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analysis to advance the health of vulnerable populations

An Analysis of Selected Mental Health Conditions among Maryland Full-Benefit Dual-Eligible Beneficiaries

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Overview

At the request of the Maryland Department of Health and Mental Hygiene (DHMH), The Hilltop Institute conducted a series of analyses on the health care utilization of Maryland's full-benefit dual-eligible beneficiaries. Together, these analyses provide an overview on how this population accesses health care services, the types of services being used, and where the services are provided. This information will inform the state's decision-making process in the development of a strategy to integrate care delivery for Maryland's dual-eligible beneficiaries under the Centers for Medicare and Medicaid Services (CMS) State Innovation Model (SIM) grant.

This report examines full-benefit dual-eligible beneficiaries with mental health conditions in Maryland during calendar year (CY) 2012, including number and type of mental health conditions; age, gender, race, and county of residence; emergency department use; Medicare and Medicaid expenditures; and Medicare and Medicaid service days.

Methodology

Hilltop used Medicaid Management Information System (MMIS2) data and Medicare data to examine service utilization patterns for full-benefit dual-eligible beneficiaries with a mental health diagnosis in CY 2012. The study population was defined as individuals eligible for both full Medicaid benefits and Medicare benefits, with at least one mental health diagnosis in CY 2012. Hilltop used MMIS2 eligibility files to identify individuals with at least one month of Medicaid eligibility and at least one month of Medicare eligibility, so that the study cohort includes individuals who were dually eligible for the full year as well as individuals who were dually eligible for only part of the year. Hilltop then used Medicaid coverage group designations to identify full-benefit dual-eligible beneficiaries. Dual eligibles enrolled in one of the four Medicare Savings Program—Qualified Medicare Beneficiary (QMB), Specified Low-Income Medicare Beneficiary (SLMB), Qualified Individuals (QI), and Qualified Disabled Working Individual (QDWI)—coverage group designations were excluded from the analysis, and services rendered through a Medicare Advantage plan were not included.

Hilltop used CY 2012 Medicare and Medicaid claims to identify full-benefit dual-eligible beneficiaries with claims meeting the clinical definition for depression, anxiety disorder, or bipolar disorder. Individuals who met the clinical definition for a single mental health condition and not any other mental health condition were included in the category for that single mental health condition. Individuals who met the clinical definition for more than one of the mental health conditions (depression, anxiety disorder, or bipolar disorder) were categorized as having "multiple mental health conditions."

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To determine Medicare and Medicaid service utilization and expenditures, Hilltop then combined CY 2012 Medicaid long-term care, nursing facility (NF), home and community-based services (HCBS), and hospice claims to create a Medicaid services data file. Similarly, Medicare inpatient, home health, hospice, and outpatient claims were combined to create a Medicare services data file.

Data Sources

Maryland Medicaid Management Information System (MMIS2) Eligibility and Claims Files

The MMIS2 system contains key Medicaid eligibility, enrollment, program, utilization, and expenditure data for the Maryland Medicaid and Children's Health Insurance Program (CHIP). The MMIS2 eligibility file contains dates of Medicaid eligibility, coverage group information, and basic demographic information. MMIS2 claims files contain service utilization and expenditure data for Medicaid enrollees served through a fee-for-service delivery model. All MMIS2 files can be linked using a unique Medicaid beneficiary identification number.

Medicare Beneficiary and Claims Files

In response to the Medicare Modernization Act of 2003 (MMA), CMS makes available to researchers the Chronic Conditions Data Warehouse (CCW). Available Medicare data include enrollment and eligibility files, fee-for-service institutional and non-institutional claims, and assessment data. The claims-level research identifiable files (RIF) are linked by a unique beneficiary identification number that allows analysis across multiple care settings. Hilltop has developed a Medicaid-Medicare beneficiary identification crosswalk to link MMIS2 and Medicare data for analysis.

Findings

Over one-third of Maryland's 87,728 full-benefit dual-eligible beneficiaries identified in the CY 2012 Medicare and Medicaid eligibility files had at least one Medicare claim with a mental health diagnosis. As shown in Table 1, beneficiaries under the age of 65, females, and Whites were more likely to have at least one mental health condition.

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Table 1. Maryland's Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, CY 2012

Category	Number	Percentage
Total	**33,289**	**38%**
Under 65	18,493	56%
Age 65 and Older	14,796	44%
Female	21,731	65%
Male	11,557	35%
Asian	1,062	3%
Black	11,416	34%
White	17,243	52%
Hispanic	645	2%
Native American/Pacific Islands/Alaskan	89	<1%
Unknown	2,833	9%

As Table 2 shows, individuals in the study population were more likely to have multiple mental health conditions than to have a single condition. The prevalence of anxiety disorders and bipolar disorder were relatively similar across age groups. However, over half of the beneficiaries under the age of 65 had more than one mental health condition, while less than one-third of their older counterparts had more than one condition. Depression was the most prevalent mental health condition among beneficiaries aged 65 and older.

Table 2. Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Condition Type and Age Group, CY 2012

Condition	All Ages		Under 65		65 and Older	
	N	%	N	%	N	%
Anxiety Disorders	3,206	10%	1,624	9%	1,582	11%
Bipolar Disorder	4,147	12%	1,794	10%	2,353	16%
Depression	11,573	35%	5,386	29%	6,187	42%
Multiple Conditions	14,363	43%	9,689	52%	4,674	31%
Total	**33,289**	**100%**	**18,493**	**100%**	**14,796**	**100%**

Tables 3 and 4 provide information on the distribution of mental health conditions among the study population by selected demographics, age, and type of condition. Table 3 shows that White females aged 65 and older were far more likely to have an anxiety disorder, bipolar disorder, depression, or multiple mental health conditions than younger females. The opposite was true for males; those under the age of 65 were more likely than males aged 65 and older to have these conditions. Whites of both age groups were more likely than those of other races to have an anxiety disorder, bipolar disorder, or multiple mental health conditions. Blacks under the age of

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65 were more likely than other racial groups in this age group to have depression. The percentage of Whites with bipolar disorder and with multiple conditions was equally distributed across the two age groups.

Table 4 shows the geographic distribution of full-benefit dual-eligible beneficiaries with mental health conditions. Most of the individuals with at least one mental health condition were in Baltimore City, Baltimore County, and Montgomery County—the most populous areas. With a few exceptions, the percentage of individuals with a mental health condition within a county was similar across both age groups. Baltimore City beneficiaries under the age of 65 were more likely to have anxiety disorder, bipolar disorder, depression, or multiple mental health conditions than similarly-aged individuals in each of the other counties. Their older counterparts were also likely to have multiple mental health conditions and—along with individuals in Montgomery County—depression.

Table 3. Demographic Distribution of Maryland Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Type of Mental Health Condition, CY 2012

Category	Anxiety Disorder				Bipolar Disorder				Depression				Multiple Conditions			
	Under 65		65 and Older		Under 65		65 and Older		Under 65		65 and Older		Under 65		65 and Older	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Female	895	55%	1,267	80%	792	44%	1,523	65%	3,179	59%	4,529	73%	6,014	62%	3,532	76%
Male	729	45%	315	20%	1,002	56%	830	35%	2,206	41%	1,658	27%	3,675	38%	1,142	24%
Asian	17	1%	121	8%	27	2%	47	2%	52	1%	478	8%	67	1%	253	5%
Black	557	34%	457	29%	740	41%	663	28%	2,533	47%	1,768	29%	3,561	37%	1,137	24%
White	936	58%	784	50%	923	51%	1,201	51%	2,395	44%	2,992	48%	5,387	56%	2,625	56%
Hispanic	25	2%	70	4%	24	1%	27	1%	88	2%	199	3%	122	1%	90	2%
Other*	**	**	**	**	**	**	**	**	14	<1%	11	<1%	46	<1%	**	**
Unknown	86	5%	145	9%	74	4%	415	18%	303	6%	740	12%	506	5%	565	12%
Total	1,624		1,582		1,794		2,353		5,385		6,187		9,689		4,674	

* Native America, Pacific Islands/Alaskan are combined due to small cell sizes.

** Not reported due to small cell sizes.

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Table 4. Number of Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Condition, Age Group, and County of Residence, CY 2012

County	Anxiety Disorder				Bipolar Disorder				Depression				Multiple Conditions			
	Under 65		65 and Older		Under 65		65 and Older		Under 65		65 and Older		Under 65		65 and Older	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Allegany	58	4%	47	3%	33	2%	15	1%	149	3%	229	4%	267	3%	97	2%
Anne Arundel	127	8%	86	5%	134	7%	87	4%	335	6%	314	5%	655	7%	227	5%
Baltimore City	319	20%	299	19%	379	21%	377	16%	1,503	28%	1,249	20%	2,484	26%	901	19%
Baltimore County	242	15%	184	12%	355	20%	420	18%	795	15%	932	15%	1,503	16%	776	17%
Calvert	18	1%	*	*	18	1%	88	4%	63	1%	36	1%	94	1%	38	1%
Caroline	14	1%	18	1%	21	1%	55	2%	59	1%	69	1%	99	1%	51	1%
Carroll	44	3%	48	3%	33	2%	86	4%	127	2%	142	2%	288	3%	200	4%
Cecil	42	3%	20	1%	26	1%	31	1%	131	2%	96	2%	285	3%	98	2%
Charles	40	2%	36	2%	12	1%	122	5%	105	2%	99	2%	144	1%	100	2%
Dorchester	12	1%	20	1%	33	2%	46	2%	79	1%	60	1%	139	1%	80	2%
Frederick	53	3%	41	3%	47	3%	84	4%	150	3%	195	3%	329	3%	123	3%
Garrett	21	1%	23	1%	13	1%	*	*	65	1%	76	1%	62	1%	24	1%
Harford	57	4%	34	2%	68	4%	122	5%	171	3%	161	3%	414	4%	180	4%
Howard	42	3%	63	4%	78	4%	89	4%	135	3%	230	4%	271	3%	203	4%
Kent	17	1%	11	1%	*	*	17	1%	17	<1%	26	<1%	36	<1%	23	<1%
Montgomery	135	8%	336	21%	174	10%	238	10%	428	8%	1,209	20%	808	8%	787	17%
Prince George's	132	8%	121	8%	130	7%	112	5%	483	9%	501	8%	589	6%	241	5%
Queen Anne's	18	1%	12	1%	14	1%	16	1%	36	1%	32	1%	50	1%	15	<1%
St. Mary's	31	2%	29	2%	21	1%	72	3%	102	2%	71	1%	126	1%	62	1%
Somerset	*	*	12	1%	22	1%	11	<1%	34	1%	48	1%	72	1%	25	1%
Talbot	14	1%	*	*	18	1%	20	1%	43	1%	49	1%	67	1%	26	1%
Washington	106	7%	72	5%	55	3%	79	3%	200	4%	218	4%	493	5%	201	4%
Wicomico	50	3%	33	2%	69	4%	106	5%	109	2%	76	1%	250	3%	123	3%
Worcester	16	1%	11	1%	24	1%	47	2%	37	1%	48	1%	100	1%	55	1%
Out of State	*	*	12	1%	*	*	*	*	30	1%	21	<1%	64	1%	18	<1%
Totals	1,624	100%	1,582	100%	1,794	100%	2,353	100%	5,386	100%	6,187	100%	9,689	100%	4,674	100%

* Not reported due to small cell sizes.

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Medicare Emergency Department Visits

Table 5 shows the distribution of Medicare-paid fee-for-service emergency department (ED) visits by full-benefit dual-eligible beneficiaries with the targeted mental health conditions. Over half of the study population had at least one ED visit in CY 2012. Individuals with multiple mental health conditions were more likely to have two or more ED visits than those with a single mental health condition.

Table 5. Emergency Department Visits by Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Condition, CY 2012

ED visits	Anxiety Disorders		Bipolar Disorder		Depression		Multiple Conditions		Total	
	N	%	N	%	N	%	N	%	N	%
None	1,627	51%	2,141	52%	6,110	53%	5,970	42%	15,848	48%
1	653	20%	860	21%	2,355	20%	2,808	20%	6,676	20%
2-3	507	16%	725	17%	1,917	17%	2,862	20%	6,011	18%
4-5	205	6%	264	6%	653	6%	1,216	8%	2,338	7%
6+	214	7%	157	4%	538	5%	1,507	10%	2,416	7%
Total	3,206	100%	4,147	100%	11,573	100%	14,363	100%	33,289	100%

As Table 6 shows, for those full-benefit dual-eligible beneficiaries with a single mental health condition, there was little or no difference in the percentage of individuals with an ED visit when compared by age group, regardless of the mental health condition. However, beneficiaries under the age of 65 with multiple mental health conditions were twice as likely to have six or more ED visits as their older counterparts.

Table 6. Emergency Department Visits by Full-Benefit Dual-Eligible Beneficiaries with a Mental Health Condition, by Condition and Age Group, CY 2012

ED Visits	Anxiety Disorders				Bipolar Disorder				Depression				Multiple Conditions			
	Under 65		65 and Older		Under 65		65 and Older		Under 65		65 and Older		Under 65		65 and Older	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
None	817	50%	810	51%	964	54%	1,177	50%	2,675	50%	3,435	56%	3,772	39%	2,198	47%
1	329	20%	324	20%	361	20%	499	21%	1,112	21%	1,243	20%	1,855	19%	953	20%
2-3	242	15%	265	17%	281	16%	444	19%	923	17%	994	16%	1,926	20%	936	20%
4-5	106	7%	99	6%	111	6%	153	7%	357	7%	296	5%	907	9%	309	7%
6+	130	8%	84	5%	77	4%	80	3%	319	6%	219	4%	1,229	13%	278	6%
Total	1,624	100%	1,582	100%	1,794	100%	2,353	100%	5,386	100%	6,187	100%	9,689	100%	4,674	100%

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Medicare and Medicaid Expenditures

Medicare and Medicaid expenditures for full-benefit dual eligibles with one or more mental health conditions totaled $1.6 billion in CY 2012 (Table 7). Individuals with a single diagnosis of bipolar disorder were—on average—far more costly per person than those with other conditions or multiple conditions. Additionally, individuals aged 65 and older incurred significantly higher costs, with the average annual per person cost for individuals aged 65 and older being 54 percent higher than for individuals under age 65 ($61,320 compared to $39,780). For bipolar disorder, the per-person cost was 51.3 percent higher for those aged 65 and older; for multiple conditions, the per-person cost was 76.1 percent higher.

Table 7. Total Medicare and Medicaid Expenditures for Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Age Group and Condition, CY 2012

Condition	All Ages	Average Annual Cost Per Person	Under 65	Average Annual Cost Per Person	65 and Older	Average Annual Cost Per Person
Anxiety Disorder	$124,532,102	$38,843	$58,751,599	$36,177	$65,744,326	$41,558
Bipolar Disorder	$258,815,559	$62,410	$86,697,842	$48,327	$172,069,391	$73,128
Depression	$564,358,463	$48,765	$214,314,855	$39,791	$350,003,817	$56,571
Multiple Conditions	$695,397,149	$48,416	$375,881,430	$38,795	$319,476,924	$68,352
Total	$1,642,979,963	$49,355	$735,645,726	$39,780	$907,294,457	$61,320

Table 8 displays the study population's CY 2012 total (mental health and other medical) Medicare fee-for-service and Medicaid expenditures. Medicaid expenditures include expenditures (i.e., MCO capitation payments, dental) incurred by Medicaid enrollees prior to gaining Medicare eligibility. Medicare "carrier" services (known as "physician" services under Medicaid) are defined under Medicare Part B as services from primary professional providers (e.g., physicians and other medical professionals). Nursing facility services for individuals aged 65 and older with depression accounted for the largest proportion of Medicaid spending. The largest proportion of Medicare spending was for inpatient services for individuals under the age of 65 who had multiple mental health conditions.

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Table 8. Expenditures for Medicare and Medicaid Services for Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Mental Health Condition and Age Group, CY 2012

Service Type	Anxiety Disorders		Bipolar Disorder		Depression		Multiple Conditions	
	Under 65	65 and Older	Under 65	65 and Older	Under 65	65 and Older	Under 65	65 and Older
Medicaid Expenditures								
Physician	$2,510,758	$1,062,886	$7,065,714	$1,428,339	$10,880,021	$4,127,919	$32,336,815	$5,434,544
Dental	$10,374	$0	$14,956	$132	$18,570	$8	$71,202	$81
Durable medical equipment	$11,248	$26,400	$9,361	$4,932	$97,616	$60,322	$99,935	$41,650
Home health services	$26,120,707	$9,372,433	$36,198,200	$7,884,858	$55,272,726	$40,792,450	$75,233,098	$24,088,421
Hospice	$25,074	$928,508	$322,928	$2,700,112	$468,268	$3,830,191	$1,313,276	$3,808,202
Inpatient	$1,740,884	$1,277,949	$1,067,770	$1,359,591	$9,027,274	$5,760,607	$19,378,977	$7,511,429
ICF -ID*	$201,205	$196,807	$2,190,950	$382,197	$0	$201,841	$1,227,912	$0
Outpatient	$1,157,886	$872,649	$792,268	$509,255	$4,832,365	$2,678,083	$10,527,410	$2,537,682
Nursing facility	$3,068,920	$21,986,243	$13,043,923	$92,887,555	$25,845,034	$155,879,130	$38,369,348	$147,577,105
MCO Capitation**	$1,913,786	$586,354	$1,312,885	$241,090	$6,779,669	$1,835,282	$15,037,497	$1,710,123
Pharmacy***	$303,107	$378,363	$489,685	$406,363	$2,009,635	$1,337,688	$4,783,094	$1,162,807
Special services	$540,188	$774,954	$536,195	$788,241	$1,747,870	$4,264,046	$2,627,791	$2,876,730
Total Medicaid	**$37,604,136**	**$37,463,545**	**$63,044,835**	**$108,592,664**	**$116,979,048**	**$220,767,566**	**$201,006,354**	**$196,748,775**
Medicare Expenditures								
Carrier	$4,515,918	$5,527,194	$4,874,795	$9,522,191	$17,959,129	$23,752,057	$38,172,697	$21,525,662
Durable medical equipment	$785,929	$527,976	$606,587	$799,009	$3,333,144	$2,367,400	$3,877,431	$1,737,691
Home health aide	$311,177	$687,854	$319,160	$1,078,490	$1,737,561	$3,452,738	$2,464,607	$2,580,136
Hospice	$269,214	$1,214,983	$388,720	$2,966,166	$690,079	$4,959,979	$1,228,453	$4,825,676
Inpatient	$9,046,798	$12,219,778	$10,545,746	$26,979,903	$44,611,483	$56,289,811	$77,395,169	$52,146,496
Outpatient	$5,226,309	$4,276,991	$4,337,911	$7,511,676	$22,094,676	$17,693,064	$39,740,208	$18,195,272
Nursing facility	$992,118	$3,826,005	$2,580,088	$14,619,292	$6,909,734	$20,721,201	$11,996,511	$21,717,217
Total Medicare	**$21,147,463**	**$28,280,781**	**$23,653,007**	**$63,476,727**	**$97,335,807**	**$129,236,250**	**$174,875,077**	**$122,728,149**
Total Medicaid and Medicare	**$58,751,599**	**$65,744,326**	**$86,697,842**	**$172,069,391**	**$214,314,855**	**$350,003,817**	**$375,881,430**	**$319,476,924**

* Intermediate Care Facilities for Individuals with Intellectual Disability.
** MCO Capitation payments are present for Medicaid recipients who participated in HealthChoice before gaining Medicare eligibility during the reporting year.
***Medicaid prescription medications and certain "over the counter" drugs.

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Medicare and Medicaid Service Days

Tables 9 and 10 show the number of Medicare and Medicaid service days used for all services by the study population in CY 2012. As shown in Table 9, full-benefit dual-eligible beneficiaries with at least one mental health condition used 13.7 million combined Medicare and Medicaid service days. Medicare and Medicaid service days occurring on the same day for the same person are both included in the service days. Individuals with multiple conditions used more service days than those with a single condition. The study population used 86 percent more Medicaid service days (8.91 million) than Medicare service days (4.80 million).

Total service days were fairly evenly divided between those under age 65 and those aged 65 and older (6.63 million and 7.08 million, respectively) (Table 10). Service days for individuals under age 65 with multiple mental health conditions accounted for more than half of the service days used by this age group. Among individuals aged 65 and older, individuals with depression had the greatest number of service days (41 percent of the total).

Table 9. Medicare and Medicaid Service Days for Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Payer and Condition, CY 2012

Condition	Total		Medicare		Medicaid	
	N	%	N	%	N	%
Anxiety Disorder	1,150,240	8%	375,021	8%	775,219	9%
Bipolar Disorder	1,795,170	13%	590,811	12%	1,204,359	14%
Depression	4,869,626	36%	1,672,185	35%	3,197,441	36%
Multiple Conditions	5,895,567	43%	2,161,742	45%	3,733,825	42%
Total	**13,710,603**	**100%**	**4,799,759**	**100%**	**8,910,844**	**100%**

Note: Medicare and Medicaid service days occurring on the same day for the same person are both included in the service day count.

Table 10. Medicare and Medicaid Service Days for Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Age Group and Condition, CY 2012

Condition	All Ages		Under 65		65 and Older	
	N	%	N	%	N	%
Anxiety Disorder	1,150,240	8%	559,774	8%	590,466	8%
Bipolar Disorder	1,795,170	13%	696,039	10%	1,099,131	16%
Depression	4,869,626	36%	1,934,129	29%	2,935,497	41%
Multiple Conditions	5,895,567	43%	3,443,020	52%	2,452,547	35%
Total	**13,710,603**	**100%**	**6,632,962**	**100%**	**7,077,641**	**100%**

Note: Medicare and Medicaid service days occurring on the same day for the same person are both included in the service day count.

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Table 11 shows Medicare and Medicaid service days by condition, age, and type of service. Medicaid service days for individuals under the age of 65 with multiple conditions outnumbered Medicaid service days for each of the single conditions, regardless of age. When compared by service type, Medicaid nursing facility service days for individuals aged 65 and older with depression and those aged 65 and older with multiple conditions used the largest share of Medicaid days. Individuals aged 65 and under with depression used the largest number of Medicare service days, of which the greatest portion was for carrier-provided services.

Table 11. Medicare and Medicaid Service Days for Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Condition, Age Group, Payer, and Service Category, CY 2012

Service Type	Anxiety		Bipolar		Depression		Multiple Conditions	
	Under 65	65 and Older	Under 65	65 and Older	Under 65	65 and Older	Under 65	65 and Older
Medicaid Expenditures								
Physician	46,588	30,015	57,173	39,156	176,423	129,885	419,498	132,342
Durable medical equipment	69	60	44	51	374	334	341	206
Home health services	208,798	117,317	243,217	74,359	473,113	568,980	569,135	312,807
Hospice	145	4,819	1,517	13,597	1,747	19,845	4,615	19,771
Inpatient	3,284	3,597	4,160	4,667	14,758	14,366	40,967	17,731
Outpatient	11,751	8,695	14,226	3,605	54,622	23,514	137,998	25,729
Nursing facility	11,393	114,917	64,268	490,089	120,926	811,483	186,714	770,405
Dental	147	+	180	+	187	+	841	+
ICF-ID*	366	366	4,067	727	+	366	2,284	+
MCO Capitation**	58,822	13,569	44,833	4,308	194,339	40,189	411,824	33,459
Pharmacy***	9,402	12,460	9,168	14,191	30,397	40,353	78,487	40,906
Special services	45,933	72,705	55,418	61,332	182,965	298,274	300,982	226,781
Total Medicaid	**396,698**	**378,521**	**498,271**	**706,088**	**1,249,851**	**1,947,590**	**2,153,686**	**1,580,139**
Medicare Expenditures								
Carrier	69,097	75,030	83,383	152,189	264,608	373,717	590,264	348,999
Durable medical equipment	51,458	69,315	57,108	51,960	205,745	257,621	327,272	175,401
Home health aide	5,271	9,246	4,633	14,930	27,477	47,892	37,669	38,020

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Hospice	1,463	7,116	2,372	18,406	3,555	29,445	6,769	29,333
Inpatient	4,558	6,501	6,489	14,732	21,253	30,650	48,421	31,240
Outpatient	28,655	33,549	36,040	98,700	142,749	187,894	244,276	184,789
Nursing facility	2,574	11,188	7,743	42,126	18,891	60,688	34,663	64,626
Total Medicare	**163,076**	**211,945**	**197,768**	**393,043**	**684,278**	**987,907**	**1,289,334**	**872,408**
Total Medicaid and Medicare	**559,774**	**590,466**	**696,039**	**1,099,131**	**1,934,129**	**2,935,497**	**3,443,020**	**2,452,547**

* Intermediate Care Facilities for Individuals with Intellectual Disability.

** MCO Capitation payments are present for Medicaid recipients who participated in HealthChoice before gaining Medicare eligibility during the reporting year.

***Medicaid prescription medications and certain "over the counter" drugs.

+ Not shown due to small cell size.

In addition to their mental health diagnosis, full-benefit dual-eligible beneficiaries are often diagnosed with a myriad of other medical and/or mental health conditions. As the list of other diagnosed conditions for the study population is exhaustive, Table 12 provides only the top ten conditions, as defined by the total number of individuals assigned a given diagnosis. As shown, hypertension, anemia, and diabetes were the most prevalent diagnoses.

Table 12. Full-Benefit Dual-Eligible Beneficiaries with Mental Health Conditions, by Comorbidities, CY 2012

Co-Morbid Conditions	Number of Individuals				
	Total	Depression	Bipolar Disorder	Anxiety Disorder	Multiple Conditions
Hypertension	19,989	7,457	2,521	1,926	8,085
Anemia	12,985	4,611	1,880	1,116	5,378
Diabetes	11,459	4,317	1,484	974	4,684
Hyperlipidemia	11,129	4,096	1,119	1,204	4,710
Rheumatoid Arthritis/Osteoarthritis	10,987	3,882	901	1,127	5,077
Ischemic Heart Disease	10,137	3,719	1,193	1,012	4,213
Alzheimer's Disease and Related Disorders or Senile Dementia	9,554	3,515	1,878	596	3,565
Schizophrenia and Other Psychotic Disorders	7,421	1,696	1,128	385	4,212
Heart Failure	7,322	2,681	1,043	679	2,919
Chronic Kidney Disease	7,296	2,725	1,019	602	2,950

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Summary

Full-benefit dual-eligible beneficiaries with a mental health condition often require specialized assistance to navigate complex behavioral health and medical systems. This need can be compounded for those individuals with multiple mental health conditions. In CY 2012, over one-third of Maryland's full-benefit dual-eligible beneficiaries had one or more claims with a mental health diagnosis. Individuals under the age of 65 were more likely to have a mental health condition than those aged 65 and older. The younger cohort was more likely to have multiple mental health conditions, while those aged 65 and older were far more likely to have depression. Females and Whites were also more likely to have at least one mental health condition.

Geographically, Baltimore City, Baltimore County, and Montgomery County had the greatest number of individuals with at least one mental health condition. Baltimore City beneficiaries under the age of 65 were more likely to have anxiety disorder, bipolar disorder, depression, or multiple mental health conditions than similarly-aged individuals in each of the other counties.

CY 2012 Medicare and Medicaid expenditures (mental health and non-mental health services) for full-benefit dual eligibles with at least one mental health condition totaled $1.6 billion. On average, individuals with bipolar disorder were far more costly per person than those with other mental health conditions, while those with an anxiety disorder were, on average, the least costly.

Half the study population had at least one ED visit in CY 2012. Individuals with multiple mental health conditions were more likely to have one or more ED visits, and younger beneficiaries with multiple mental health conditions were twice as likely to have six or more ED visits as their older counterparts.

Full-benefit dual-eligible beneficiaries often have multiple medical and/or mental health conditions. In CY 2012, hypertension, anemia, and diabetes were the most prevalent comorbid conditions identified for this study population.

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