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## **Children and Adults With Long Term Services and Support Needs: MaineCare and Medicare Expenditures and Utilization, State Fiscal Year 2010**

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# C H A R T B O O K

## Children and Adults with Long Term Service and Support Needs

### MaineCare and Medicare Expenditures and Utilization

State Fiscal Year 2010



UNIVERSITY OF  
SOUTHERN MAINE

Muskie School of Public Service

## **Children and Adults with Long Term Service and Support Needs**

MaineCare and Medicare  
Expenditures and Utilization  
State Fiscal Year 2010

**December 2012**

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Muskie School of Public Service at the University of Southern Maine

### **Prepared for:**

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## Acknowledgements

Many people contributed to the vision, conceptualization and final presentation of the charts and data in this report. As part of Maine's State Profile Tool grant, project staff developed a profile of long term service and support users and their cost and utilization experience using MaineCare data from State Fiscal Year 2008.<sup>1</sup> In conducting that analysis, it became clear that a significant percent of MaineCare members who use long term services and supports are dually eligible for MaineCare and Medicare. Without the ability to examine the use of both MaineCare and Medicare services, the profile of long term service users was incomplete. The Maine Health Access Foundation generously offered to support the linkage of MaineCare and Medicare data to conduct a series of analyses of people who are dually eligible for MaineCare and Medicare services. The Maine Department of Health and Human Services and the Muskie School of Public Service purchased licenses from JEN Associates, a company with experience in linking Medicaid and Medicare data. The license from JEN Associates provided the project staff access to the de-identified linked MaineCare-Medicare data using a data analytics tool called integrated Medical Management Research System (IMMRS). The tool provides a customized user interface for analysis of the data.

The construction and use of large complex data sets is not always an easy task. Tina Gressani and Cathy McGuire provided extensive subject matter expertise related to the MaineCare data that was invaluable in assessing the data structures, coding algorithms and classification systems used for the MaineCare-Medicare analysis. They provided ongoing technical support in defining and translating the populations, variables and data elements in the JEN dataset and continuously assessed the quality and validity of the analysis. Dan Gilden from JEN Associates provided many, many hours of assistance in customizing the variables and measures in the IMMRS system for use by Maine DHHS and the Muskie School.

Stuart Bratesman applied his skills and knowledge of MaineCare and Medicare data and his eye for graphic design and data presentation in the final preparation of the report. Eileen Griffin provided constant leadership and encouragement to the team and provided the vision for analysis of long term service users.

Finally the project team would like to thank Jay Yoe for his vision, constant support, and guidance in making this report possible. His knowledge of MaineCare data and his understanding of data presentation for public audiences were invaluable. We greatly appreciate his patience, persistence and understanding.

Julie Fralich

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<sup>1</sup> Griffin E et al. A Cross-System Profile of Maine's Long Term Support System; A New View of Maine's Long Term Services and Supports and the People Served. Portland, ME: University of Southern Maine, Muskie School of Public Service School of Public Service; 2009.

## **Introduction**

This report is one of a series of reports the Muskie School has prepared on MaineCare members who are dually eligible for MaineCare and Medicare Services. An earlier report provided a high level overview of the MaineCare and Medicare use and expenditure patterns for all members who were dually eligible in state fiscal years (SFY) 2008 to 2010.<sup>2</sup> Both reports were prepared as part of the Maine State Profile Tool grant funded by the Centers for Medicare & Medicaid Services.

This second report analyzes the characteristics, use and expenditure patterns of sub-populations of long term service users including adults with mental illness, adults with brain injury, adults with developmental disabilities, older adults and adults with disabilities and children with mental illness and children with developmental disabilities.

The report includes information on MaineCare-only members and members who are dually eligible for MaineCare and Medicare. Dually eligible members in this report are those considered full benefit members. Full benefit members qualify for full Medicaid benefits. For these individuals, Medicaid covers the services that are not part of the standard Medicare benefit. Partial benefit members are those who receive assistance from Medicaid to pay their Medicare premiums and cost-sharing obligations. Partial benefit members are also known as Qualified Medicare Beneficiaries (QMBs); Specified Low Income Medicare Beneficiaries (SLMBs); Qualified Individuals (QIs); and Qualified Disabled and Working Individuals (QDWIs).

Individuals who are dually eligible for MaineCare and Medicare typically have multiple chronic conditions, high medical and long term care costs, and low income. Medicare covers hospital, medical, skilled long term care and pharmacy services while Medicaid pays for behavioral health, community based long term services and supports and nursing home services. The integration of services and benefits for people who are dually eligible is a challenge for states and the federal government.

As states move to introduce value based purchasing initiatives through health homes, accountable care communities and other managed care efforts, the need to coordinate services and align incentives between the Medicaid and Medicare programs becomes increasingly critical. Many states are involved in dual eligible demonstrations to improve the integration of services, benefits and care.

## **Overview of Populations**

The following population groups and definitions were developed by the Steering Committee for the State Profile Tool grant. This included representatives from the various program offices within the Maine Department of Health and Human Services responsible for managing programs for adults and children. Adults may fall into more than one category. The children's group is hierarchical. Children are identified as eligible for all groups and then assigned in the following order : Developmental disabilities; mental illness and then physical disabilities. For more detailed definitions, see Appendix A.

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<sup>2</sup> McGuire et al. Chartbook: Members Dually Eligible for MaineCare and Medicare Benefits; MaineCare and Medicare Expenditures and Utilization. Portland, ME: University of Southern Maine, Muskie School of Public Service School of Public Service; 2012.

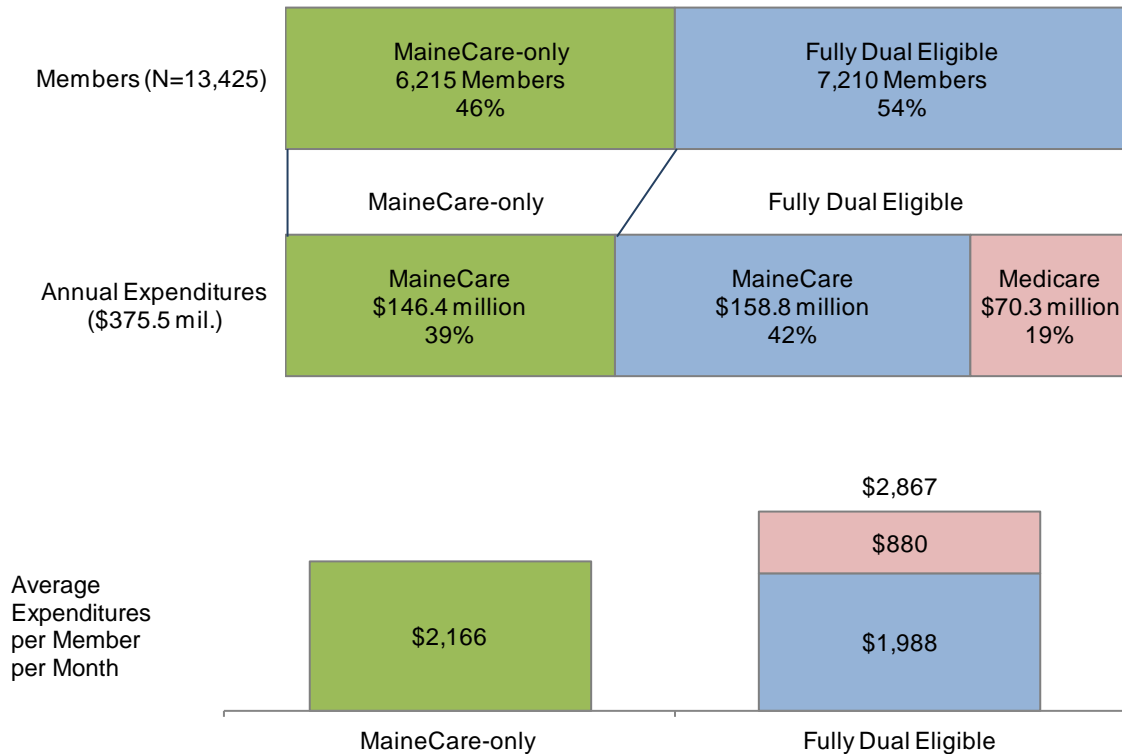
<b>ADULTS (Age 18 and over)</b>	
<b>With Mental Illness</b>	Members receiving mental health case management (§17) for 5 or more months over two years, or using 5 or more months of residential care facility treatment for people with mental illness (§97) over a two year period.
<b>Older Adults and Adults with Disabilities</b>	Members residing in nursing homes (§67), residential care (§97) or housing with assisted living services (§2 and §6). Members receiving services under the waiver for older adults and adults with disabilities (§19) or private duty nursing (§96) or day health services (§26).
<b>With Physical Disabilities who Self-Direct</b>	Members receiving consumer directed waiver services (§22) or state plan consumer directed personal assistance services (§12).
<b>With Brain Injuries</b>	Use of rehabilitative services (§102); specialized nursing facilities for persons with brain injury (§67); individuals residing in residential care with diagnoses of brain injury <sup>3</sup> ; members with inpatient hospitalization over 30 days or eight or more emergency department visits during the year with a brain injury diagnosis.
<b>With Developmental Disabilities</b>	Members in ICFs-MR (§50) or accessed either waiver serving person with mental retardation or autism (§21 & §29); who have MR case management (§13) or MR residential care facilities (§97) or residing in a nursing facility (§67) with an MR diagnosis.
<b>CHILDREN (Age 0-17)</b>	
<b>With Developmental Disabilities</b>	Children 17 years or younger receiving community rehab services (§28) formerly day habilitation services (§24) with a mental retardation diagnosis.
<b>With Mental Illness</b>	Children 17 years or younger using specific behavioral health services including: 5 or more months over a two year period of Home & Community-Based Treatment (§65), Children’s ACT (§65) or two or more inpatient psychiatric hospitalizations (§46) over a two-year period or 12 months or more (continuous or non-continuous) stay in residential treatment (§97 – including TFC).
<b>With Physical Disabilities</b>	Children receiving private duty nursing (§96).

**Note on Medicare Expenditures:**

In this report, dollars include expenditures for MaineCare Pharmacy and Medicare Part A&B pharmacy, but do not include Medicare Part D. The Centers for Medicare & Medicaid Services (CMS) does not provide Part D cost data in these extracts. Part A pharmacy includes drugs during an inpatient or skilled nursing stay; Part B pharmacy includes drugs administered during an office visit; drugs administered through Durable Medical Equipment (such as inhalation devices, IV or infusion pumps) and some self-administered drugs (e.g. oral anti-emetic drugs within 48 hours or chemotherapy, drugs for dialysis patients).

## Adults with Mental Illness

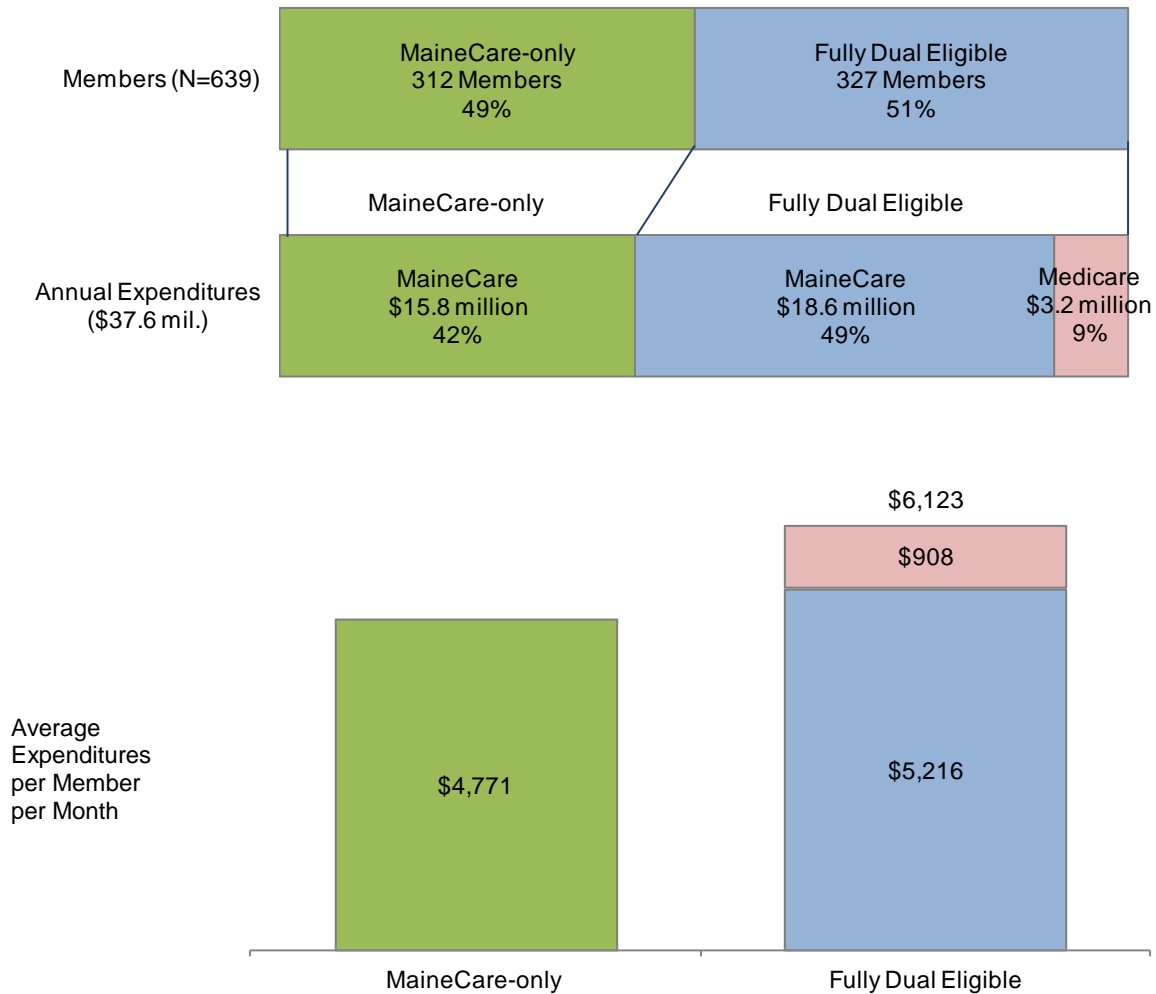
**Chart 1:** Proportion of the number of MaineCare-only, fully dual eligible and partially dual eligible members compared to their proportional share of MaineCare and Medicare expenditures, SFY 2010



Slightly more than half of adults with mental illness were dually eligible for Medicare and MaineCare services. Total annual expenditures (MaineCare and Medicare) for adults with mental illness was \$375.5 million in 2010. Although dual eligible members represented 54% of this population group, their expenditures represented 61% of total MaineCare and Medicare expenditures. Per member per month expenditures for dually eligible members was \$2867 compared with \$2166 for MaineCare-only members.

## Adults with Brain Injury

**Chart 2:** Proportion of the number of MaineCare-only, fully dual eligible and partially dual eligible members compared to their proportional share of MaineCare and Medicare expenditures, SFY 2010

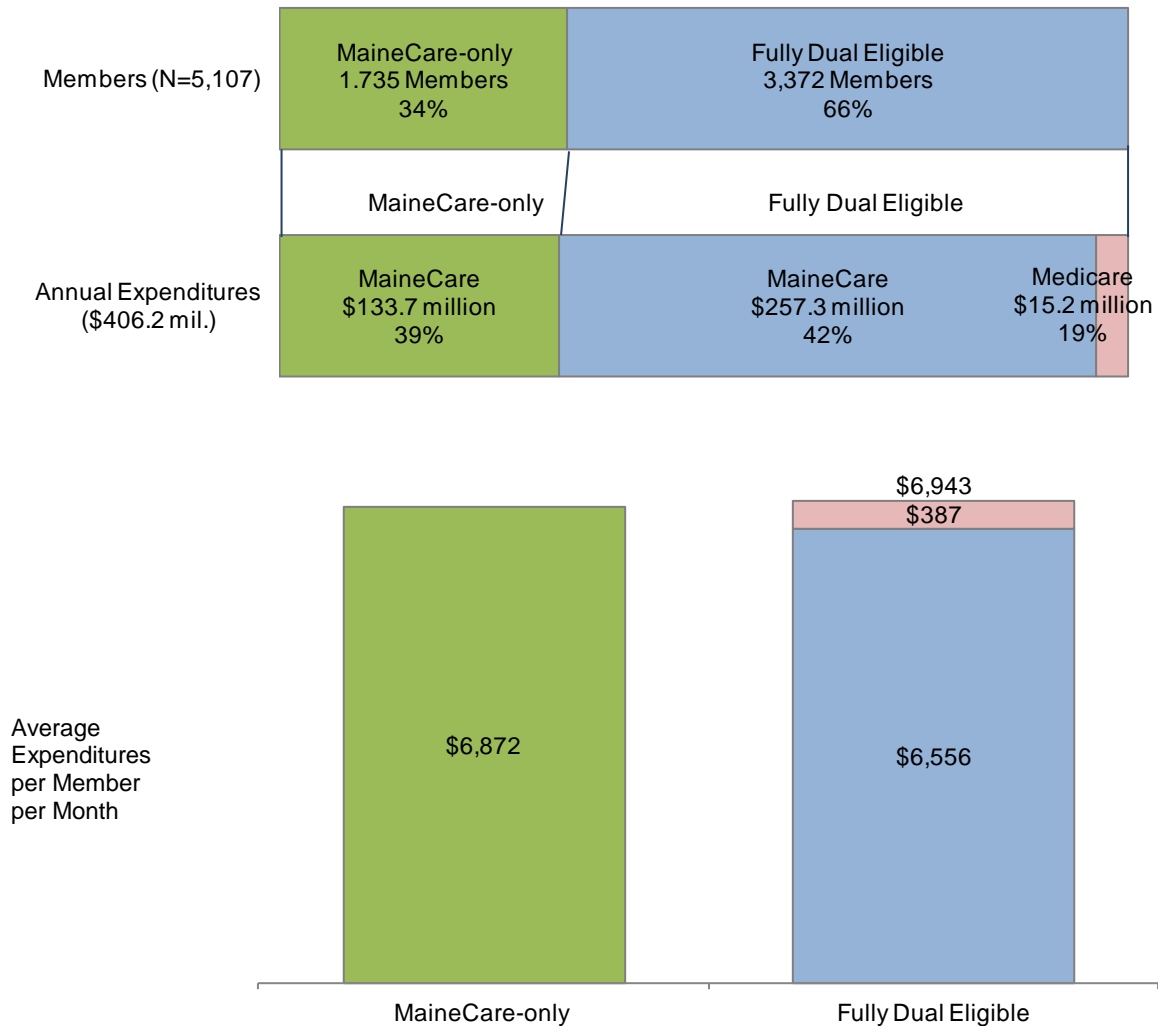


Approximately half of the adults with brain injury are dually eligible for MaineCare and Medicare services. The per member per month costs for dually eligible members were significantly higher (\$6123) than the costs for MaineCare-only members (\$4771).



## Adults with Developmental Disabilities

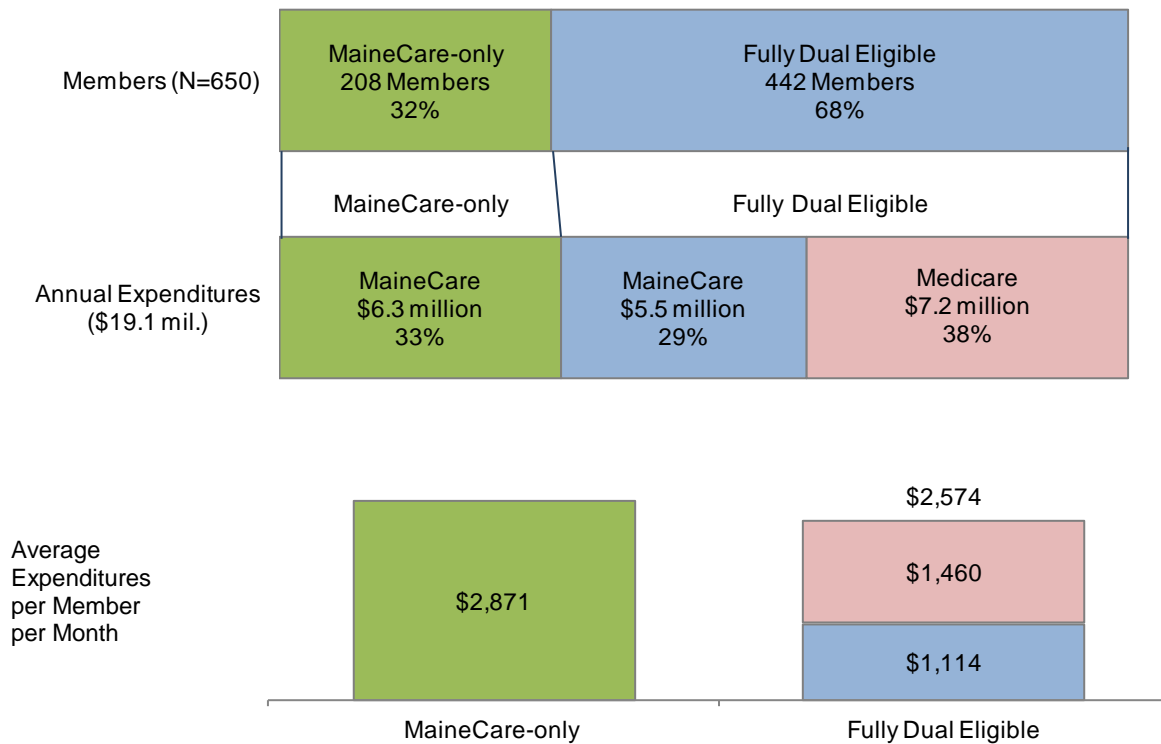
**Chart 3:** Proportion of the number of MaineCare-only, fully dual eligible and partially dual eligible members compared to their proportional share of MaineCare and Medicare expenditures, SFY 2010



Two-thirds of adults with developmental disabilities were dually eligible for MaineCare and Medicare services in SFY 2010. Most of the expenditures for people with developmental disabilities are long term service and support services paid for by MaineCare. The per member per month costs for MaineCare-only and dually eligible members were very similar (\$6872 compared with \$6943).

## Adults with Physical Disabilities Who Self-direct

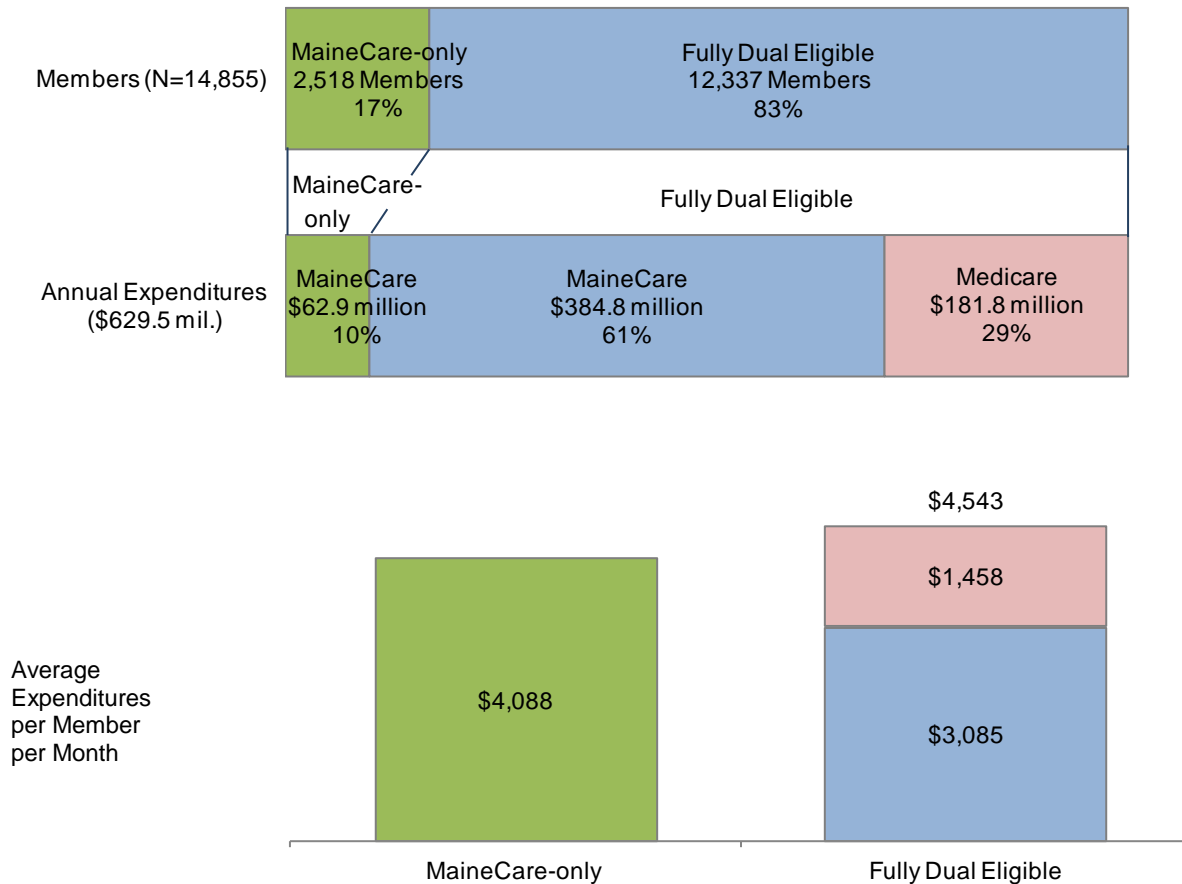
**Chart 4:** Proportion of the number of MaineCare-only, fully dual eligible and partially dual eligible members compared to their proportional share of MaineCare and Medicare expenditures, SFY 2010



Slightly more than two-thirds of adults with physical disabilities who self-direct services were dually eligible for MaineCare and Medicare services. For those who were dually eligible, Medicare expenditures were higher (\$7.2 million) than MaineCare expenditures (\$5.5 million). On average, the per member per month expenditures for MaineCare only members (\$2871) were slightly higher than the per member expenditures (\$2574) for dually eligible members.

## Older Adults and Adults with Disabilities

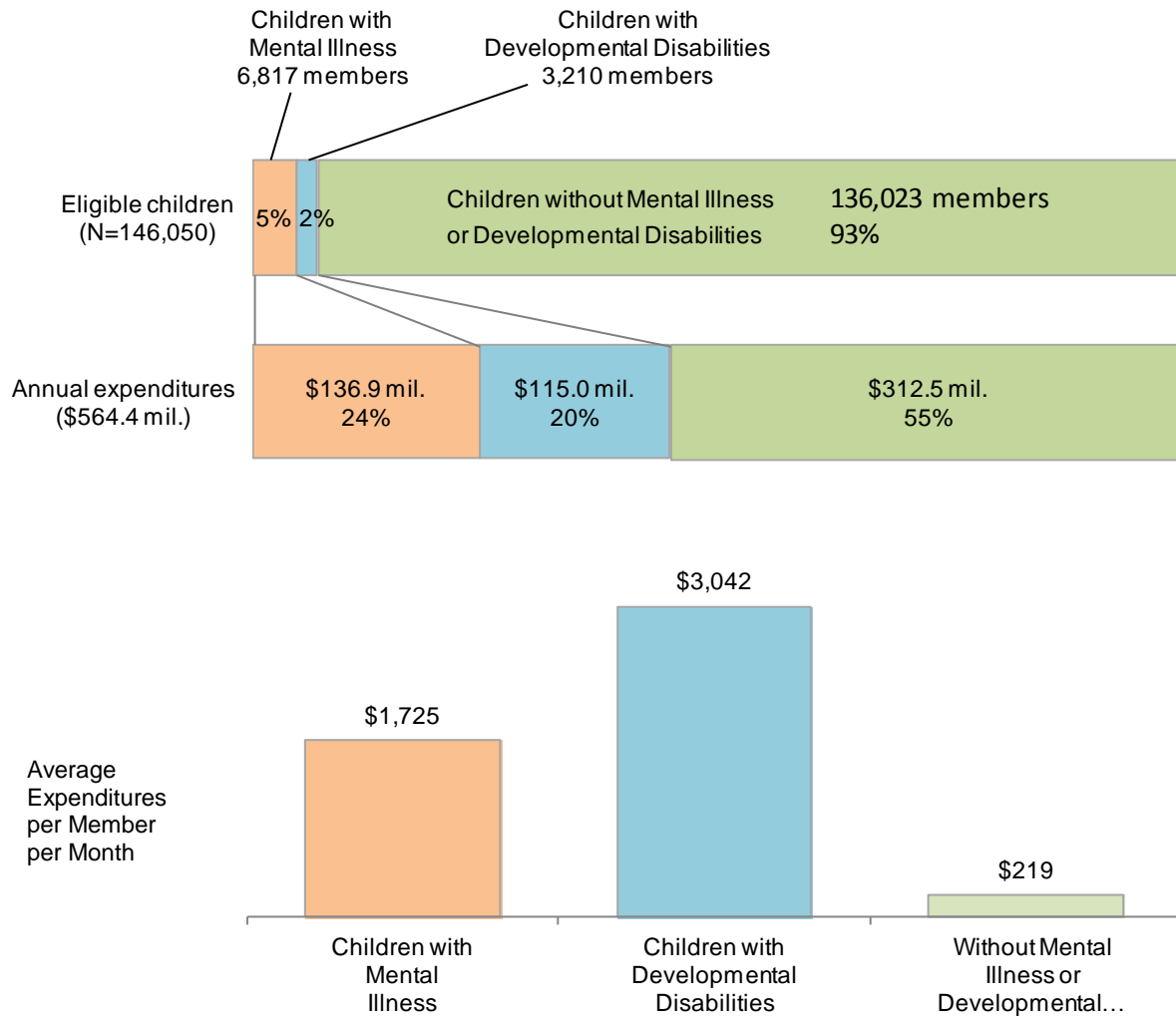
**Chart 5:** Proportion of the number of MaineCare-only, fully dual eligible and partially dual eligible members compared to their proportional share of MaineCare and Medicare expenditures, SFY 2010



Eighty-three percent of older adults and adults with disabilities were dually eligible for MaineCare and Medicare services in SFY 2010. MaineCare expenditures represented 71% of total expenditures (MaineCare and Medicare) for all older adults and adults with disabilities. The per member per month expenditures for those who were dually eligible were slightly higher (\$4543) than the per member per month expenditures for MaineCare-only members.

## MaineCare Eligible Child Populations

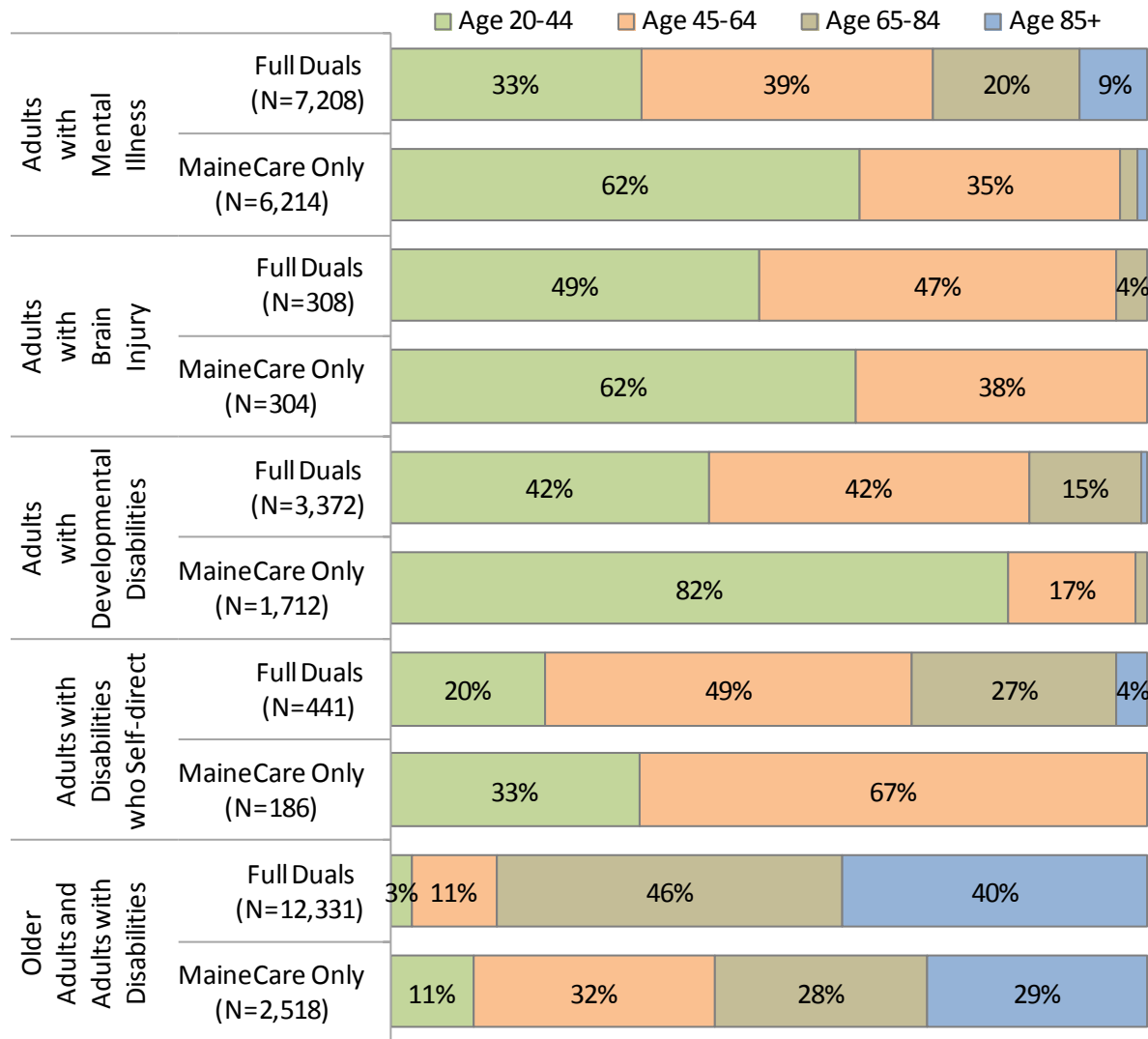
**Chart 6:** Proportion of the number of MaineCare eligible children with mental illness, developmental disabilities, or without either condition, compared to their proportional share of MaineCare expenditures, SFY 2010



Children with mental illness and children with developmental disabilities represented 5% and 2% respectively of the total children served by MaineCare in 2010. Expenditures for the 5% of children with mental illness represented 24% of total MaineCare expenditures for children; expenditures for 2% of the children with developmental disabilities represented 20% of MaineCare expenditures for children. Per member expenditures for children with developmental disabilities was \$3042; compared with \$1725 for children with mental illness and \$219 for children without mental illness of developmental disabilities.

## Adult Members by Age Group

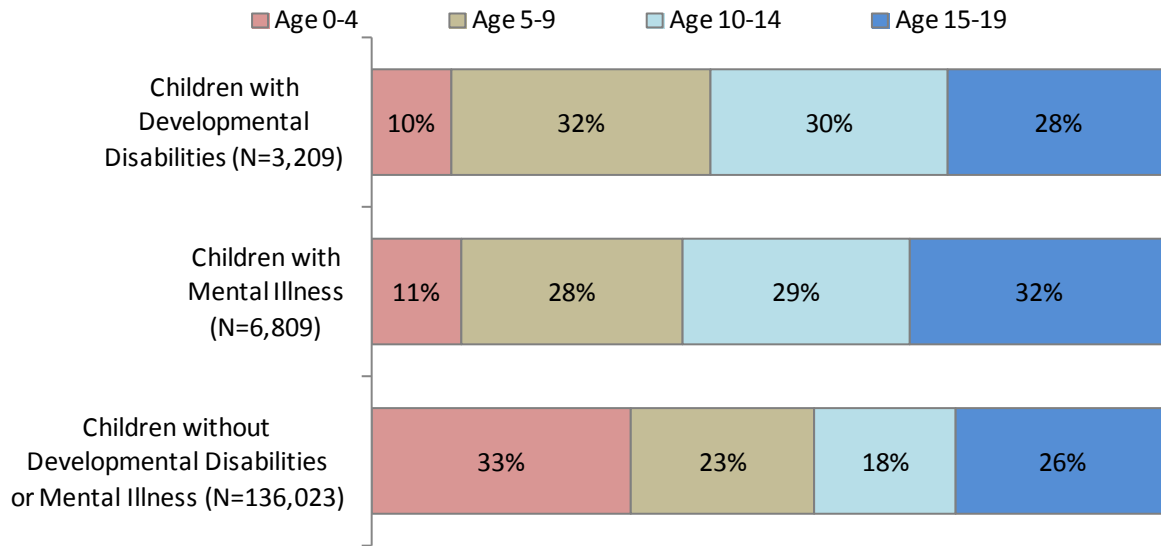
**Chart 7:** Distribution of fully dual eligible and MaineCare only adults by age group, for selected adult populations in SFY 2010



In general, people who are dually eligible for MaineCare and Medicare services are older. People may be eligible for Medicare due to age (age 65 and older) or because of a disability. Not surprisingly, older adults and adults with disabilities are more likely to be age 65 or older. Those under 65 who are dually eligible for MaineCare and Medicare are eligible because they meet the Medicare disability criteria.

## Child Members by Age Group

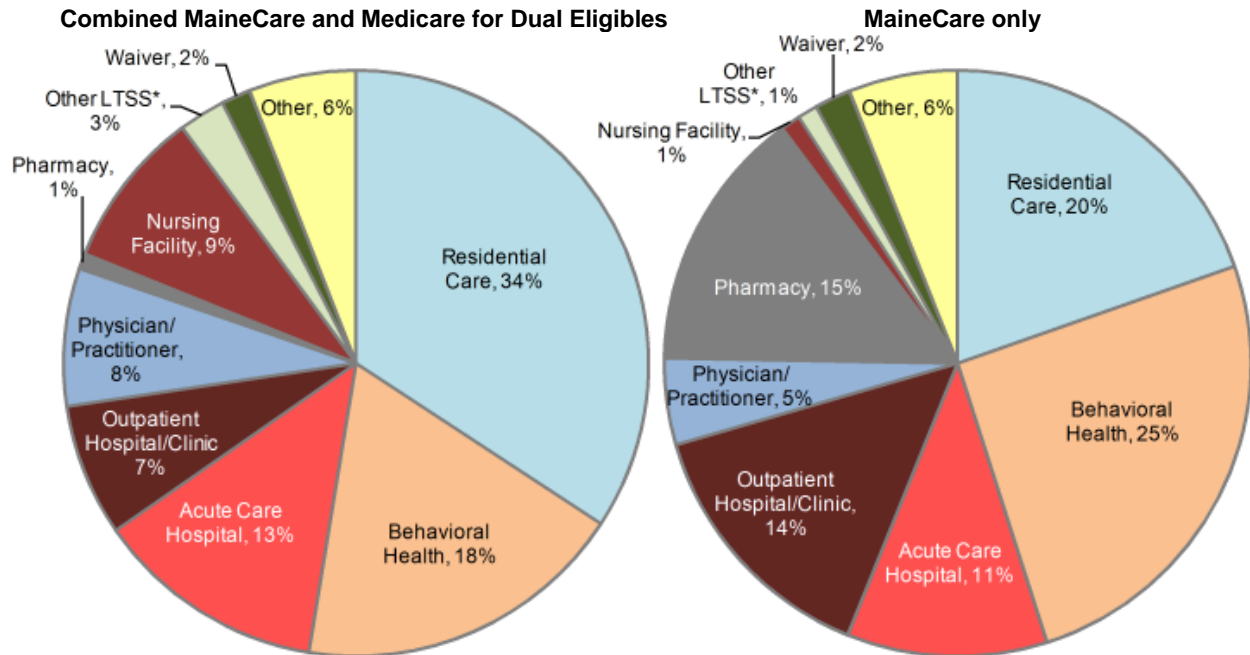
**Chart 8:** Age distribution of MaineCare eligible children, whose ages could be determined, by selected populations:



Children served by MaineCare who do not have a mental illness or a developmental disability tend to be younger. One-third of children without a mental illness or developmental disability are between age 0 and 4. The distribution of children ages 15-19 with or without a developmental disability or mental illness is fairly similar with a somewhat higher prevalence in this age group for children with mental illness (32%).

## Adults with Mental Illness

**Chart 9:** Share of total annual expenditures for fully dual and MaineCare eligible members by type of service, SFY 2010



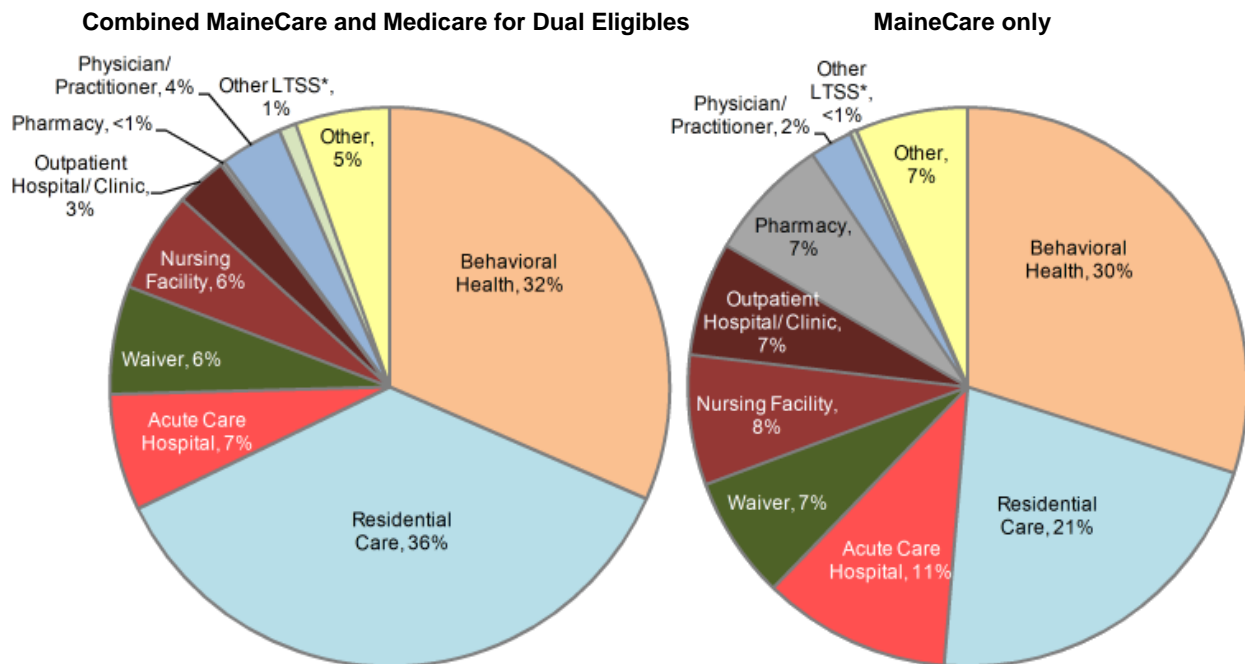
**Table 1:** Share of total annual expenditures for fully dual and MaineCare eligible by type of service, SFY 2010

	Fully Dual Eligible Members			MaineCare Eligible Only	MaineCare Combined
	MaineCare	Medicare	Combined		
Persons served (unduplicated count)	7,210	7,210	7,210	6,215	13,425
Annual expenditures (in millions)	\$158.8	\$70.3	\$229.1	\$146.4	\$305.2
Residential Care	\$78.4	\$0.0	\$78.4	\$28.7	\$107.1
Behavioral Health	\$42.1	\$0.0	\$42.1	\$37.2	\$79.3
Acute Care Hospital	\$0.6	\$28.7	\$29.2	\$16.2	\$16.8
Outpatient Hospital/Clinic	\$1.5	\$15.2	\$16.7	\$21.1	\$22.6
Physician/ Practitioner	\$2.8	\$14.7	\$17.4	\$7.0	\$9.7
Pharmacy	\$1.9	\$0.0	\$1.9	\$21.2	\$23.2
Nursing Facility	\$14.1	\$6.0	\$20.1	\$1.6	\$15.7
Other Long Term Services*	\$2.2	\$3.7	\$5.9	\$1.6	\$3.8
Waiver	\$3.7	\$0.0	\$3.7	\$2.9	\$6.7
Other	\$11.5	\$2.1	\$13.6	\$8.8	\$20.3

Residential care and behavioral health expenditures are the major cost drivers for adults with mental illness for the MaineCare only and dually eligible populations. Hospital inpatient and outpatient costs also contribute significantly to total expenditure for these groups.

## Adults with Brain Injury

**Chart 10:** Share of total annual expenditures for fully dual and MaineCare eligible members by type of service, SFY 2010



**Table 2:** Share of total annual expenditures for fully dual and MaineCare eligible by type of service, SFY 2010

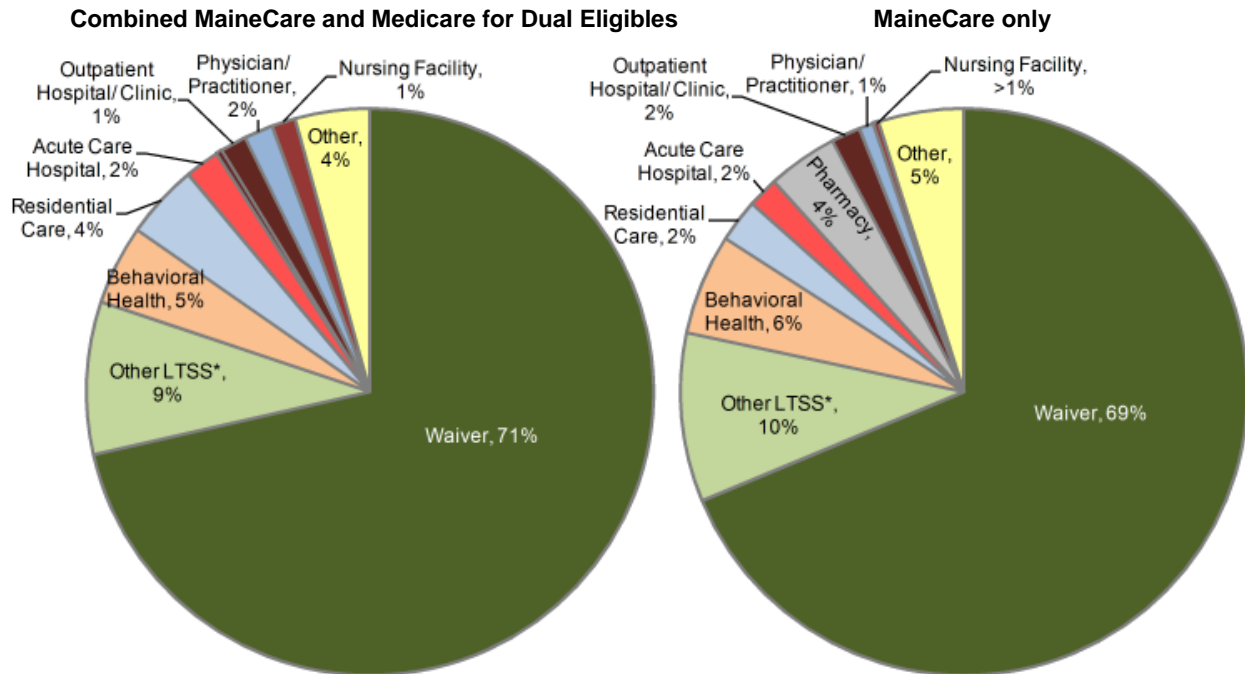
	Fully Dual Eligible Members			MaineCare Eligible Only	MaineCare Combined
	MaineCare	Medicare	Combined		
Persons served (unduplicated annual count)	327	327	327	312	639
Annual expenditures (in millions)	\$18.6	\$3.2	\$21.8	\$15.8	\$33.1
Behavioral Health	\$6.9	\$0.0	\$6.9	\$4.7	\$11.1
Residential Care	\$7.9	\$0.0	\$7.9	\$3.4	\$10.6
Acute Care Hospital	\$0.0	\$1.4	\$1.5	\$1.7	\$1.9
Waiver	\$1.4	\$0.0	\$1.4	\$1.1	\$3.0
Nursing Facility	\$0.9	\$0.3	\$1.3	\$1.2	\$1.7
Outpatient Hospital/Clinic	\$0.0	\$0.6	\$0.6	\$1.0	\$1.1
Pharmacy	\$0.1	\$0.0	\$0.1	\$1.1	\$1.2
Physician/Practitioner	\$0.1	\$0.7	\$0.8	\$0.4	\$0.5
Other Long Term Services*	\$0.1	\$0.1	\$0.2	\$0.1	\$0.1
Other	\$1.1	\$0.1	\$1.2	\$1.0	\$2.0

For the 639 members identified with brain injury, residential care costs represented 36% of total expenditures for those who were dually eligible and 21% for those who were MaineCare only. Behavioral health costs were approximately one-third of total costs. (see Appendix B for details on the services included in each cost category).



## Adults with Developmental Disabilities

**Chart 11:** Share of total annual expenditures for fully dual and MaineCare eligible members by type of service, SFY 2010.



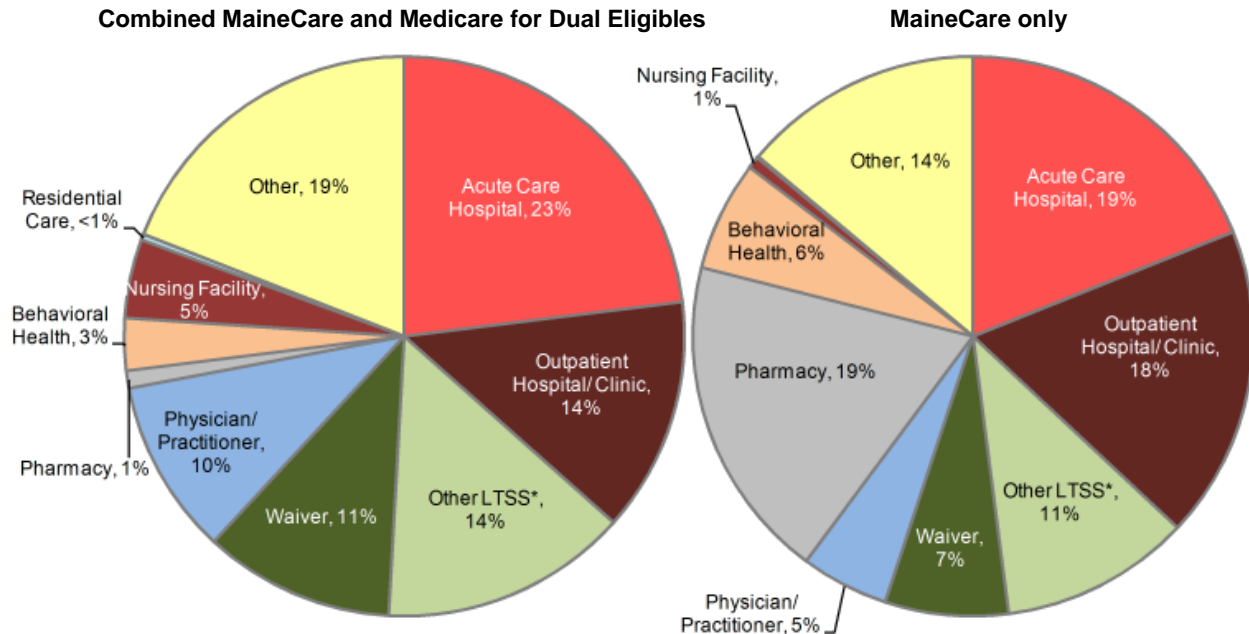
**Table 3:** Share of total annual expenditures for fully dual and MaineCare eligible by type of service, SFY 2010

	Fully Dual Eligible Members			MaineCare Eligible Only	MaineCare Combined
	MaineCare	Medicare	Combined		
Persons served (unduplicated annual count)	3,372	3,372	3,372	1,735	5,107
Annual expenditures (in millions)	\$257.3	\$15.2	\$272.5	\$133.7	\$391.0
Waiver	\$194.7	\$0.0	\$194.7	\$91.9	\$286.6
Other Long Term Services	\$22.8	\$0.9	\$23.6	\$12.8	\$35.6
Behavioral Health	\$12.3	\$0.0	\$12.3	\$7.7	\$20.0
Residential Care	\$11.6	\$0.0	\$11.6	\$3.3	\$14.9
Acute Care Hospital	\$0.1	\$5.2	\$5.4	\$2.3	\$2.5
Pharmacy	\$1.0	\$0.0	\$1.0	\$5.4	\$6.3
Outpatient Hospital/ Clinic	\$0.3	\$3.8	\$4.1	\$2.2	\$2.5
Physician/ Practitioner	\$0.9	\$3.6	\$4.5	\$1.1	\$2.0
Nursing Facility	\$2.8	\$0.9	\$3.7	\$0.4	\$3.2
Other	\$10.8	\$0.8	\$11.6	\$6.5	\$17.4

More than two-thirds of the expenditures for adults with disabilities (MaineCare only and dually eligible members) were for HCBS Waiver services. Other long term care service costs represented the second largest category of expenses.

## Adults with Physical Disabilities Who Self-direct

**Chart 12:** Share of total annual expenditures for fully dual\* and MaineCare eligible members by type of service, SFY 2010



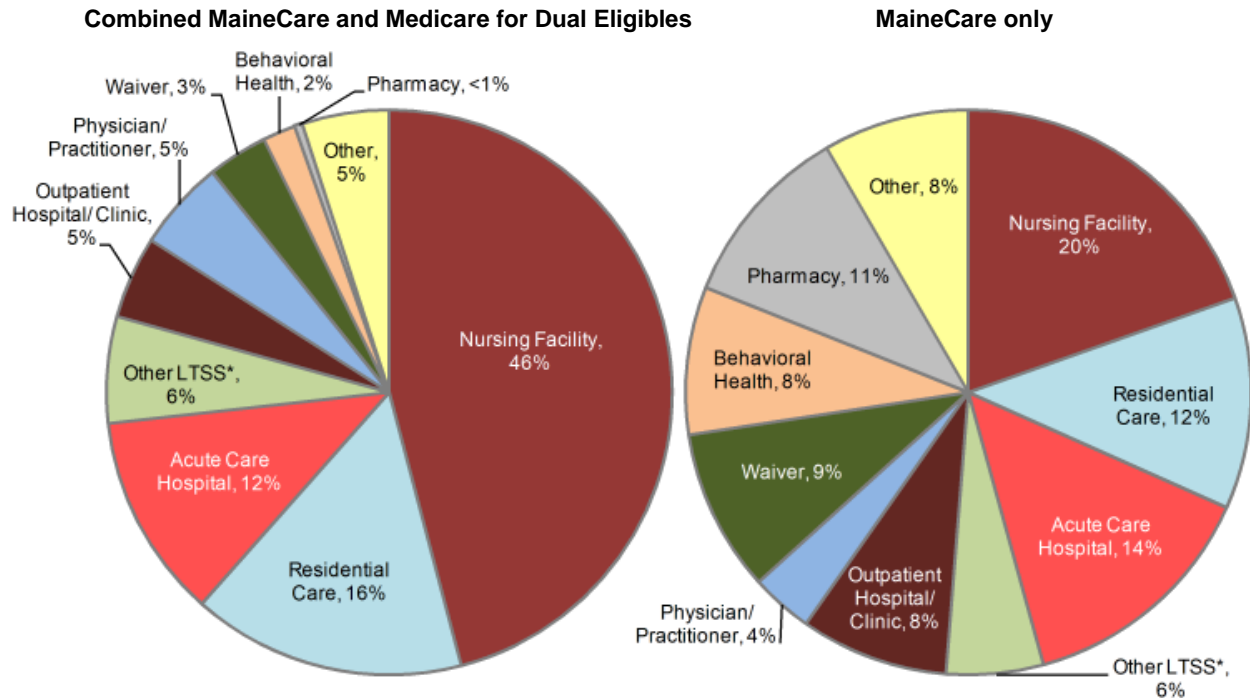
**Table 4:** Share of total annual expenditures for fully dual and MaineCare eligible by type of service, SFY 2010

	Fully Dual Eligible Members			MaineCare Eligible Only	MaineCare Combined
	MaineCare	Medicare	Combined		
Persons served (unduplicated annual count)	442	442	442	208	650
Annual expenditures (in millions)	\$5.5	\$7.2	\$12.8	\$6.3	\$11.8
Acute Care Hospital	\$0.1	\$2.8	\$2.9	\$1.2	\$1.3
Outpatient Hospital/ Clinic	\$0.1	\$1.6	\$1.7	\$1.1	\$1.2
Other Long Term Services*	\$1.3	\$0.5	\$1.8	\$0.7	\$2.0
Waiver	\$1.4	\$0.0	\$1.4	\$0.4	\$1.9
Physician/ Practitioner	\$0.2	\$1.1	\$1.3	\$0.3	\$0.6
Pharmacy	\$0.1	\$0.0	\$0.1	\$1.2	\$1.3
Behavioral Health	\$0.4	\$0.0	\$0.4	\$0.4	\$0.8
Nursing Facility	\$0.2	\$0.4	\$0.6	\$0.0	\$0.2
Residential Care	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Other	\$1.6	\$0.8	\$2.4	\$0.9	\$2.5

More than one-third of the expenditures for adults with physical disabilities who direct their own services were for hospital inpatient and outpatient services. For MaineCare only members, pharmacy costs represented 19% of total costs. Medicare dollars are understated since they do not include Medicare Part D pharmacy costs.

## Older Adults and Adults with Disabilities

**Chart 13:** Share of total annual expenditures for fully dual and MaineCare eligible members by type of service, SFY 2010



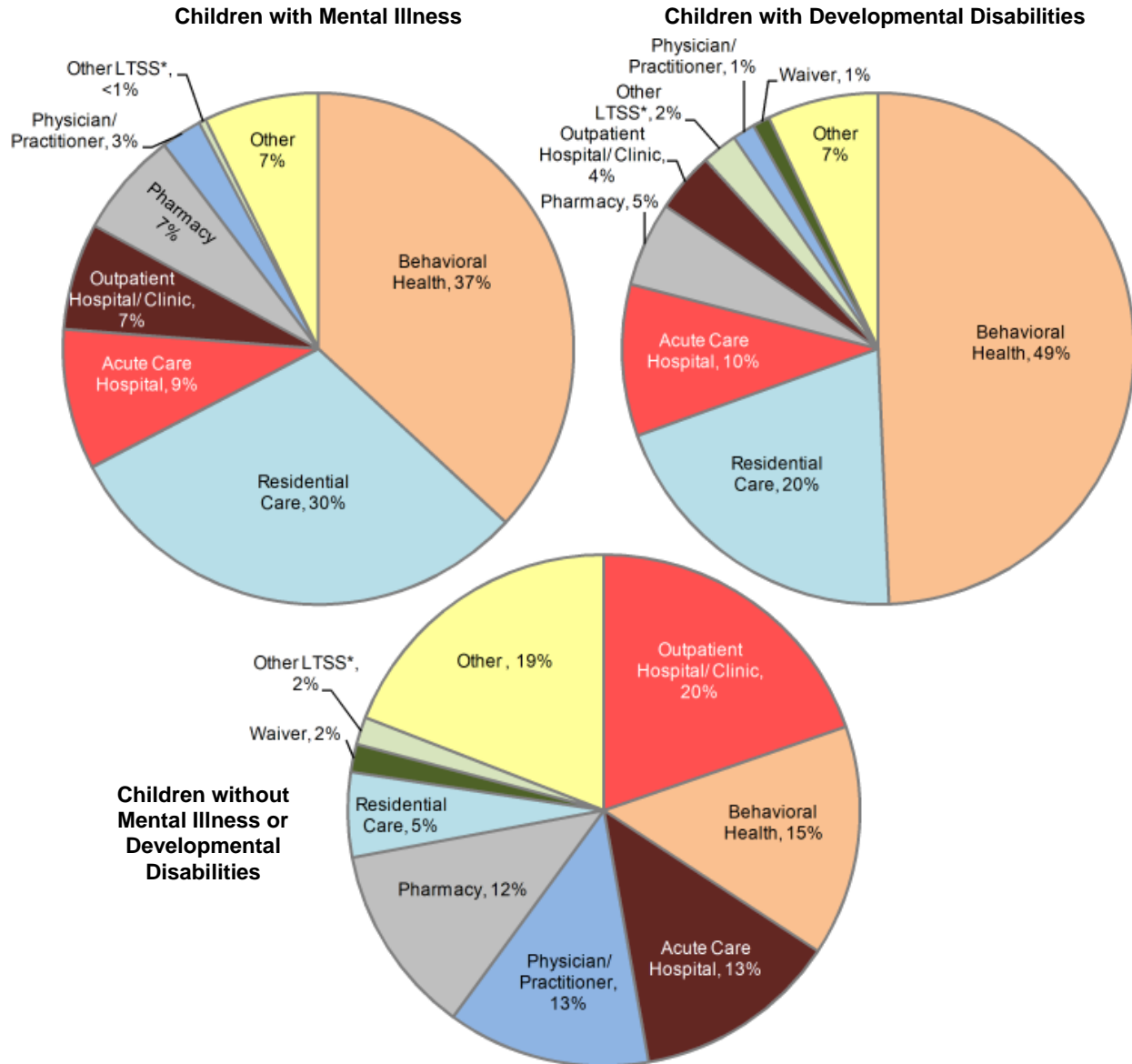
**Table 5:** Total annual expenditures for fully dual and MaineCare eligible by type of service, SFY 2010

	Fully Dual Eligible Members			MaineCare Eligible Only	MaineCare Combined
	MaineCare	Medicare	Combined		
Persons served (unduplicated annual count)	12,337	12,337	12,337	2,518	14,855
Annual expenditures (in millions)	\$384.8	\$181.8	\$566.6	\$62.9	\$447.7
Nursing Facility	\$224.0	\$36.0	\$260.0	\$12.3	\$236.3
Residential Care	\$88.8	\$0.0	\$88.8	\$7.6	\$96.4
Acute Care Hospital	\$1.6	\$64.6	\$66.2	\$8.8	\$10.5
Other Long Term Services*	\$10.1	\$24.4	\$34.4	\$3.5	\$13.6
Outpatient Hospital/ Clinic	\$0.7	\$26.0	\$26.6	\$5.3	\$6.0
Physician/ Practitioner	\$3.9	\$25.4	\$29.3	\$2.2	\$6.1
Waiver	\$19.5	\$0.0	\$19.5	\$5.8	\$25.4
Behavioral Health	\$10.7	\$0.0	\$10.7	\$5.3	\$16.0
Pharmacy	\$2.6	\$0.0	\$2.6	\$6.7	\$9.2
Other	\$22.9	\$5.4	\$28.3	\$5.3	\$28.2

Nursing facility and residential care costs were the major categories of expenditures for those older adults and adults with disabilities who were dually eligible for MaineCare and Medicare services. Hospital and physician costs represented close to 20% of total expenditures. HCBS waiver costs represented 3% of total expenditures.

## Children

**Chart 14:** Share of total MaineCare annual expenditures for children with mental illness, with developmental disabilities and with no mental illness or developmental disabilities by type of service, SFY 2010



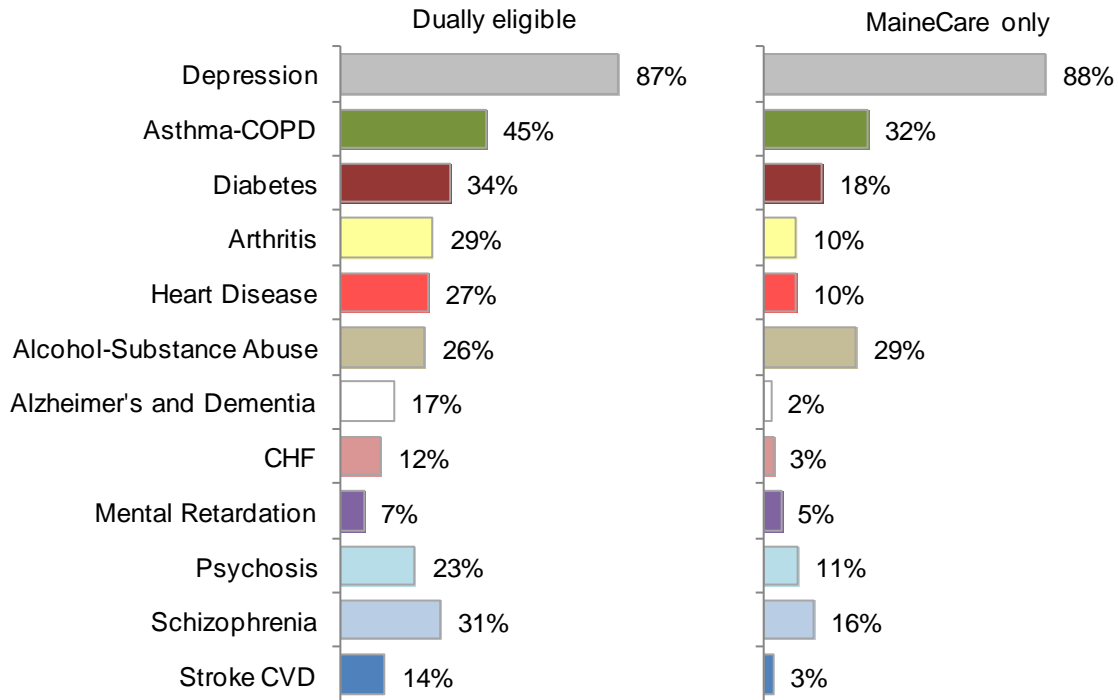
Behavioral health and residential care were the largest cost categories for children with mental illness and developmental disabilities. Inpatient and outpatient services represented approximately one third of the expenditures for children without mental illness or developmental disabilities.

**Table 6:** Total Annual MaineCare Expenditures for selected child populations, by type of service, SFY 2010

Children with:	Mental Illness	Developmental Disabilities	Without Either	Mental Illness	Developmental Disabilities	Without Either
Unique Count of Members	6,817	3,210	136,023			
	Annual expenditures (in millions)			Average expenditures per member per month		
Total	\$136.9	\$115.0	\$312.5	\$1,725	\$3,042	\$219
Behavioral Health	\$50.5	\$56.7	\$45.5	\$636	\$1,500	\$32
Residential Care	\$41.7	\$23.2	\$16.7	\$525	\$613	\$12
Outpatient Hospital/ Clinic	\$9.3	\$4.4	\$61.6	\$117	\$116	\$43
Acute Care Hospital	\$12.2	\$11.0	\$40.4	\$153	\$291	\$28
Pharmacy	\$9.2	\$6.1	\$37.5	\$115	\$162	\$26
Physician/ Practitioner	\$3.5	\$1.6	\$40.2	\$45	\$43	\$28
Other LTSS*	\$0.6	\$2.6	\$5.5	\$8	\$69	\$4
Waiver	\$0.0	\$1.2	\$5.5	\$0	\$33	\$4
Other	\$10.0	\$8.1	\$59.7	\$126	\$214	\$42

## Prevalence of Selected Chronic Diseases among Adults with Mental Illness

**Chart 15:** Prevalence rates for selected chronic diseases\* among fully dual eligible and MaineCare only members based on primary or secondary diagnoses found on physician or hospital claims, SFY 2010

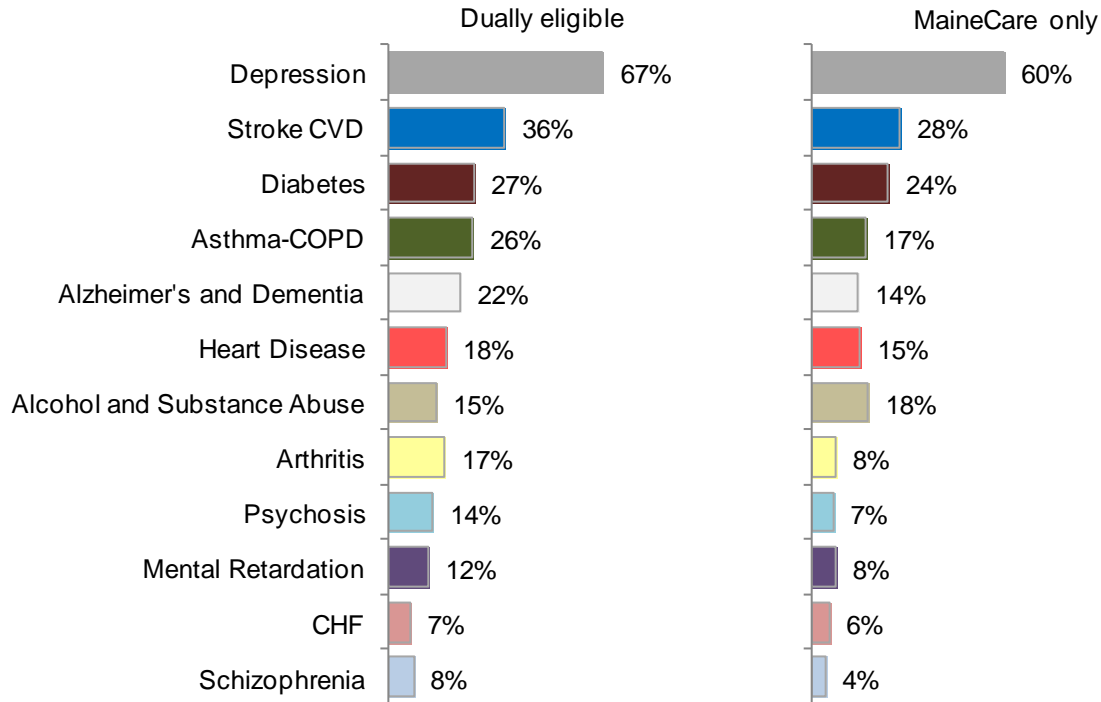


The majority of adults with mental illness had a diagnoses of depression. The second most common diagnosis was asthma-COPD. Almost one third of those who were dually eligible also had a diagnoses of diabetes. Approximately one-quarter adults with mental illness also had a diagnosis of alcohol-substance abuse.

\* While the JEN Associates definition of "mental retardation" does include ICD-9-CM diagnosis codes for mild, moderate, severe and profound mental retardation and "unspecified mental retardation" it does not include diagnosis codes for autism, "pervasive developmental disorders", or Down's syndrome. However, it also includes ICD-9-CM codes 331 to 331.99 ("other cerebral degenerations"), but does not include senile dementia, presenile dementia, vascular dementia or senile psychotic conditions, or 294.1 ("dementia in conditions classified elsewhere").

## Prevalence of Selected Chronic Diseases among Adults with Brain Injury

**Chart 16:** Prevalence rates for selected chronic diseases\* among fully dual eligible and MaineCare only members based on primary or secondary diagnoses found on physician or hospital claims, SFY 2010

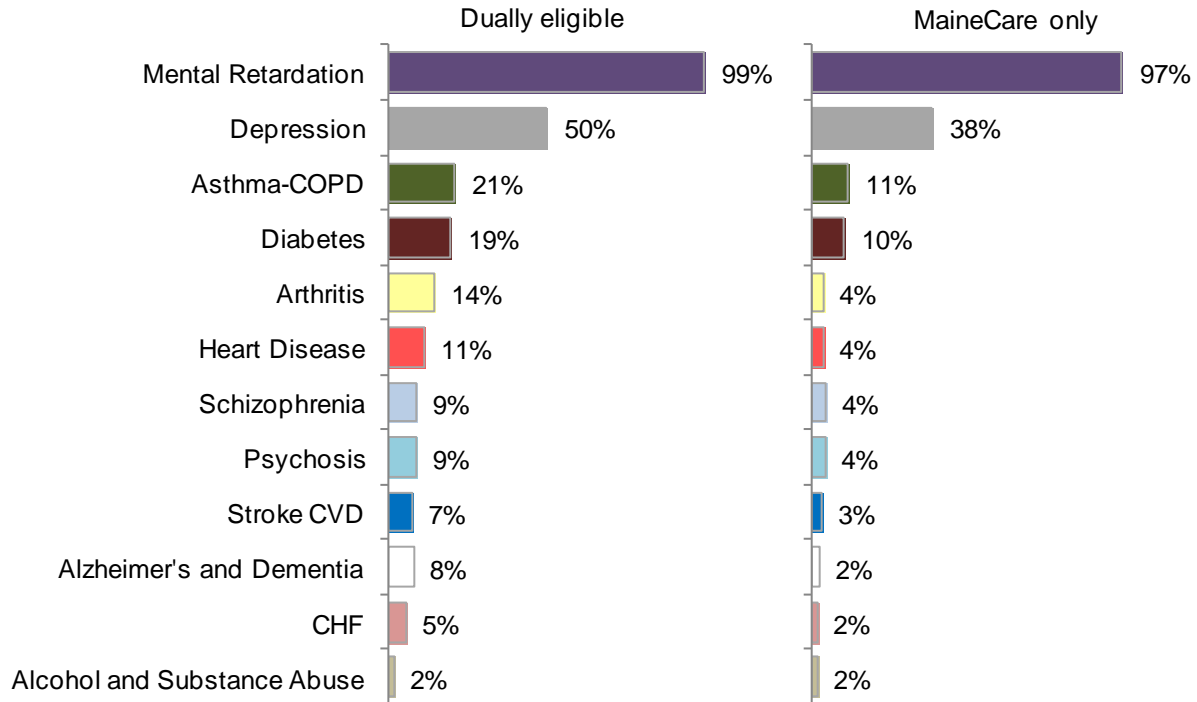


Depression was the most prevalent diagnosis for those with brain injury. Stroke CVD was the second most common diagnosis with diabetes the third most common diagnosis.

\* While the JEN Associates definition of "mental retardation" does include ICD-9-CM diagnosis codes for mild, moderate, severe and profound mental retardation and "unspecified mental retardation" it does not include diagnosis codes for autism, "pervasive developmental disorders", or Down's syndrome. However, it also includes ICD-9-CM codes 331 to 331.99 ("other cerebral degenerations"), but does not include senile dementia, presenile dementia, vascular dementia or senile psychotic conditions, or 294.1 ("dementia in conditions classified elsewhere").

## Prevalence of Selected Chronic Diseases among Adults with Developmental Disabilities

**Chart 17:** Prevalence rates for selected chronic diseases\* among fully dual eligible and MaineCare only members based on primary or secondary diagnoses found on physician or hospital claims, SFY 2010



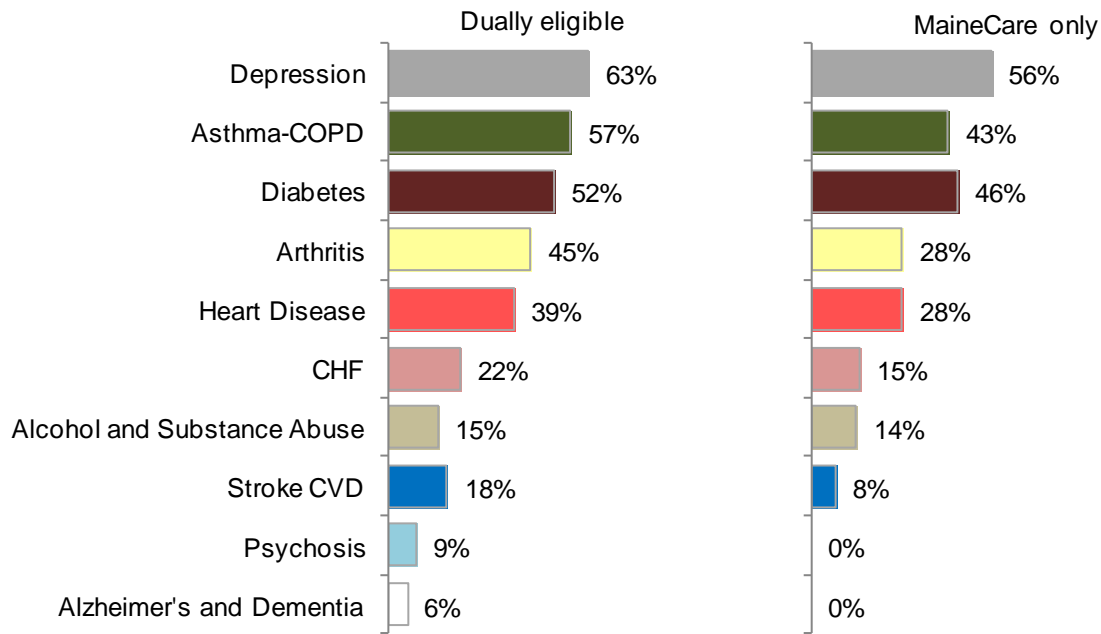
Among those with developmental disabilities, mental retardation was the predominant diagnosis; with depression the second most common diagnosis.

\* While the JEN Associates definition of "mental retardation" does include ICD-9-CM diagnosis codes for mild, moderate, severe and profound mental retardation and "unspecified mental retardation" it does not include diagnosis codes for autism, "pervasive developmental disorders", or Down's syndrome. However, it also includes ICD-9-CM codes 331 to 331.99 ("other cerebral degenerations"), but does not include senile dementia, presenile dementia, vascular dementia or senile psychotic conditions, or 294.1 ("dementia in conditions classified elsewhere").



## Prevalence of Selected Chronic Diseases among Adults with Physical Disabilities who Self-direct

**Chart 18:** Prevalence rates for selected chronic diseases\* among fully dual eligible and MaineCare only members based on primary or secondary diagnoses found on physician or hospital claims, SFY 2010

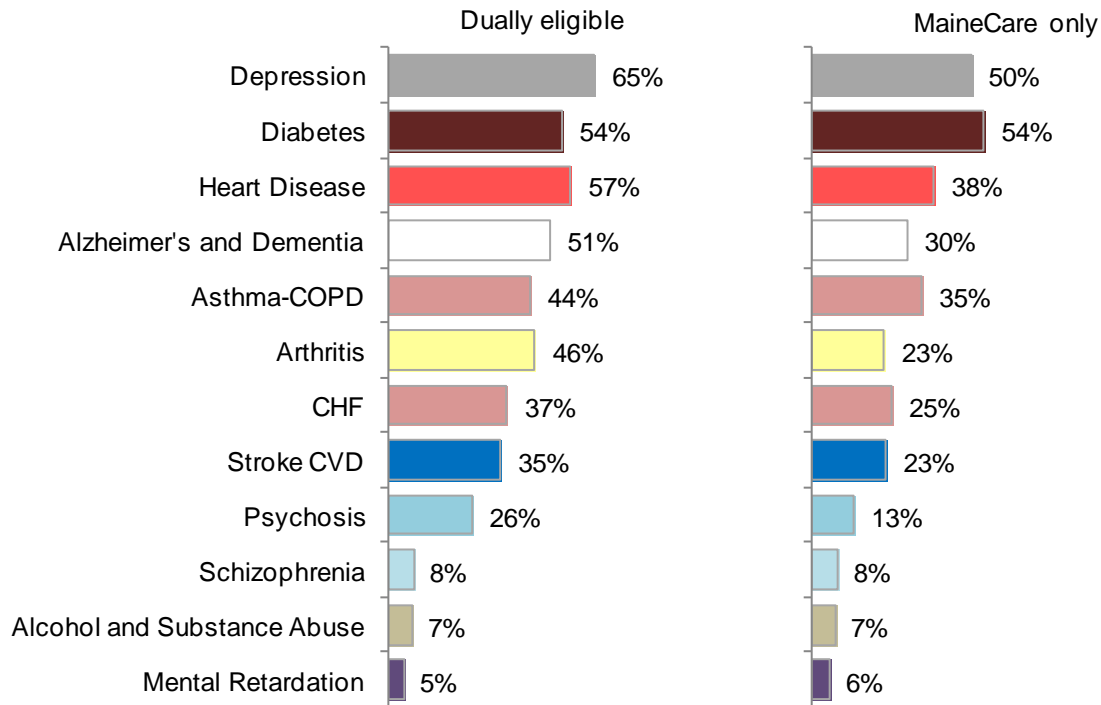


For those with physical disabilities who self-direct services, depression was the most common diagnosis; with asthma-COPD the second most common diagnosis and diabetes was prevalent for almost half of this population group. For those who were dually eligible, arthritis was also very common (45%).

\* While the JEN Associates definition of "mental retardation" does include ICD-9-CM diagnosis codes for mild, moderate, severe and profound mental retardation and "unspecified mental retardation" it does not include diagnosis codes for autism, "pervasive developmental disorders", or Down's syndrome. However, it also includes ICD-9-CM codes 331 to 331.99 ("other cerebral degenerations"), but does not include senile dementia, presenile dementia, vascular dementia or senile psychotic conditions, or 294.1 ("dementia in conditions classified elsewhere").

## Prevalence of Selected Chronic Diseases among Older Adults & Adults with Disabilities

**Chart 19:** Prevalence rates for selected chronic diseases\* among fully dual eligible and MaineCare only members based on primary or secondary diagnoses found on physician or hospital claims, SFY 2010



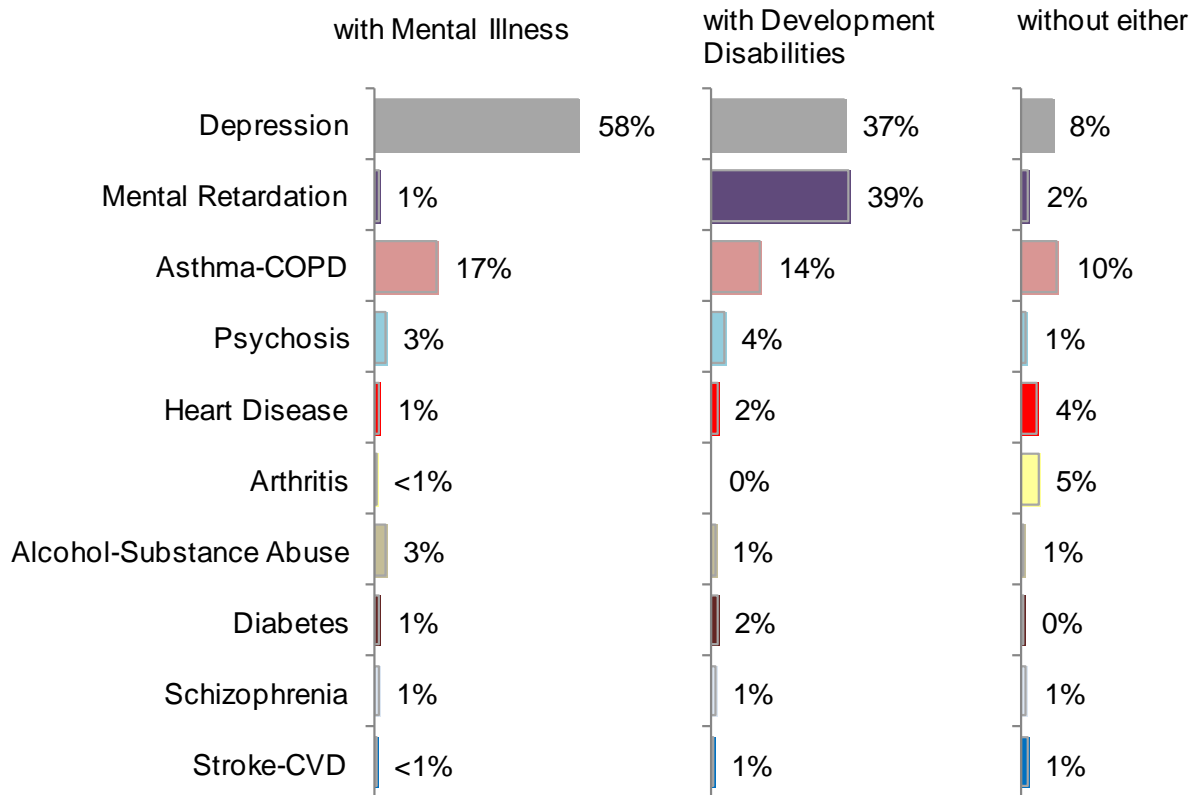
Older adults and adults with disabilities had multiple chronic conditions. Depression, diabetes, heart disease and dementia were the most common diagnoses for more than half of the dually eligible population. Other common diagnoses were asthma-COPD, arthritis and CHF.

\* While the JEN Associates definition of "mental retardation" does include ICD-9-CM diagnosis codes for mild, moderate, severe and profound mental retardation and "unspecified mental retardation" it does not include diagnosis codes for autism, "pervasive developmental disorders", or Down's syndrome. However, it also includes ICD-9-CM codes 331 to 331.99 ("other cerebral degenerations"), but does not include senile dementia, presenile dementia, vascular dementia or senile psychotic conditions, or 294.1 ("dementia in conditions classified elsewhere").

## Prevalence of Selected Chronic Diseases among MaineCare Eligible Children

**Chart 20:** Prevalence rates for MaineCare eligible children for selected chronic diseases\* based on primary or secondary diagnoses found on physician or hospital claims, SFY 2010

Prevalence rates for children:



Depression was the most common diagnosis for children with mental illness (50%) and more than a third of the children with developmental disabilities also had a diagnosis of depression. Asthma-COPD was also more common among those with mental illness and developmental disabilities than those without either condition.

\* While the JEN Associates definition of "mental retardation" does include ICD-9-CM diagnosis codes for mild, moderate, severe and profound mental retardation and "unspecified mental retardation" it does not include diagnosis codes for autism, "pervasive developmental disorders", or Down's syndrome. However, it also includes ICD-9-CM codes 331 to 331.99 ("other cerebral degenerations"), but does not include senile dementia, presenile dementia, vascular dementia or senile psychotic conditions, or 294.1 ("dementia in conditions classified elsewhere").

SPT Methods: Revised Population Group Definitions

**Appendix A**

**Adults (Age 18+)**

Adults may fall into more than one category

Age is calculated at the beginning of the year

<p>With Mental Illness</p>	<p>Members receiving mental health case management (§17) for 5 or more months over two years, or using 5 or more months of residential care facility treatment for people with mental illness (§97) over a two year period</p>	<ul style="list-style-type: none"> <li>• Mental Health Case Management – Billing Specialty 12 Community Support use of 5 or more months over two state fiscal years (7/1 – 6/30)</li> <li>• Mental Health Diagnosis 291.xx-316.xx and PNMI services Billing Specialty 39 PNMI for 20 or more months over two state fiscal years (7/1 – 6/30)</li> <li>• Age at beginning of two year period is 18 and over</li> </ul>
<p>Older Adults and Adults with Disabilities</p>	<p>Members residing in nursing homes (§67), residential care (§97) or housing with assisted living services (§2 and §6). Members receiving services under the waiver for older adults and adults with disabilities (§19) or private duty nursing (§96) or day health services (§26).</p>	<p>Nursing homes (§67) – Billing Specialty 03 and Sub Specialties 3, 372 and 373 (Use revenue code 0167 instead of sub-specialties) with LOS greater than 30 days OR                      Residential care (§97) Appendix C facilities – Billing Specialty 39 and Sub Specialties 267, 268, 269 (Use procedure codes BQ, BP, BH,BL, BQL,PL) OR                      Housing with assisted living services (§6) – Billing Specialty 169 OR                      Housing with assisted living services – Billing Specialty 479<sup>4</sup> OR                      Members receiving services under the waiver for older adults and adults with disabilities (§19) -- Billing Specialty 57 Elderly waiver or Billing Specialty 214 Adults with Disabilities OR                      private duty nursing (§96) -- Billing Specialty 58 Private Duty Nursing OR                      day health services (§26) – Billing Specialty 36 Day Health services</p>

<sup>4</sup> Housing with Assisted Living services was ultimately repealed in July 09 and the services were provided under personal care service when applicable.

SPT Methods: Revised Population Group Definitions

With Physical Disabilities who Self-Direct	Members receiving consumer directed waiver services (§22) or state plan consumer directed personal assistance services (§12).	Consumer directed waiver services (§22) – Billing Specialty 55 OR State plan consumer directed personal assistance services (§12) - -Billing Specialty 22
With Brain Injuries	Use of rehabilitative services (§102); specialized nursing facilities for persons with brain injury (§67); individuals residing in residential care with diagnoses of brain injury <sup>5</sup> ; members with inpatient hospitalization over 30 days or eight or more emergency department visits during the year with a brain injury diagnosis.	Use of rehabilitative services (§102) – Billing Specialty 61 Rehab Services OR Specialized nursing facilities for persons with brain injury (§67) Provider ID = 176870102 or 432469801 OR Individuals residing in residential care with diagnoses of brain injury <sup>6</sup> -- Billing Provider 39 and BI diagnosis (any diagnosis) (attached) Members with inpatient hospitalization over 30 days with BI diagnosis – Billing Specialty 01 and BI diagnosis (any diagnosis) and LOS greater than 30 days OR Eight or more emergency department visits during the year with a brain injury diagnosis Billing Specialty 04 and Revenue codes (450-459) with BI diagnosis (any diagnosis) (note this criteria was not met in earlier data analysis
With Developmental Disabilities	Members in ICFs-MR (§50) or accessed either waiver serving person with mental retardation or autism (§21 & §29); who have MR case management (§13) or MR residential care facilities (§97) or residing in a nursing facility (§67) with an MR diagnosis.	Members in ICFs-MR (§50) -- Billing Specialty 40 ICF-MR OR MR waiver serving person with mental retardation or autism (§21 & §29) – Billing Specialty 26 or MR Waiver OR MR case management (§13) – Billing Specialty 178 Case Management Adults with Mental Retardation OR MR residential care facilities (§97) – Billing Specialty

<sup>5</sup> Brain Injury diagnosis code set developed by Me-CDC and BIS (excludes congenital – birth related and Degenerative diagnoses.

<sup>6</sup> Brain Injury diagnosis code set developed by Me-CDC and BIS (excludes congenital – birth related and Degenerative diagnoses.

SPT Methods: Revised Population Group Definitions

		<p>39 and Sub Specialty 353 or 354 (use procedure codes RMR, MRP, MRB, MRBL MBPL )OR                  Nursing facility (§67) – Billing Specialty 03 and Sub Specialties 3, 372 and 373 (Use revenue code 0167 ) with an MR diagnosis (any diagnosis 299.xx, 317.xx-319.xx, 758.0).</p>
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**Children (Age 0-17)**

The children’s group is hierarchical. Children are identified as eligible for all groups and then assigned in the following order –1.) Developmental disabilities (DD) based on diagnosis 299, 317-319, 758.0); If not DD the 2.) Mental Disorders (MD); If not (DD or MD) then 3.) Physical Disabilities.

<p>With Developmental Disabilities</p>	<p>Children 17 years or younger receiving community rehab services (§28) formerly day habilitation services (§24) with a mental retardation diagnosis.</p>	<p>Community rehab services (§28) – Billing Specialty 600 with a mental retardation diagnosis (any diagnosis 299.xx, 317.xx-319.xx, 758.0).                  Day habilitation services (§24) – Billing Specialty 35 with a mental retardation diagnosis (any diagnosis 299.xx, 317.xx-319.xx, 758.0).                  Both specialty codes were in use over the period.</p>
<p>With Mental Disorders</p>	<p>Children 17 years or younger using specific behavioral health services including: 5 or more months over a two year period of Home &amp; Community-Based Treatment (§65), Children’s ACT (§65) or two or more inpatient psychiatric hospitalizations (§46) over a two-year period or 12 months or more (continuous or non-continuous) stay in residential treatment (§97 – including TFC).</p>	<p>Children <b>17 years or younger</b><sup>7</sup> using specific behavioral health services including: 5 or more months over a two year period of:                  Home &amp; Community-Based Treatment (§65) – Procedure Code H2021 with modifiers (HN or HO or HY or HU or HU with second modifier U1 ) OR                  Procedure Code H0023 with modifiers (HN or HO or HU or HU with second modifier U1 ) OR                  Procedure code H2033 OR                  Older Section 28 Community Support Codes (in 2007 and early 2008 data) – Billing Specialty 28 and (procedure codes Z4135 or Z4136 or Z4137 or Z4138 or Z4140 or Z4185 or Z4187), OR Billing Specialty 28 and Sub Specialty 493 and procedure code G9007 (just use age the age limit to include) OR</p>

<sup>7</sup> Age criteria 0-17 needs to be applied to these codes.

SPT Methods: Revised Population Group Definitions

		<p>OR  Children’s ACT (§65) – Procedure Code ZNC16  OR  Two or more Inpatient psychiatric hospitalizations (§46) over two years – Billing Specialty 02 IMD OR Billing Specialty 01 and MH Diagnosis (291.xx-316.xx) (this includes MH stay in general acute hospitals)  OR  12 months or more (continuous or non-continuous) stay in residential treatment (§97) -- Billing specialty 39 with Sub specialties 279 or 283 (procedure codes RTS or RTSL).</p>
With Physical Disabilities	Children receiving private duty nursing (§96).	private duty nursing (§96) – Billing Specialty 58

## **Appendix B**

### **Billing Specialty by Major Service Categories**

For the purpose of this study, the services recorded on MaineCare and Medicare claims were arranged into the following list of eleven major categories:

#### **Inpatient**

- DISTINCT PART UNIT
- GENERAL INPATIENT
- INPATIENT PSYCH

#### **Outpatient**

- GENERAL OUTPATIENT
- OUTPATIENT PSYCH

#### **Physician**

- Certified Registered Nurse Anesthetist
- Critical Care Nurse Specialist
- Federally Qualified Health Center
- INDIAN HEALTH SERVICES
- NURSE MIDWIFE
- NURSE PRACTITIONER
- PHYSICIAN
- PODIATRIST
- RURAL HEALTH CENTER

#### **Home Health**

- HOME HEALTH AGENCY

#### **Behavioral Health**

- DAY TREATMENT
- DEVELOPMENTAL & BEHAVIORAL EVALUATION CLINIC SERVI
- EARLY INTERVENTION
- FREESTANDING DAY HAB
- HOME BASED MENTAL HEALTH
- Licensed Clinical Professional Counselor
- Licensed Clinical Social Worker
- LICENSED MARRIAGE AND FAMILY THERAPIST
- MENTAL HEALTH AGENCY
- Mental Health Case Management
- Office of Child and Family Services
- PSYCH EXAMINER
- PSYCHOLOGIST
- REHABILITATION SERVICES
- Rehabilitative & Community Support Services for Children with Cognitive Impairments
- SCHOOL BASED DAY TREATMENT
- SUBSTANCE ABUSE SERVICES

#### **Nursing Facility**

- NURSING FACILITY

#### **Residential Care**



FLAT RATE BOARDING HOME  
PRIVATE NON MEDICAL INST

## Billing Specialty by Major Service Categories

### Waiver Services

ADULTS WITH DISABILITIES  
ELDERLY  
MR WAIVER  
PHYSICALLY DISABLED

### Other Long Term Care

ADULT FAMILY CARE  
ASSISTED LIVING SERVICES July1 09 PDN IX  
CONSUMER-DIRECTED PERSONAL CARE ASSISTANT  
DAY HEALTH SERVICES  
HOME BASED SERVICES FOR CHILDREN WITH MENTAL RETAR  
HOSPICE  
ICF/MR  
PERSONAL CARE SERV  
PRIVATE DUTY NURSING

### Pharmacy

PHARMACY

### Other

ADULT PDN SERVICES - AGCY  
AMBULANCE  
AMBULATORY CARE CLINIC  
AMBULATORY SURGICAL CTR  
AUDIOLOGIST  
CHILD HEALTH  
CHIROPRACTOR  
DENTAL CLINIC  
DENTAL HYGIENE SCHOOL  
DENTIST  
DENTURIST/PRIVATE  
DENTURIST/PUBLIC  
DME/SUPPLIES  
FAMILY PLANNING AGENCY  
FULL SERVICE TRANSPORT  
GENETIC SERVICES  
HEARING AID DEALER  
INDEPENDENT LABORATORY  
MEDICAL IMAGING SERVICES  
OCCUPATIONAL THERAPIST  
OPTICAL LAB(SOLE SOURCE)  
OPTICIAN  
OPTIONAL EPSDT PROVIDER  
OPTOMETRIST  
Other Case Management  
PHYSICAL THERAPIST

## Billing Specialty by Major Service Categories

### **Other (continued)**

PROSTHETICS/ORTHOTICS

PUBLIC HEALTH SUPERVISION STATUS/DENTAL HYGIENIST

SCHOOL BASED REHAB-CERT.

SOCIAL SERVICES

SPEECH & HEARING AGENCY

SPEECH LANG PATHOLOGIST

VD SCREENING

WHEELCHAIR VAN