Facility Setting, FY 2011**



In FY 2011, the largest percentage (84%) of newly enrolled nursing facility residents entered the nursing facility from an acute care hospital setting. Less than 10% enter the nursing home from a community-based setting such as a private home or apartment, group home, or assisted living facility.

**Figure 13. Medicaid Nursing Facility Residents, by Age Group and Reimbursement Level, FY 2011**



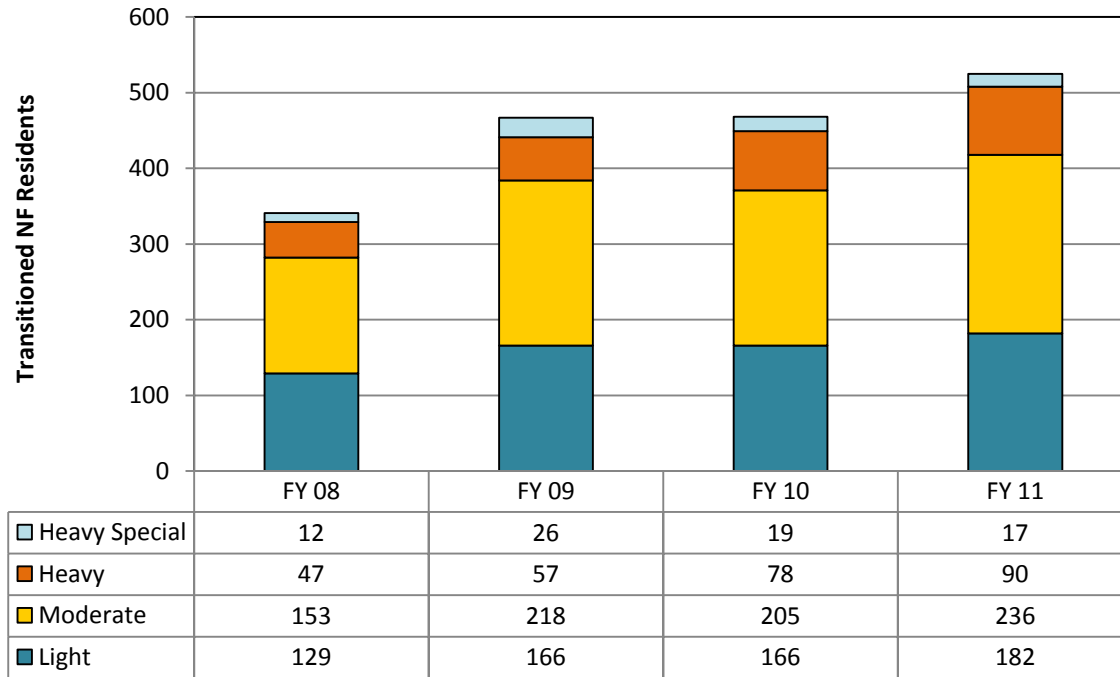
In FY 2011, nursing facility residents with the highest reimbursement rates were older residents. Forty-seven percent of persons aged 65 years and older required a “heavy” or “heavy special” reimbursement rate, compared to 37% of residents under age 65.

In both the Under 65 and 65 and Older age groups, the largest percentage of nursing facility residents required a “moderate” reimbursement level.

**Note:** The total number of nursing facility residents with a reimbursement level designation in FY 2011 was 21,901. Reimbursement levels are defined as follows: Light – Dependent in 0, 1, or 2 ADLs; Moderate – Dependent in 3 or 4 ADLs; Heavy – Dependent in all 5 ADLs; Heavy Special – Dependent in all 5 ADLs and requires and receives one or more of the following: Communicable Disease Care, Central Intravenous Line, Peripheral Intravenous Care, Decubitus Ulcer Care, Tube Feeding, Ventilator Care, or Support Surface A or B during the majority of the month.

**Source:** MMIS2

**Figure 14. Transitioned Medicaid Nursing Facility Residents, by Reimbursement Level, FY 2008 – FY 2011**



In FY 2011, 35% of individuals transitioning from a nursing facility to the community in FY 2011 had a “light” reimbursement level. Whereas, the percentage of nursing facility residents with a “light” reimbursement level was between 9% for residents under age 65 and 23% for residents aged 65 and older.

Source: MMIS2

**Figure 15. Medicaid Nursing Facility Length of Stay at Discharge, by Discharge Type, FY 2011**

Length of Stay in Months					
Discharge Type	Percentile				Mean
	25th	50 <sup>th</sup> /Median	75th	100th	
Return Not Anticipated (n=1,608)	1.0	3.1	9.8	193.3	9.2
Return Anticipated (n=969)	0.7	3.1	12.4	250.2	11.3
Death In Facility (n=2,195)	1.2	8.6	33.4	325.9	23.4

**Note:** Length of stay is defined in the MDS3.0 as the reference date of the discharge minus the admission date plus one.

**Source:** MDS3.0

The length of stay in a nursing facility varied greatly by discharge type for persons discharged in FY 2011.

For persons who were discharged and not expected to return to the facility, the average length of stay was 9.2 months. The median length of stay was 3.1 months (meaning that half of the residents had above 3.1 months and the remaining half had below 3.1 months)

For persons who died in the facility, the average length of stay was 23.4 months and the median length of stay was 8.6 months.



**Figure 16. Medicaid Nursing Facility Length of Stay at Discharge, by Discharge Type and Age Group, FY 2011**

Length of Stay in Months					
	Percentile				
Age Group	25th	50 <sup>th</sup> /Median	75th	100th	Mean
Under 65 (n=1,073)	0.8	2.0	7.4	305.6	7.8
65 and older (n=3,695)	1.1	6.1	24.1	325.9	18.6
Total (n=4,768)	1.0	4.6	19.3	325.9	16.2

**Note:** Length of stay is defined in the MDS3.0 as the reference date of the discharge minus the admission date plus one.

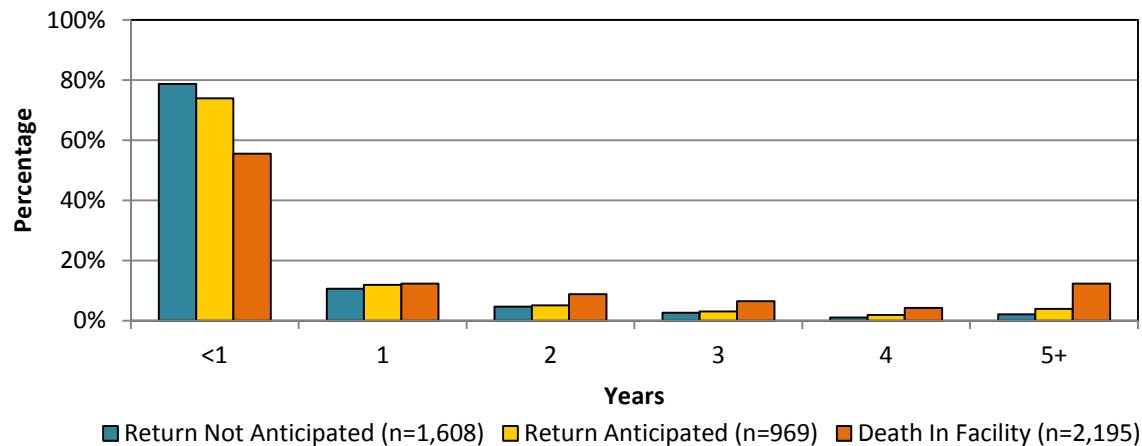
**Source:** MDS3.0

The overall lengths of stay for residents discharged in FY 2011 were less variable when examined across age groups.

Lengths of stay for discharged residents under age 65 ranged from .8 to 305.6 months, with an average length of stay of 7.8 months.

Lengths of stay for discharged residents aged 65 and older ranged from 1.1 to 325.9 months, with an average length of stay of 18.6 months.

**Figure 17. Medicaid Nursing Facility Length of Stay at Discharge, by Discharge Type, in Years**



The vast majority of residents discharged from a nursing facility in FY 2011 had a Medicaid-paid stay that was shorter than one year. Of these individuals, 79% were discharged and not expected to return, 74% anticipated returning, and 56% died in the facility.

**Figure 18. Medicaid Nursing Facility Length of Stay at Discharge, by Discharge Type, in Months, for Persons with a Stay of Less than 12 Months**

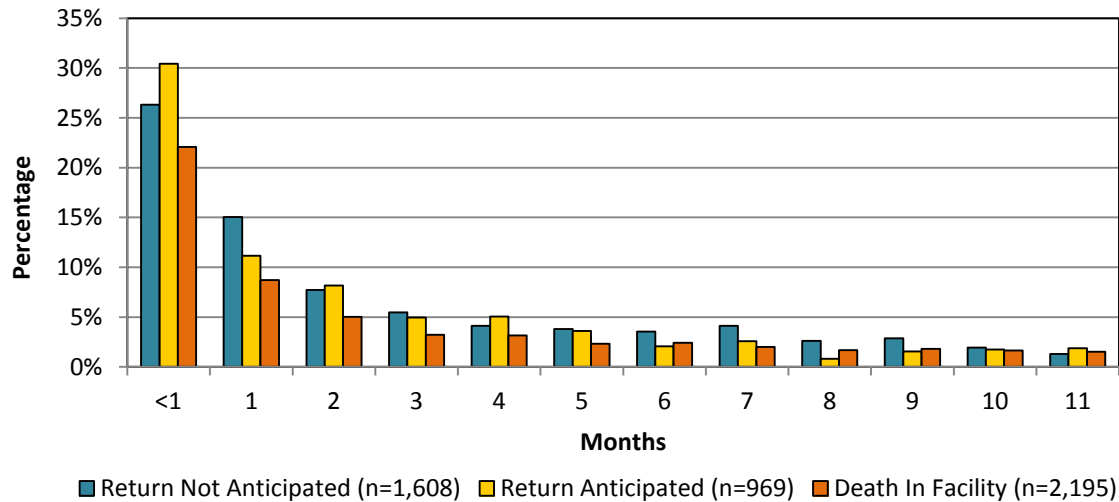
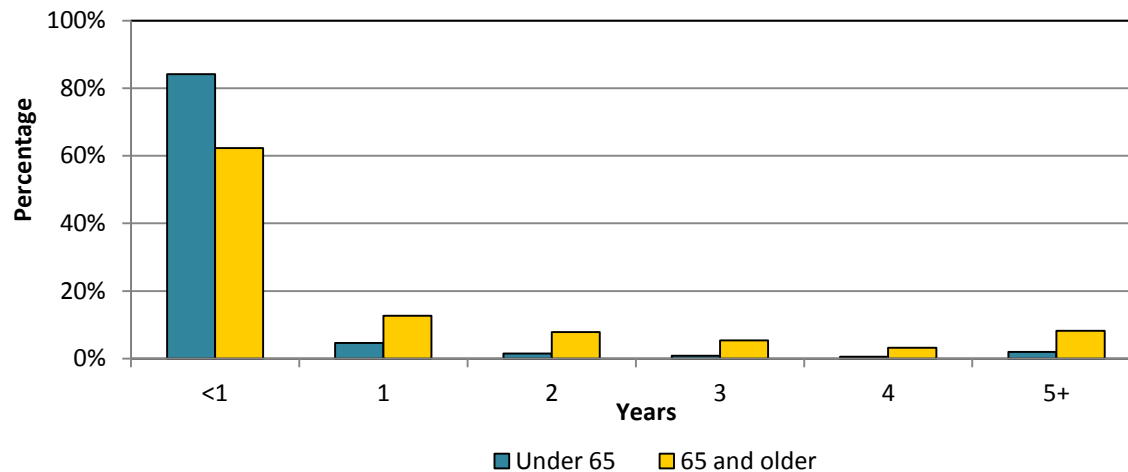


Figure 18 provides detailed information on the length of stay at discharge for persons with a nursing facility stay shorter than 12 months. As shown, the largest percentage of residents, regardless of discharge type, had a length of stay shorter than one month.

**Note:** Length of stay is defined in the MDS3.0 as the reference date of the discharge minus the admission date plus one.

**Source:** MDS3.0

**Figure 19. Medicaid Nursing Facility Length of Stay at Discharge, in Years, by Age Group**



Nearly 85% of nursing facility residents under the age of 65—and 62% of residents aged 65 and older—had a stay of shorter than one year.

**Figure 20. Medicaid Nursing Facility Length of Stay at Discharge, in Months, by Age Group, for Persons with a Stay of Less than 12 Months**

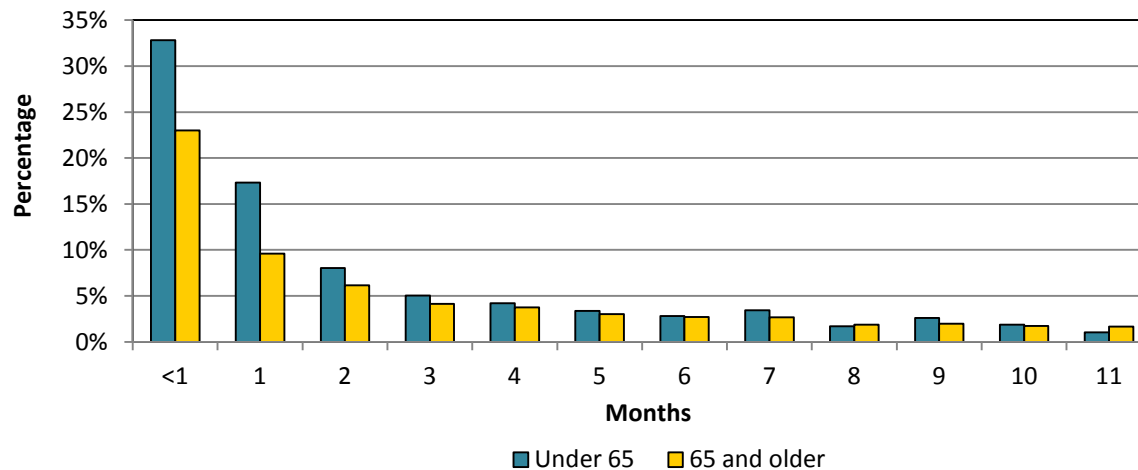


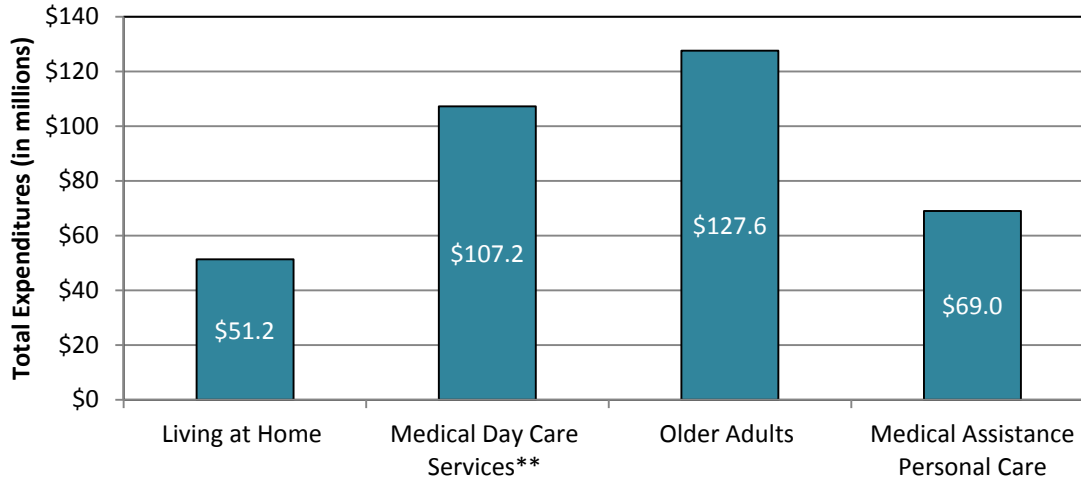
Figure 20 provides detailed information on the length of stay at discharge for nursing facility residents with a stay of less than 12 months. Nearly 75% of those aged 65 and under—and 53% of those aged 65 and older—had a stay of 6 months or less.

**Note:** Length of stay is defined in the MDS3.0 as the reference date of the discharge minus the admission date plus one.

Source: MDS3.0

# **Chapter 2. Medicaid Expenditures and Service Utilization**

**Figure 21. Total Medicaid Expenditures\* for Home- and Community-Based Waiver Participants and Medical Assistance Personal Care Recipients, FY 2011**



Total Medicaid expenditures for waiver participants and Medical Assistance personal care recipients (including Money Follows the Person participants) include waiver and non-waiver expenditures but do not include waiver administrative costs.

In FY 2011, total Medicaid expenditures for Older Adults Waiver participants were \$127.6 million, Medical Day Care Services Waiver expenditures were \$107.2 million, and Living at Home Waiver expenditures were \$51.2 million. Total Medicaid expenditures for recipients of Medical Assistance personal care not enrolled in the Medical Day Care Services Waiver totaled \$69.0 million.

**Figure 22. Total Medicaid Expenditures\* for Home- and Community-Based Waiver Participants and Nursing Facility Residents, FY 2008 – FY 2011**

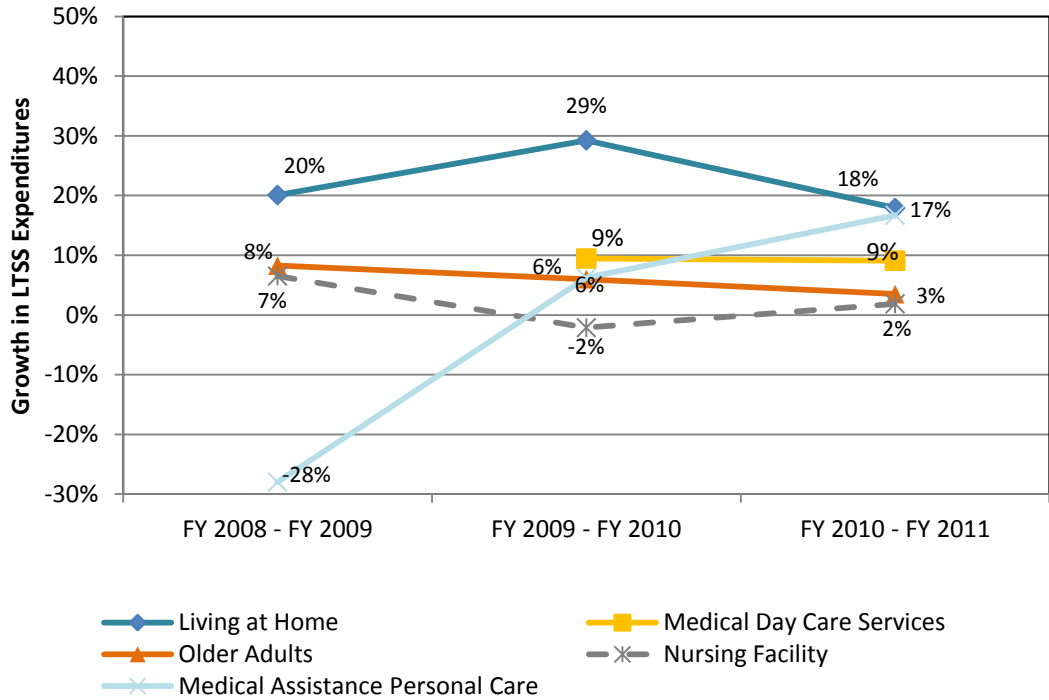
	FY 08	FY 09	FY 10	FY 11
Living at Home	\$28,000,757	\$33,625,276	\$43,463,117	\$51,247,962
Medical Day Care Services**		\$89,807,030	\$98,297,445	\$107,236,454
Older Adults	\$107,411,981	\$116,293,679	\$123,271,336	\$127,576,882
Medical Assistance Personal Care	\$77,239,115	\$55,613,262	\$59,079,907	\$68,960,322
<b>Total Home- and Community-Based Services Expenditures</b>	<b>\$212,651,853</b>	<b>\$295,339,247</b>	<b>\$324,111,805</b>	<b>\$355,021,620</b>
Nursing Facility Residents	\$1,087,314,881	\$1,158,265,306	\$1,133,663,857	\$1,154,912,776

\*For administrative costs, see Figures 28, 29, and 30.

\*\*Effective July 1, 2008, medical day care was converted from a State Plan service to a waiver service. FY 2009 expenditures for MAPC users decreased as MAPC users transitioned to the Medicaid Day Care Services Waiver.

Source: DSS

**Figure 23. Growth Rate of Medicaid Expenditures\* for Long-Term Services and Supports, FY 2008 – FY 2011**



Medicaid expenditures for Living at Home Waiver participants grew, on average, 22% each year from FY 2008 to FY 2011. This was the largest average annual increase among the three waivers.

Medicaid expenditures for nursing facility residents increased 2% from FY 2010 to FY 2011.

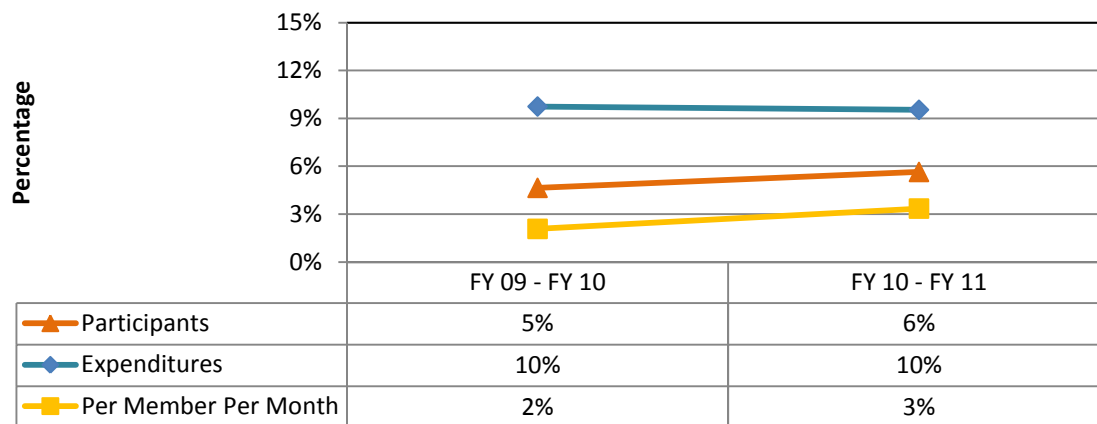
Medicaid expenditures for Medical Assistance personal care recipients decreased 28% from FY 2008 to FY 2009. This is likely due to the transition of many MAPC users to the Medical Day Care Waiver.

\*Total Medicaid expenditures for waiver participants (including Money Follows the Person participants) include waiver, non-waiver, and pharmacy expenditures, but do not include waiver administrative costs. For administrative costs, see Figures 28, 29, and 30.

\*\*Effective July 1, 2008, medical day care was converted from a State Plan service to a waiver service.

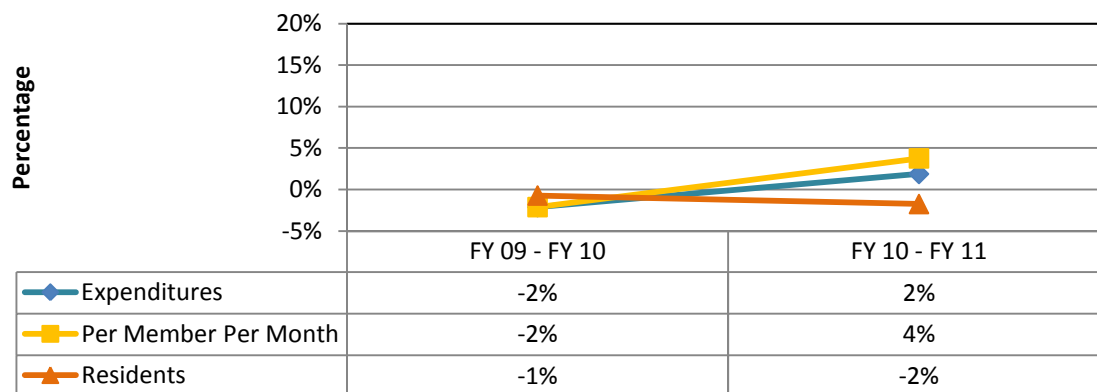
Source: DSS

**Figure 24. Growth Rate of Participants and Expenditures for Home- and Community-Based Waivers and Medical Assistance Personal Care Recipients,\* FY 2009 – FY 2011**



From FY 2009 to FY 2011, the rate growth of Medicaid home- and community-based services expenditures remained stable at 10%.

**Figure 25. Growth Rate of Participants and Expenditures for Nursing Facility Residents, FY 2009 – FY 2011**

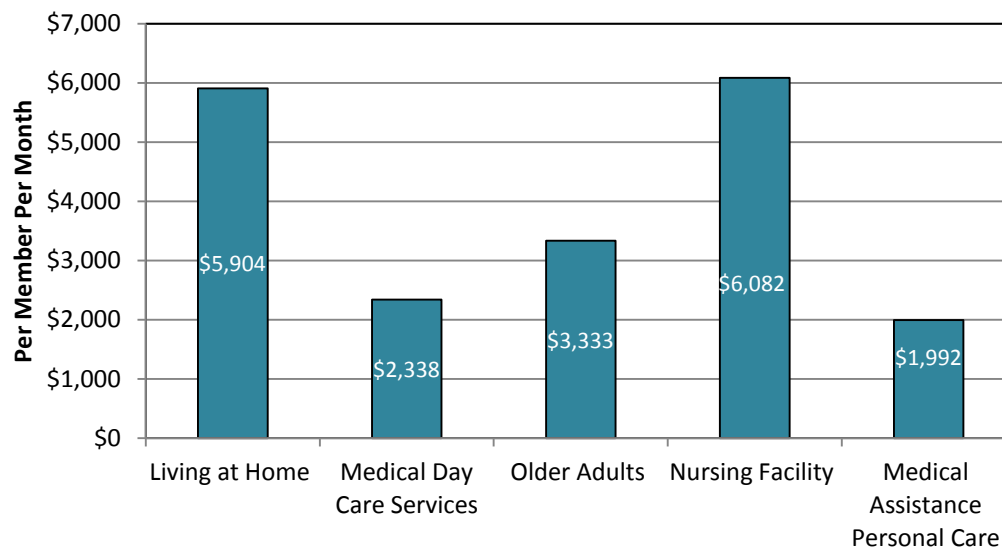


Although there was a decrease in the number of nursing facility residents from FY 2010 to FY 2011, expenditures and PMPM costs increased slightly from the previous reporting period.

\* Does not include administrative costs or Medical Day Care Services Waiver expenditures or users. For administrative costs, see Figures 28, 29, and 30.

Source: DSS

**Figure 26. Per Member Per Month Medicaid Expenditures\* for Long-Term Services and Supports Users, FY 2011**



Medicaid-funded services for Living at Home Waiver participants were \$2,571 more costly PMPM than for Older Adults Waiver participants, and \$3,566 more costly PMPM than for Medical Day Care Services Waiver participants. Among the factors influencing expenditure differences are the mix of services used by recipients, age differences among enrollees, and differences in Medicare coverage among enrollees.

**Figure 27. Per Member Per Month Medicaid Expenditures\* for Long-Term Services and Supports Users, FY 2008 – FY 2011**

	FY 08	FY 09	FY 10	FY 11
<b>Living at Home</b>	\$4,480	\$4,879	\$5,530	\$5,904
<b>Medical Day Care Services</b>		\$2,349	\$2,331	\$2,338
<b>Older Adults</b>	\$3,026	\$3,252	\$3,273	\$3,333
<b>Medical Assistance Personal Care</b>	\$1,926	\$1,798	\$1,812	\$1,992
<b>Nursing Facility</b>	\$5,621	\$5,989	\$5,862	\$6,082

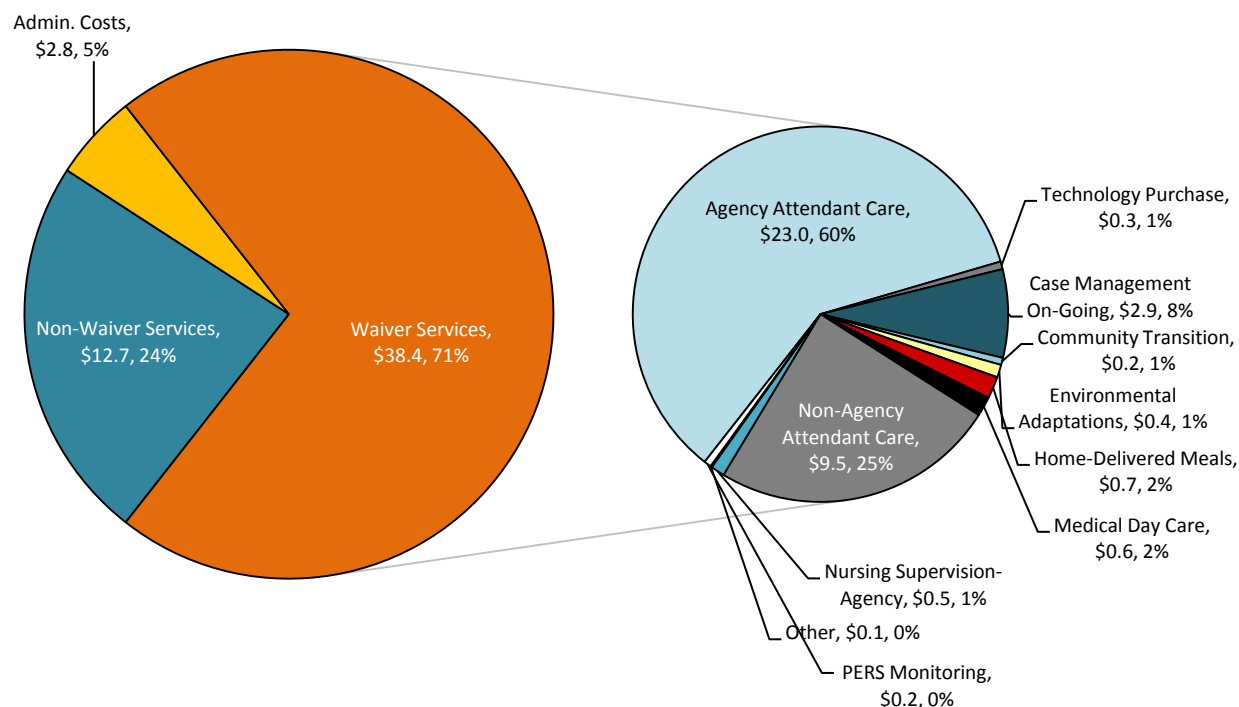
Nursing facility residents had the highest PMPM costs in FY 2011; however, there was a \$374 PMPM increase in expenditures for Living at Home Waiver participants from FY 2010 to FY 2011. PMPM costs for recipients of Medical Assistance personal care services were relatively stable during the four reporting periods.

\* Does not include administrative costs. For administrative costs, see Figures 28, 29, and 30.

Source: DSS



**Figure 28. Distribution of Total Medicaid Expenditures (in Millions) for Living at Home Waiver Participants, FY 2011**



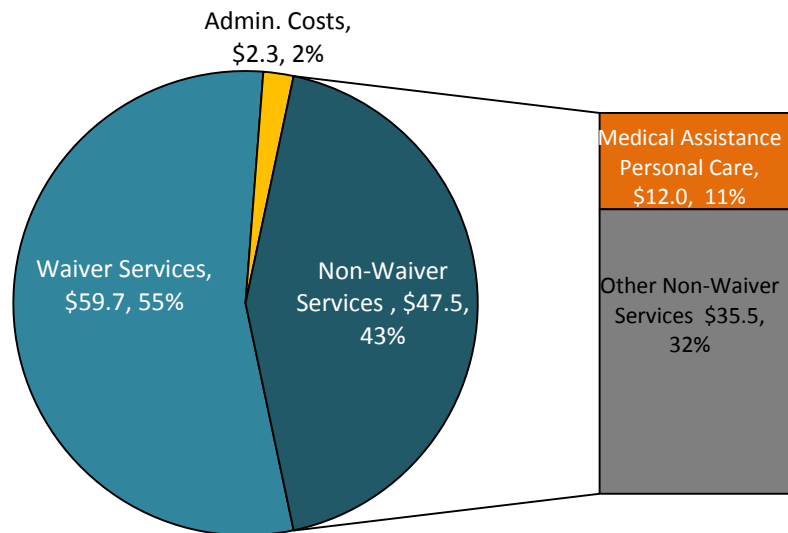
For Living at Home Waiver participants, 7 out of every 10 dollars are spent on waiver services. Eighty-five percent of waiver expenditures were spent on attendant care services.

Non-waiver services, pharmacy costs, and administrative costs account for the rest of the expenditures.

Note: Administrative costs include medical eligibility reviews, personal care worker taxes, staff costs, and fiscal intermediary services. Additional administrative costs are incurred in administering the waiver (e.g., IT expenditures for eligibility determinations, enrollment, claims processing, reporting to CMS, and utilization review), but are not easily quantifiable.

Sources: DSS and DHMH Long-Term Care and Waiver Services

**Figure 29. Distribution of Total Medicaid Expenditures (in Millions) for Medical Day Care Services Waiver Participants, FY 2011**

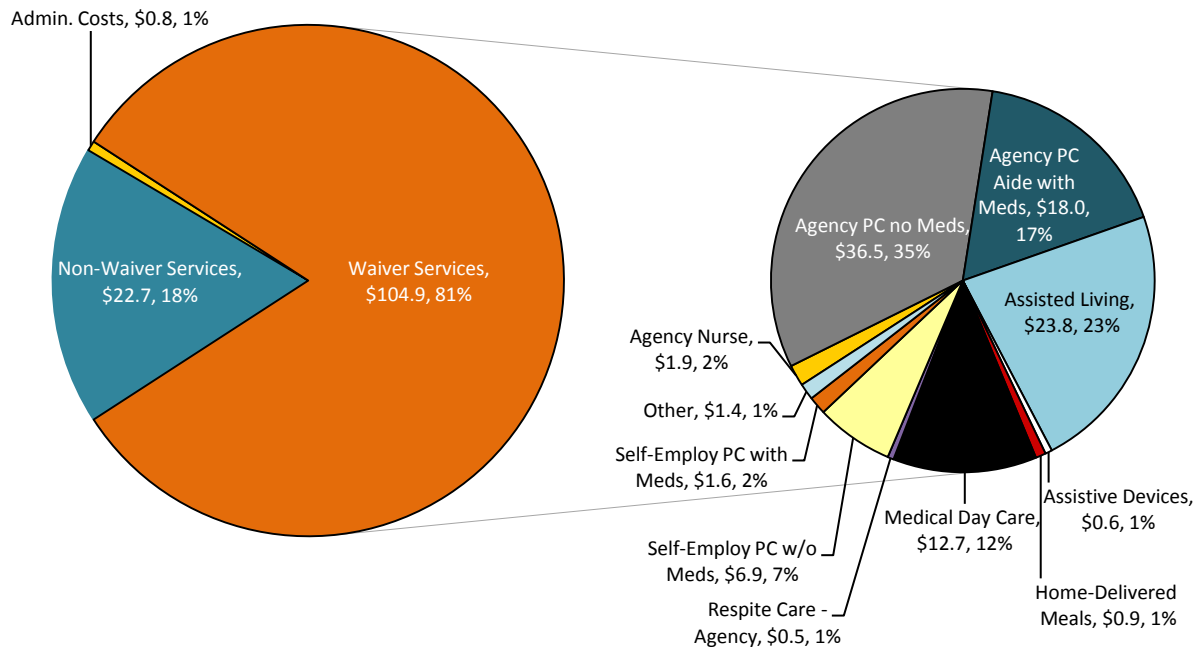


For Medical Day Care Services Waiver participants, \$5.50 out of every \$10 is spent on medical day care services. Non-waiver services, pharmacy costs, and administrative costs account for the rest of the expenditures.

Note; Administrative costs include 3871B assessments, Adult Evaluation and Review Services (AERS) evaluations, staff costs, and eligibility reviews. Additional administrative costs are incurred in administering the waiver (e.g., staffing and IT expenditures for eligibility determinations, enrollment, claims processing, reporting to CMS, and utilization review), but are not easily quantifiable.

Sources: DSS and DHMH Long-Term Care and Waiver Services

**Figure 30. Distribution of Total Medicaid Expenditures (in Millions) for Older Adults Waiver Participants, FY 2011**

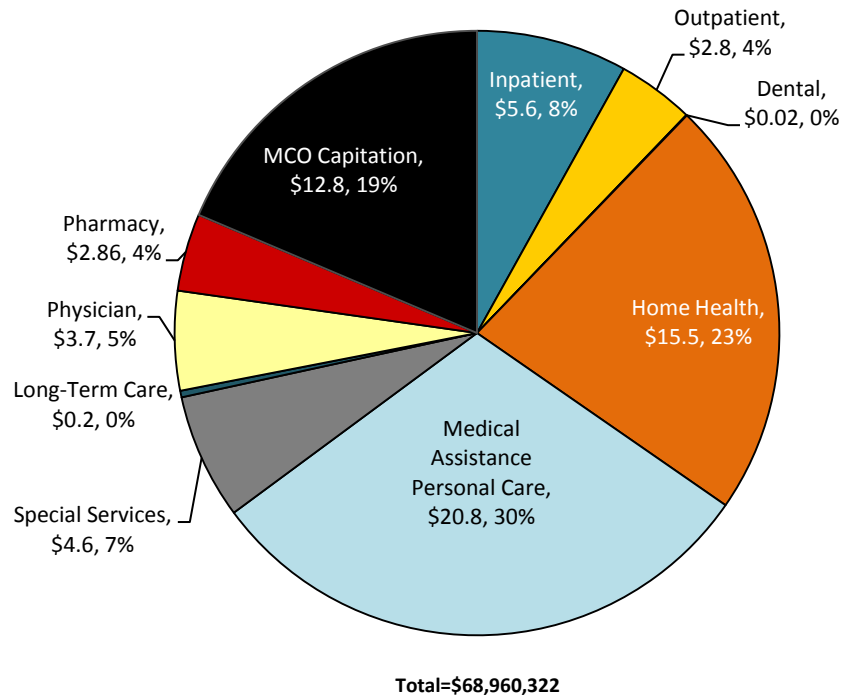


For Older Adults Waiver participants, 8 out of every 10 dollars are spent on waiver services in FY 2011. Personal care expenditures comprised 63% of waiver expenditures.

Note: Administrative costs include medical eligibility reviews and staff costs. Additional administrative costs are incurred in administering the waiver (e.g., staffing and IT expenditures for eligibility determinations, enrollment, claims processing, reporting to CMS, and utilization review), but are not easily quantifiable.

Sources: DSS and DHMH Long-Term Care and Waiver Services

**Figure 31. Distribution of Total Medicaid Expenditures (in Millions) for Medical Assistance Personal Care Recipients,\* FY 2011**

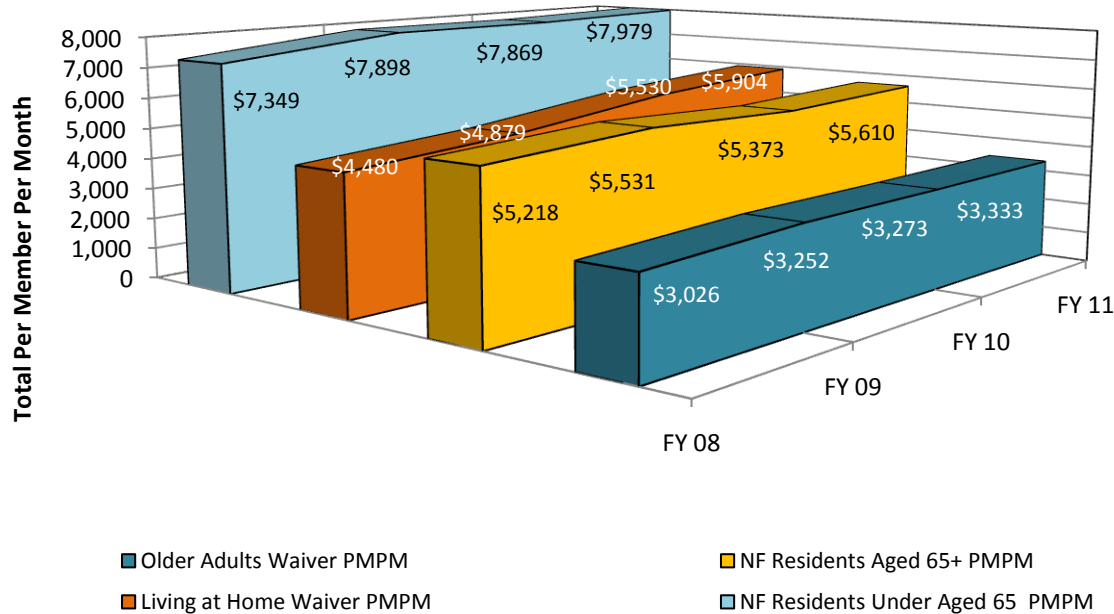


Total FY 2011 Medicaid expenditures for Medical Assistance personal care recipients not enrolled in the Medical Day Care Services Waiver totaled \$69 million. At \$20.8 million, expenditures for personal care services made up 30% of the total.

\* Does not include Medical Assistance personal care recipients who were enrolled in the Medical Day Care Services Waiver. Expenditures reflect Medicaid expenditures incurred within 7 days of the receipt of Medical Assistance personal care.

Sources: DSS and DHMH Long-Term Care and Waiver Services

**Figure 32. Per Member Per Month Total Medicaid Expenditures for Waiver Participants and Nursing Facility Residents, FY 2008 – FY 2011**



PMPM expenditures for waiver participants and nursing facility residents varied by setting and waiver. Older Adults Waiver participants had the lowest PMPM expenditures (\$3,333) and nursing facility residents under the age of 65 had the highest (\$7,979).

Sources: DSS and MMIS

**Figure 33. Use of Personal and Attendant Care Services by Living at Home Waiver, Older Adults Waiver, and Medical Day Care Services Waiver Participants, FY 2011**

Personal and Attendant Care Services	Number of Users	FY 11 Expenditures	PMPM	Average Units of Service per User*
<b>Living at Home Waiver</b>				
Attendant Care – Agency	651	\$23,008,913	\$3,625	227
Attendant Care – Non-Agency	314	\$9,458,117	\$2,858	150
<b>Older Adults Waiver</b>				
Personal Care Aide without Medications – Agency	1,471	\$36,535,798	\$2,658	161
Personal Care Aide with Medications – Agency	573	\$17,965,098	\$3,712	157
Personal Care Aide without Medications – Consumer-Employed	303	\$6,880,195	\$2,380	190
Personal Care Aide with Medications – Consumer-Employed	51	\$1,587,911	\$3,118	200
<b>Medical Assistance Personal Care Recipients***</b>	5,147	\$29,583,758	\$479	**
Level 1	1,005	\$2,263,951		**
Level 2	4,390	\$25,710,397		**
Level 3	140	\$1,585,998		**
Day of Training	1,417	\$23,412		**

In FY 2011, Medicaid expenditures for waiver-based attendant care services and personal care services for Living at Home and Older Adults Waiver participants totaled \$95.4 million. Of this, 66% were for Older Adults Waiver participant services.

Medical Assistance personal care were provided to 5,147 individuals, at a total cost of \$29.6 million. Of the individuals receiving Medical Assistance personal care, 1,483 were Medical Day Care Services Waiver participants who received this service, at a total cost of \$8.7 million.

Note: “Average units of service” is the service expenditure divided by the service Medicaid payment rate divided by the number of service users.

\* FY 2011 Living at Home and Older Adults Waiver Medicaid payment rates were used to calculate the average units of service used.

\*\* Average units of service cannot be calculated due to the unit of measure for these services (i.e., per year, per modification).

\*\*\* Medical Assistance personal care recipients may receive more than one level of personal care in a given fiscal year.

Source: DSS

**Figure 34. Use of Environmental Assistance Services by Living at Home and Older Adults Waiver Participants, FY 2011**

Environmental Assistance Services	Number of Users	FY 11 Expenditures	PMPM	Average Units of Service per User*
<b>Living at Home Waiver</b>				
Assistive Technology/Devices	327	\$253,103	\$516	**
Environmental Accessibility Modifications	147	\$420,031	\$2,453	**
Environmental Assessment	68	\$26,362	\$388	1
Personal Emergency Response Systems–Purchase/Install	97	\$6,199	\$63	**
Personal Emergency Response Systems–Monthly Monitoring	540	\$237,888	\$44	1
<b>Older Adults Waiver</b>				
Assistive Technology/Devices	1,662	\$613,084	\$93	**
Environmental Accessibility Modifications	167	\$490,374	\$2,706	**
Environmental Assessment	189	\$74,435	\$390	1
Personal Emergency Response Systems–Purchase/Install	265	\$17,514	\$65	**
Personal Emergency Response Systems–Monitor/Maintenance	1,278	\$496,608	\$42	1

In FY 2011, Medicaid expenditures for environmental assistance services for Living at Home Waiver and Older Adults Waiver participants totaled \$2.6 million.

Among the Older Adults Waiver participants and the Living at Home Waiver participants, assistive devices and the maintenance and monitoring of Personal Emergency Response Systems were the most widely used services.

\* FY 2011 Living at Home and Older Adults Waiver Medicaid payment rates were used to calculate the average units of service used.

\*\* Average units of service cannot be calculated due to the unit of measure for these services (i.e., per year, per modification).

Source: DSS

**Figure 35. Use of Medical Day Care and Senior Center Plus Services by Living at Home, Medical Day Care Services, and Older Adults Waiver Participants, FY 2011**

Medical Day Care and Senior Center Plus Services	Number of Users	FY 11 Expenditures	PMPM	Average Units of Service per User*
<b>Living at Home Waiver</b>				
Medical Day Care	71	\$643,400	\$980	11
<b>Medical Day Care Services Waiver</b>				
Medical Day Care	4,475	\$59,749,351	\$1,378	15
<b>Older Adults Waiver</b>				
Medical Day Care	1,168	\$12,711,980	\$1,139	13
Senior Center Plus	57	\$263,384	\$527	9

\* FY 2011, Living at Home, Medicaid Day Care Services, and Older Adults Waiver Medicaid payment rates were used to calculate the average units of service used.

Source: DSS

In FY 2011, Medicaid expenditures for Medical Day Care and Senior Center Plus services totaled \$73.4 million.

On average, Medical Day Care Services Waiver participants received 15 days of care per month at an average per person cost of \$1,378.

Older Adults Waiver participants and Living at Home Waiver participants used slightly fewer days of care than Medical Day Care Services Waiver participants, at 13 and 11 days per month, respectively.



**Figure 36. Use of Nutrition Services by Living at Home and Older Adults Waiver Participants, FY 2011**

Nutrition Services	Number of Users	FY 11 Expenditures	PMPM	Average Units of Service per User*
<b>Living at Home Waiver</b>				
Dietitian/Nutritionist Services	0	\$0	\$0	0
Home-Delivered Meals	368	\$730,404	\$275	30
<b>Older Adults Waiver</b>				
Dietitian/Nutritionist Services	5	\$366	\$73	1
Home-Delivered Meals	570	\$906,324	\$194	24

\* FY 2011 Living at Home and Older Adults Waiver Medicaid payment rates were used to calculate the average units of service used.

Source: DSS

At \$1.6 million in FY 2011, expenditures for nutrition services nearly doubled those for FY 2010. This was due, in part, to the increased utilization of home-delivered meals by Living at Home Waiver participants.

As in previous years, there was very little use of dietitian and/or nutritionist services across the two waivers in FY 2011.

**Figure 37. Use of Respite Care Services by Older Adults Waiver Participants, FY 2011**

Respite Care Services	Number of Users	FY 11 Expenditures	PMPM	Average Units of Service per User*
<b>Older Adults Waiver</b>				
<b>Respite Care – Agency</b>	458	\$540,702	\$424	8
<b>Respite Care – Self-Employed</b>	23	\$13,479	\$221	5
<b>Respite Care – Assisted Living</b>	32	\$21,831	\$373	1

\* FY 2011 Older Adults Waiver Medicaid payment rates were used to calculate the average units of service used.

Source: DSS

In FY 2011, respite care services for Older Adults Waiver participants totaled \$576,012.

Agency-provided respite care services were the most frequently used services; Older Adults Waiver participants received, on average, eight days of care per month.

**Figure 38. Use of Other Services by Living at Home and Older Adults Waiver Participants, FY 2011**

Other Services	Number of Users	FY 11 Expenditures	PMPM	Average Units of Service per User*
<b>Living at Home Waiver</b>				
Case Management Ongoing	809	\$2,923,612	\$345	69
Community Transition Waiver Service	121	\$237,165	\$1,974	**
Consumer Training	7	\$2,855	\$140	1
Family Training – Agency	1	\$153	\$153	<1
Family Training – Non-Agency	0	\$0	\$0	0
Nursing Supervision – Agency	719	\$457,629	\$83	1
Nursing Supervision – Non-Agency	51	\$15,853	\$55	1
<b>Older Adults Waiver</b>				
Behavior Consultation	224	\$59,782	\$122	1
Family or Consumer Training	4	\$979	\$98	1
Nursing Supervision – Agency	2,135	\$1,888,148	\$95	1

Nearly all (809) of the 822 Living at Home Waiver participants received ongoing case management services, at a total cost of \$2.9 million in FY 2011.

\* FY 2011 Living at Home and Older Adults Waiver Medicaid payment rates were used to calculate the average units of service used.

\*\* Average units of service cannot be calculated due to the unit of measure for these services (i.e., per year, per modification).

Source: DSS

**Figure 39. Distribution of Medical Day Care Services Users and Expenditures, by Waiver, FY 2011**

Waiver	Medical Day Care Services Users	Percentage of Waiver/ Participants	Medical Day Care Expenditures	Percentage of Total Medicaid Expenditures
Living at Home	71	8.6%	\$643,400	1.3%
Medical Day Care Services	4,475	96.8%	\$59,749,351	55.7%
Older Adults	1,168	30.6%	\$12,711,980	9.9%
<b>Total</b>	<b>5,714</b>		<b>\$73,104,731</b>	

In FY 2011, 5,714 Marylanders—the majority of whom were Medical Day Care Services Waiver participants—used Medicaid-funded medical day care services, at a total cost of \$73.1 million.

Source: DSS

**Figure 40. Total Medicaid Expenditures for Older Adults Waiver Participants Residing in Assisted Living, FY 2011**

	FY 11 Expenditures	Users*	PMPM
Assisted Living Level 2	\$6,930,075	338	\$2,080
Assisted Living Level 3	\$34,055,258	1,317	\$2,731
Not in Assisted Living	\$103,771,746	2,509	\$4,607

\* Older Adults Waiver participants may receive Assisted Living Level 2 and Assisted Living Level 3 services.

Source: DSS

In FY 2011, 1,305 (34% of) Older Adults Waiver participants resided in an assisted living setting. Medicaid expenditures for services received by Assisted Living Level 2 and Assisted Living Level 3 residents totaled \$40,985,333.

**Figure 41. Use of Assisted Living Services by Older Adults Waiver Participants, FY 2011**

Assisted Living Services	Number of Users	FY 11 Expenditures	PMPM	Average Units of Service per User*
<b>Older Adults Waiver</b>				
Assisted Living Level 2, no medical day care	378	\$3,245,662	\$994	13
Assisted Living Level 2, with medical day care	105	\$539,480	\$567	10
Assisted Living Level 3, no medical day care	1,310	\$16,592,506	\$1,348	15
Assisted Living Level 3, with medical day care	529	\$3,427,487	\$722	10

\* FY 2011 Older Adults Waiver Medicaid payment rates were used to calculate the average units of service used. Living at Home Waiver participants do not receive assisted living waiver services.

**Note:** Assisted Living is a residential or facility-based residence that provides housing and supportive services, supervision, personalized assistance, health-related services, or a combination of these services to meet the needs of residents who are unable to perform (or who need assistance in performing) ADLs or IADLs (instrumental activities of daily living). The assisted living levels are determined by the amount of assistance provided. Assisted Living Level 1 providers are authorized to care for residents with low-level care needs. Assisted Living Level 2 providers care for residents with moderate care needs. Assisted Living Level 3 providers care for residents with high-level care needs. The Older Adults Waiver does not provide Assisted Living Level 1 services. Reimbursement rates for assisted living services differ for assisted living with medical day care and assisted living without medical day care.

**Source:** DSS

The FY 2011 PMPM Medicaid expenditures for assisted living residents were less than expenditures for persons who were not residing in assisted living.

The most widely used of these services was Assisted Living Level 3 with no medical day care. Over 1,300 waiver participants used this service in FY 2011.

**Figure 42. Medicaid Non-Waiver Expenditures for Living at Home, Older Adults, and Medical Day Care Services Waiver Participants, FY 2011**

Service Category	Living at Home Waiver	Older Adults Waiver	Medical Day Care Services Waiver
Dental Services	\$6,316	\$218	\$4,093
Emergency Room Services	\$24,175	\$37,244	\$77,644
Evaluation and Management	\$131,096	\$219,493	\$366,808
DME/DMS*	\$1,323,385	\$6,073,805	\$3,526,581
Hospice Services	\$0	\$182,051	\$171,568
Inpatient Services	\$1,688,649	\$2,341,227	\$4,534,358
Medicine/Pharmacy	\$1,256,977	\$1,974,576	\$4,798,489
MCO Capitation Payments**	\$4,462,962	\$2,567,867	\$9,769,704
Medicare Cost Share	\$1,397,037	\$5,334,918	\$4,329,127
Medical Services	\$245,388	\$328,755	\$768,960
Mental Health	\$1,281	\$31,293	\$95,826
Nursing Facility Services	\$820,573	\$1,743,320	\$464,948
Other Services***	\$721,785	\$699,619	\$1,609,334
Outpatient services	\$630,206	\$830,532	\$1,320,769
Personal Care Services			\$12,003,412
Psychiatric Rehabilitation Program	\$76,976	\$255,217	\$3,655,263
Surgery	\$40,237	\$80,466	\$92,258
<b>Total</b>	<b>\$12,827,043</b>	<b>\$22,700,601</b>	<b>\$47,589,142</b>

Non-waiver costs are distributed differently across the three waivers. This is due to attendant care/personal care services being included in the Living at Home and Older Adults Waivers but excluded from the Medical Day Care Services Waiver. Similarly, costs are distributed differently as some participants have Medicare coverage and others do not. Persons with Medicare coverage would have some of their services paid by Medicare. Due to these differences in coverage and in waiver design, the total service costs of each waiver are not comparable.

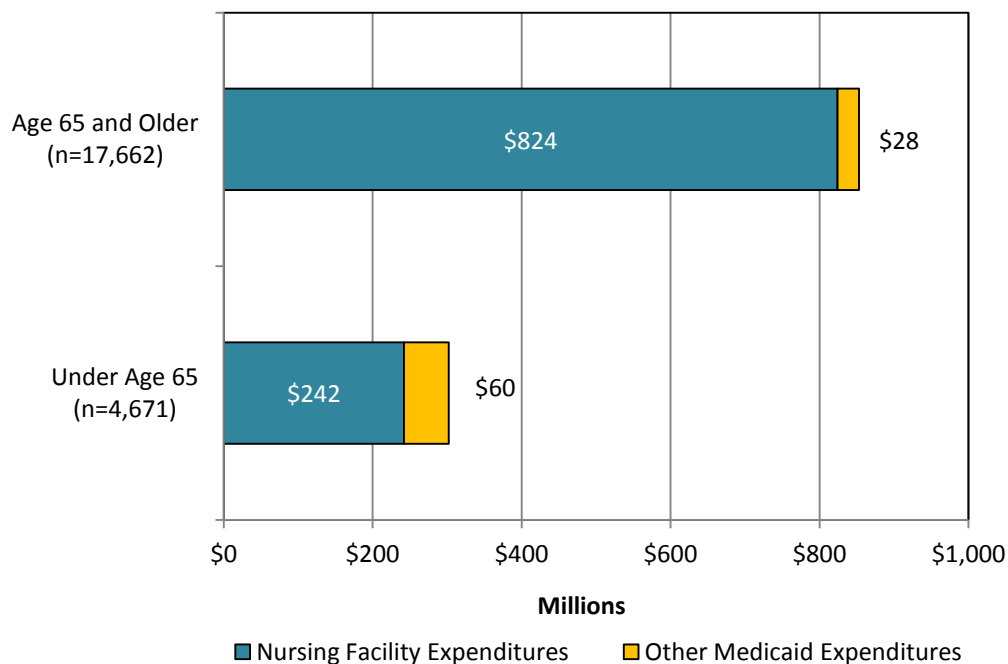
\* DME refers to durable medical equipment, and DMS refers to disposable medical supplies.

\*\* “MCO Capitation Payments” are fixed monthly amounts paid to managed care organizations (MCOs) to provide services to Medicaid beneficiaries who are enrolled in the Maryland HealthChoice program. Capitation payments are based on actuarial projections of medical utilization. MCOs are required to provide all covered, medically necessary Medicaid services within that capitated amount.

\*\*\* “Other Non-Waiver Services” are services other than those listed above and those provided under the waiver that are paid for by Medicaid on behalf of Older Adults Waiver participants.

Source: MMIS2

**Figure 43. Total Medicaid Expenditures for Nursing Facility Residents, by Age Group, FY 2011**



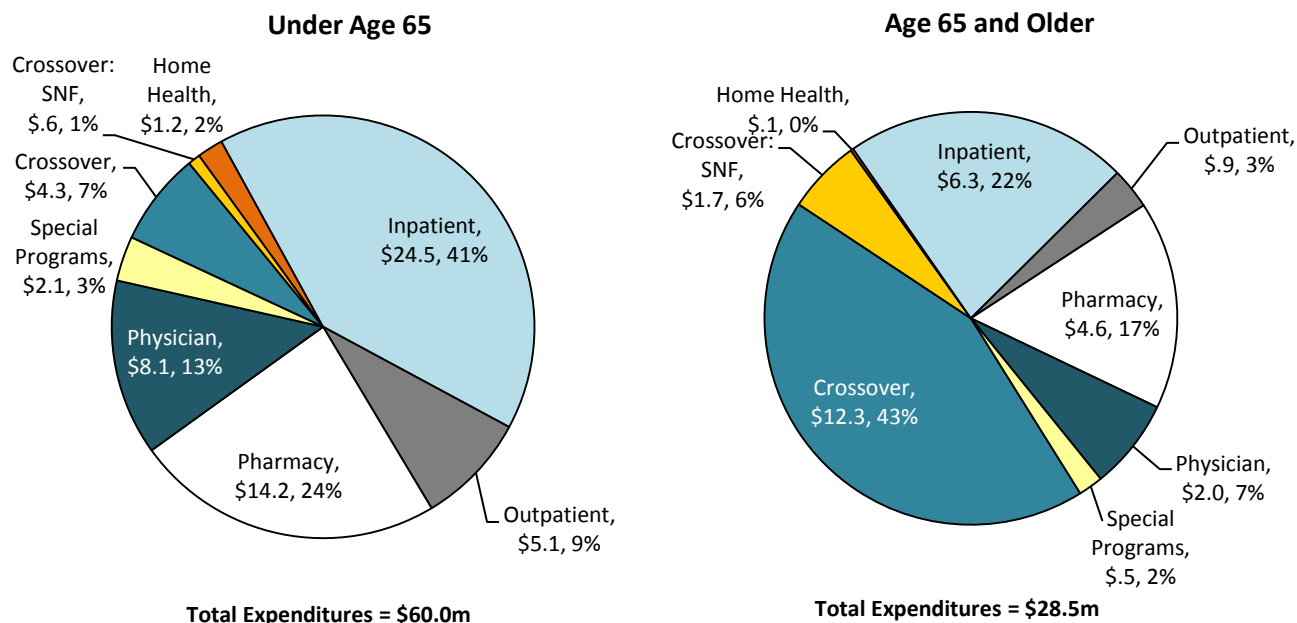
In FY 2011, a very high percentage (over 90% for persons aged 65 and older, and nearly 80% for persons under age 65) of the total \$1.15 billion Medicaid expenditures for nursing facility residents was for nursing facility expenditures. Other Medicaid expenditures made up only a small share.

In FY 2011, over half (51%) of Medicaid nursing facility residents under age 65 and nearly all (92%) of the residents aged 65 and older had Medicare Coverage.

**Note:** Total Medicaid expenditures include a) Medicaid nursing facility expenditures, b) other Medicaid expenditures with dates of service concurrent to a resident's nursing facility claims, and c) Medicaid expenditures for an intervening hospital stay (i.e., the beginning day of the hospital claim coincides with the last day of a nursing facility claim, and the last day of the hospital claim coincides with the beginning day of a nursing facility claim).

Source: MMIS2

**Figure 44. Other Medicaid Service Expenditures for Nursing Facility Residents, by Age Group, FY 2011**



In FY 2011, as in previous years, inpatient costs composed the highest percentage (41%) of “other” Medicaid expenditures for nursing facility residents under age 65. Non-nursing facility crossover payments made up the highest percentage (43%) of “other” Medicaid expenditures for nursing facility residents aged 65 and older.

Pharmacy expenditures were the second and third highest “other” Medicaid expenditures for nursing facility residents under age 65 (24%) and aged 65 and older (17%). Medicare Part D covers many pharmacy costs for Medicare beneficiaries, which explains the higher share for individuals under age 65.

**Note:** Other Medicaid service expenditures include Medicaid expenditures with dates of service concurrent to a resident’s nursing facility claims and Medicaid expenditures for an intervening hospital stay (i.e., the beginning day of the hospital claim coincides with the last day of a nursing facility claim, and the last day of the hospital claim coincides with the beginning day of a nursing facility claim).

Pharmacy – Prescription medications and certain “over the counter” medications.

Crossover: Non-NF (Nursing Facility) – Medicaid cost-sharing payments (premiums, co-payments, etc.) for non-NF services covered by Medicare.

Crossover: SNF (Skilled Nursing Facility) – Medicaid cost-sharing payments (premiums, co-payments, etc.) for SNF services covered by Medicare.

Inpatient – Services provided to patients who are admitted to a hospital, including bed and board; nursing services; diagnostic, therapeutic, or rehabilitation services; and medical or surgical services.

Outpatient – Medical or surgical care that does not require an overnight hospital stay, such as ambulatory care, therapeutic care, rehabilitation services, clinic services, medical supplies, and laboratory tests.

Physician – Services provided by a licensed physician.

Special Programs – Services that do not fall into any of the categories listed above (e.g., transportation services; occupational, physical, and speech therapy; and oxygen services).

Source: MMIS2



**Figure 45. Average Medicaid Expenditures Per Member Per Month for Nursing Facility Residents, by Age Group, FY 2008 – FY 2011**

	FY 08	FY 09	FY 10	FY 11
<b>Total</b>				
<b>Total PMPM</b>	\$5,621	\$5,989	\$5,862	\$6,082
<b>Nursing Facility Services PMPM</b>	\$5,202	\$5,509	\$5,382	\$5,616
<b>Other Medicaid Services PMPM</b>	\$419	\$479	\$480	\$466
<b>Under 65</b>				
<b>Total PMPM</b>	\$7,349	\$7,898	\$7,869	\$7,979
<b>Nursing Facility Services PMPM</b>	\$5,984	\$6,327	\$6,238	\$6,393
<b>Other Medicaid Services PMPM</b>	\$1,365	\$1,571	\$1,631	\$1,586
<b>65 and Older</b>				
<b>Total PMPM</b>	\$5,218	\$5,531	\$5,373	\$5,610
<b>Nursing Facility Services PMPM</b>	\$5,019	\$5,314	\$5,174	\$5,423
<b>Other Medicaid Services PMPM</b>	\$198	\$217	\$200	\$187

**Note:** PMPM calculations were made by dividing the annual expenditures by the total number of member months (defined as a count of months with at least one Medicaid paid day for each Medicaid nursing facility resident) in each year. Medicare costs for nursing facility residents are not included in this analysis.

**Source:** MMIS2

As in each of the three prior reporting periods, the total FY 2011 PMPM expenditures for nursing facility residents under age 65 exceeded—by \$2,369—expenditures for residents aged 65 years and older.

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#### Enrollment and Persons Served

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