A Framework for State-Level Analysis of Duals: Interleaving Medicare & Medicaid Data

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Context

With growing interest among state and federal policy makers in the better coordination of Medicare (primary and acute care) and Medicaid (long-term care) services for those who are dually eligible (duals), important questions remain about how those services and costs are related. For example, to what extent and how do added costs for community supports under Medicaid help offset other resource use under both programs? Can those added costs be justified through the redistribution of existing resources? What are the implications of coordinated/integrated care programs for rate-setting – and for the quality of care?

This research is intended to establish an initial context, or framework, within which to examine these issues. It is the first stage of a two-year effort to look at how analysis of Medicare and Medicaid services – together – can help state Medicaid administrators, in particular, assess the implications for service use, costs, and quality as new programs designed to integrate care for duals are put in place.

The Hilltop Crossover Framework

The term "crossover" refers to Medicaid claims for the portion of Medicare payments that state Medicaid programs cover on behalf of duals. Crossover payments reflect Medicare deductibles and co-payments.

The Hilltop framework is based on a two-by-two format to array summary data from claims by category of service to highlight the relationships between government programs and service use. As illustrated here, Medicare and Medicaid service use and costs are summarized to the left and right, respectively.

A MEDICARE claims linked to crossover claims	**B** MEDICAID claims crossover
C MEDICARE claims NOT linked to crossover claims	**D** MEDICAID claims NOT crossover

- Section A reflects Medicare activity that can be directly linked to Medicaid crossover claims.
- Section B reflects Medicaid crossover claims and costs that cover Medicare deductibles and co-payments. Crossover claims for which no specific Medicare claim can be found are also shown here.
- Section C shows Medicare activity that is not reflected in Medicaid claims.
- Section D shows services and costs that are covered as a Medicaid benefit (such as long-term custodial care) as well as hospital costs incurred once the Medicare benefit is exhausted.

Medicare claims were linked to Medicaid crossover claims and eligibility files for all duals in Maryland for CY 2002-2006. All program claims were organized into stay- and claim-level analytical files that include reference to associations across programs and allow ready aggregation across service type and time for any defined sub-group (coverage status, demographic, diagnosis, etc.).

Population & Results

Duals in MD: Selected Grouping Criteria (2006)

	Full Medicaid		Partial Medicaid		All 2006	
	Persons	% of col	Persons	% of col	Persons	% of col
Total	59,761	100%	22,343	100%	82,104	100%
Medicaid Coverage Categories						
1: Family & Children, Foster, Pregnant	135	0.2%	0	0.0%	135	0.2%
2: Aged, Blind, Disabled	39,467	66.0%	0	0.0%	39,467	48.1%
3: Long Term Care	16,416	27.5%	0	0.0%	16,416	20.0%
4: Home & Community Based Services	3,479	5.8%	0	0.0%	3,479	4.2%
5: QMB	0	0.0%	14,402	64.5%	14,402	17.5%
6: SLMB/QI	0	0.0%	7,941	35.5%	7,941	9.7%
7: Spenddown	264	0.4%	0	0.0%	264	0.3%
Medicare Identity Categories						
A: Primary Claimant	33,757	56.5%	17,910	80.2%	51,667	62.9%
B: Spouse	1,507	2.5%	481	2.2%	1,988	2.4%
C: Child	7,887	13.2%	385	1.7%	8,272	10.1%
D: Widow(er) / Divorced	5,811	9.7%	3,429	15.3%	9,240	11.3%
M: No Deemed HIB	9,710	16.2%	20	0.1%	9,730	11.9%
O: Other	1,089	1.8%	118	0.5%	1,207	1.5%
Dual Status Code						
01: QMB only	88	0.1%	14,389	64.4%	14,477	17.6%
02: QMB & Full Medicaid	51,187	85.7%	11	0.0%	51,198	62.4%
03: SLMB only	40	0.1%	5,632	25.2%	5,672	6.9%
06: QI	18	0.0%	2,309	10.3%	2,327	2.8%
08: Other Full Dual	8,428	14.1%	2	0.0%	8,430	10.3%
Age Categories						
Less than 21	162	0.3%	2	0.0%	164	0.2%
21 to 34	4,293	7.2%	567	2.5%	4,860	5.9%
35 to 49	9,440	15.8%	3,383	15.1%	12,823	15.6%
50 to 64	8,606	14.4%	4,896	21.9%	13,502	16.4%
65 to 74	13,118	22.0%	7,095	31.8%	20,213	24.6%
75 to 84	14,526	24.3%	4,892	21.9%	19,418	23.7%
84 & over	9,616	16.1%	1,508	6.7%	11,124	13.5%
Sex						
Female	38,869	65.0%	14,966	67.0%	53,835	65.6%
Male	20,892	35.0%	7,377	33.0%	28,269	34.4%
Race						
Asian	4,300	7.2%	540	2.4%	4,840	5.9%
Black	22,561	37.8%	9,297	41.6%	31,858	38.8%
Caucasian	28,033	46.9%	11,543	51.7%	39,576	48.2%
Hispanic	1,581	2.6%	389	1.7%	1,970	2.4%
Other/Undetermined	3,286	5.5%	574	2.6%	3,860	4.7%
Ever Disabled						
Yes	26,886	45.0%	11,276	50.5%	38,162	46.5%
No	32,875	55.0%	11,067	49.5%	43,942	53.5%
Deceased During CY						
Yes	5,933	9.9%	971	4.3%	6,904	8.4%
No	53,828	90.1%	21,372	95.7%	75,200	91.6%
Medicare Group Health Plan Coverage						
Yes	5,852	9.8%	2,285	10.2%	8,137	9.9%
No	53,909	90.2%	20,058	89.8%	73,967	90.1%

Note: Continuously-enrolled Duals during calendar year 2006

Total Medicare & Medicaid Payments, Duals w/Full Medicaid (2006)

	Medicare		Medicaid		Total				
	Users	Payments (000s)	Users	Payments (000s)	Users	Users as % of Total (53,909)	Payments (000s)	$s as % of Total	$s Per User	$s PMPM Per Dual
Total	51,021	$740,219	50,844	$1,185,252	51,601	95.7%	$1,925,470	100%	$37,315	$3,113
Hospital Inpatient	16,214	$375,394	13,822	$56,588	16,399	30.4%	$431,982	22.4%	$26,342	$698
NF & ICF/MR	5,763	$65,513	12,930	$580,854	14,238	26.4%	$646,368	33.6%	$45,397	$1,045
HH & Oth Community	3,526	$12,431	13,004	$416,080	14,943	27.7%	$428,511	22.3%	$28,676	$693
Hospice	1,540	$13,789	763	$9,764	1,554	2.9%	$23,553	1.2%	$15,156	$38
Phys., Outpat., & DME	50,962	$273,091	49,314	$121,966	51,176	94.9%	$395,057	20.5%	$7,720	$639

Note: Includes duals who were continuously-enrolled under both Medicare and Medicaid during the calendar year (from January 1 until death or year end) and had full Medicaid benefits. Excludes QMBs/SLMBs/QIs with only partial Medicaid benefits and duals with group health plan coverage.

Crossover Framework: Selected Measures of Medicare & Medicaid Payments, Duals w/Full Medicaid (2006)

	Medicare							Medicaid							
	Users	Users as % of Total (53,909)	Payments (000s)	$s as % Mcare	$s Per User	$s PMPM Per Dual	$s as % Mcare + MCaid	Users	Users as % of Total (53,909)	Payments (000s)	$s as % MCaid	$s Per User	$s PMPM Per Dual	$s as % MCare + MCaid	Recipient Payments (000s) for Institutional LTC
Total	***51,021***	***94.6%***	***$740,219***	***100%***	***$14,508***	***$1,197***	***38.4%***	***50,844***	***94.3%***	***$1,185,252***	***100%***	***$23,312***	***$1,917***	***61.6%***	***$106,845***
Hospital Inpatient	***16,214***	***30.1%***	***$375,394***	***50.7%***	***$23,152***	***$607***	***19.5%***	***13,822***	***25.6%***	***$56,588***	***4.8%***	***$4,094***	***$92***	***2.9%***	***$2,428***
NF & ICF/MR	***5,763***	***10.7%***	***$65,513***	***8.9%***	***$11,368***	***$106***	***3.4%***	***12,930***	***24.0%***	***$580,854***	***49.0%***	***$44,923***	***$939***	***30.2%***	***$104,417***
HH & Oth Community	***3,526***	***6.5%***	***$12,431***	***1.7%***	***$3,526***	***$20***	***0.6%***	***13,004***	***24.1%***	***$416,080***	***35.1%***	***$31,996***	***$673***	***21.6%***	-
Hospice	***1,540***	***2.9%***	***$13,789***	***1.9%***	***$8,954***	***$22***	***0.7%***	***763***	***1.4%***	***$9,764***	***0.8%***	***$12,796***	***$16***	***0.5%***	-
Phys., Outpat., & DME	***50,962***	***94.5%***	***$273,091***	***36.9%***	***$5,359***	***$442***	***14.2%***	***49,314***	***91.5%***	***$121,966***	***10.3%***	***$2,473***	***$197***	***6.3%***	-
Linked to crossover claims	**48,824**	**90.6%**	**$464,312**	**62.7%**	**$9,510**	**$751**	**24.1%**	**49,072**	**91.0%**	**$87,866**	**7.4%**	**$1,791**	**$142**	**4.6%**	**$2,428**
Hospital Inpatient	13,613	25.3%	$214,919	29.0%	$15,788	$348	11.2%	13,698	25.4%	$20,699	1.7%	$1,511	$33	1.1%	$51
Medicare claim found	13,613	25.3%	$214,919	29.0%	$15,788	$348	11.2%	13,593	25.2%	$20,460	1.7%	$1,505	$33	1.1%	$50
No Medicare claim found	-	-	-	-	-	-	-	221	0.4%	$239	0.0%	$1,082	$0	0.0%	$1
NF & ICF/MR	2,599	4.8%	$33,775	4.6%	$12,995	$55	1.8%	2,621	4.9%	$1,283	0.1%	$489	$2	0.1%	$2,377
Medicare claim found	2,599	4.8%	$33,775	4.6%	$12,995	$55	1.8%	2,573	4.8%	$1,175	0.1%	$457	$2	0.1%	$2,247
No Medicare claim found	-	-	-	-	-	-	-	274	0.5%	$108	0.0%	$395	$0	0.0%	$130
HH & Oth Community	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hospice	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phys., Outpat., & DME	48,760	90.4%	$215,618	29.1%	$4,422	$349	11.2%	49,013	90.9%	$65,885	5.6%	$1,344	$107	3.4%	-
Medicare claim found	48,760	90.4%	$215,618	29.1%	$4,422	$349	11.2%	48,758	90.4%	$61,086	5.2%	$1,253	$99	3.2%	-
No Medicare claim found	-	-	-	-	-	-	-	19,192	35.6%	$4,799	0.4%	$250	$8	0.2%	-
NO crossover claims	**46,809**	**86.8%**	**$275,907**	**37.3%**	**$5,894**	**$446**	**14.3%**	**30,731**	**57.0%**	**$1,097,385**	**92.6%**	**$35,709**	**$1,774**	**57.0%**	**$104,417**
Hospital Inpatient	7,367	13.7%	$160,475	21.7%	$21,783	$259	8.3%	240	0.4%	$35,889	3.0%	$149,537	$58	1.9%	$884
Medicare claim found	7,367	13.7%	$160,475	21.7%	$21,783	$259	8.3%	-	-	-	-	-	-	-	-
No Medicare claim found	-	-	-	-	-	-	-	240	0.4%	$35,889	3.0%	$149,537	$58	1.9%	$884
NF & ICF/MR	4,231	7.8%	$31,738	4.3%	$7,501	$51	1.6%	12,345	22.9%	$579,572	48.9%	$46,948	$937	30.1%	$103,533
Medicare claim found	4,231	7.8%	$31,738	4.3%	$7,501	$51	1.6%	-	-	-	-	-	-	-	-
No Medicare claim found	-	-	-	-	-	-	-	12,345	22.9%	$579,572	48.9%	$46,948	$937	30.1%	$103,533
Nursing Facility[a]	-	-	-	-	-	-	-	*12,098*	*22.4%*	*$534,837*	*45.1%*	*$44,209*	*$865*	*27.8%*	*$101,642*
ICF/MR[a]	-	-	-	-	-	-	-	*247*	*0.5%*	*$44,735*	*3.8%*	*$181,113*	*$72*	*2.3%*	*$1,891*
HH & Oth Community	3,526	6.5%	$12,431	1.7%	$3,526	$20	0.6%	13,004	24.1%	$416,080	35.1%	$31,996	$673	21.6%	-
Medicare claim found	3,526	6.5%	$12,431	1.7%	$3,526	$20	0.6%	-	-	-	-	-	-	-	-
No Medicare claim found	-	-	-	-	-	-	-	13,004	24.1%	$416,080	35.1%	$31,996	$673	21.6%	-
DD Waivers[a]	-	-	-	-	-	-	-	*5,605*	*10.4%*	*$276,477*	*23.3%*	*$49,327*	*$447*	*14.4%*	-
Older Adult Waiver[a]	-	-	-	-	-	-	-	*2,690*	*5.0%*	*$59,193*	*5.0%*	*$22,005*	*$96*	*3.1%*	-
Med Day Care (no waiver)[a]	-	-	-	-	-	-	-	*3,844*	*7.1%*	*$47,710*	*4.0%*	*$12,411*	*$77*	*2.5%*	-
Personal Care (no waiver)[a]	-	-	-	-	-	-	-	*2,923*	*5.4%*	*$20,060*	*1.7%*	*$6,863*	*$32*	*1.0%*	-
Living at Home Waiver[a]	-	-	-	-	-	-	-	*266*	*0.5%*	*$9,396*	*0.8%*	*$35,322*	*$15*	*0.5%*	-
Case Mgmt (no waiver)[a]	-	-	-	-	-	-	-	*1,111*	*2.1%*	*$285*	*0.0%*	*$256*	*$0*	*0.0%*	-
Other[a,b]	-	-	-	-	-	-	-	*127*	*0.2%*	*$2,960*	*0.2%*	*$23,305*	*$5*	*0.2%*	-
Hospice	1,540	2.9%	$13,789	1.9%	$8,954	$22	0.7%	763	1.4%	$9,764	0.8%	$12,796	$16	0.5%	-
Phys., Outpat., & DME	46,384	86.0%	$57,473	7.8%	$1,239	$93	3.0%	12,824	23.8%	$56,081	4.7%	$4,373	$91	2.9%	-
Medicare claim found	46,384	86.0%	$57,473	7.8%	$1,239	$93	3.0%	-	-	-	-	-	-	-	-
No Medicare claim found	-	-	-	-	-	-	-	12,824	23.8%	$56,081	4.7%	$4,373	$91	2.9%	-

Note: Duals continuously-enrolled from January 1 to year end or death. Excludes QMBs/SLMBs/QIs with partial Medicaid benefits and duals with group health plan coverage. [-] is value not applicable.
[a]Detail component of Medicare claims found/not found line. [b]Includes a small amount of Medicaid home health, other small waivers, and other activity.

Next Steps:
- ♦ The impact of HCBS waiver participation on Medicare and other Medicaid institutional services
- ♦ Avoidable hospitalizations ♦ Patterns of post acute hospital care
- ♦ Medicare home health and Medicaid community supports ♦ Hospice and care in the last months of life
- ♦ Medicare and Medicaid services in the presence of chronic conditions
- ♦ Medicaid service use among Medicare Advantage group health plan enrollees

Integrating analysis of Medicare and Medicaid supports and services is an important aspect of emerging consideration of the full continuum of care that is needed to help shape health system reform efforts designed to focus beyond acute care alone - at both the state and federal levels.

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