Avoidance of Double Counting Services in a Medicare-Medicaid Dually Enrolled Population

Rachel VanGilder [1], Ph.D., Michelle Roozeboom-Baker [2], Ph.D., Glenda Martens [2], M.S., Shauna Kerby [2], B.B.A., and Kathy Schneider [2, 3], Ph.D.

[1] NewWave Telecom & Technologies, Inc [2] General Dynamics Health Solutions [3] Schneider Research Associates, LLC.

INTRODUCTION

To understand medical care utilization for dually enrolled Medicare and Medicaid beneficiaries, typically the claims from these two payers have been aggregated separately and combined to calculate metrics. This has led to an overestimation of service use associated with caring for a vulnerable population.

We used a Centers for Medicare and Medicaid Services (CMS) data source to examine the utilization of services for the full benefit Medicare-Medicaid enrolled population that employed an extensive matching algorithm to identify services in Medicare and Medicaid claims files. These overlapping claims from the two payers were identified as the same service from the same provider for the same patient on the same day.

The objectives are to: 1) describe the percent of fee-for-service (FFS) Medicare claims identified in the Medicaid claims data and considered a single service in the Medicare-Medicaid dual population; 2) quantify the impact on utilization counts after accounting for overlapping claims; and 3) examine different types of service and geographic variation in overlapping claims.

METHODS

Study Design: Under contract with CMS, the Chronic Condition Warehouse (CCW) created the Medicare-Medicaid Linked Analytic Dataset (MMLEADS), a suite of person-level and service level data files containing enrollment and claims data for all Medicare beneficiary and Medicaid disabled enrollees. Importantly, the file links the Medicaid and Medicare data for all dual Medicare-Medicaid enrolled beneficiaries, which enables the identification of identical services that appear in both Medicare and Medicaid files.

Population: We used nationwide Medicare-Medicaid full dual enrollees using the 2010 MMLEADS (N=7,193,106).

Measures: We identified service settings covered by both the Medicare and Medicaid benefit. This included inpatient hospital, skilled nursing facility (SNF), outpatient/clinic, physician/provider evaluation and management services (E&M), laboratory/test, durable medical equipment (DME) and prescription drug claims. We identified the proportion of FFS claims where Medicare was the primary payer and Medicaid paid a portion or all of the beneficiary's coinsurance or deductible for the same services. We examined the variation on overlapping Medicare and Medicaid acute inpatient claims by state. Finally, we reviewed the impact on per capita service use by counting a service once when identified in Medicare and Medicaid claims compared to counting the raw services found in Medicare and Medicaid claims.

Table 1: *Characteristics of the Full Benefit Medicare-Medicaid Dually Enrolled Population in 2010.*

	Percent of Full Duals
Gender	
Male	38.1%
Female	61.9%
Age Group	
<40	10.1%
40-64	30.1%
65-84	44.9%
85+	14.9%
Mean age	65.6
Race	
Caucasian	55.1%
African American	19.3%
Hispanic	16.3%
Other	9.4%
Original Reason for Medicare Entitlement	
Old Age and Survivors Insurance	49.0%
Disability	49.5%
End Stage Renal Disease	1.5%

RESULTS

Key demographic characteristics of the full dual Medicare-Medicaid beneficiaries in the MMLEADS data are found in Table 1. Over 61% of the population were women, 40 percent were under age 65 – with an average age in this population of 65.6 years old. The original reason of entitlement for nearly 50 percent of the full dual population was due to disability.

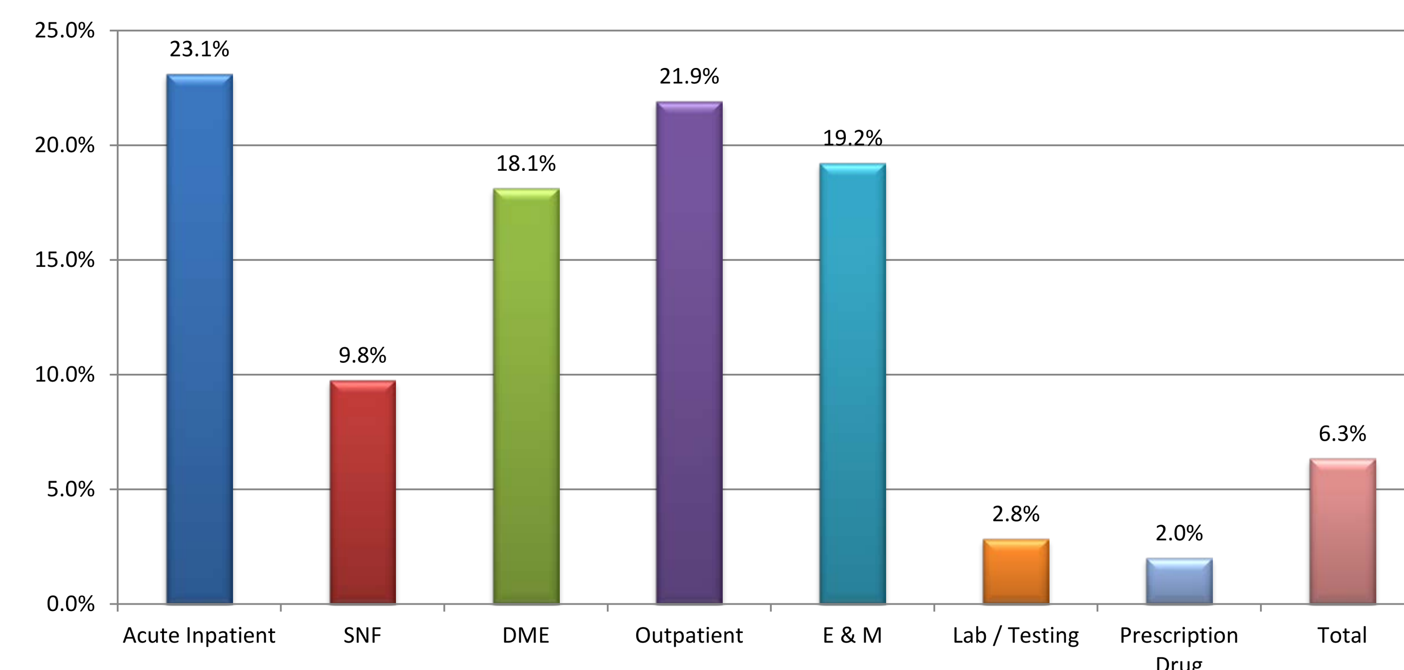
The total number of Medicare and Medicaid claims identified in 2010 for each payment system for the full dual Medicare-Medicaid enrolled population is found in Table 2. The largest number of claims in both Medicare and Medicaid for were prescription drug and physician evaluation and management services.

Table 2: *Total Number of Raw Medicare and Medicaid Claims of the Full Benefit Medicare-Medicaid Dual Enrolled population by Setting in 2010.*

Setting	Total Number of Medicare Claims	Total Number of Medicaid Claims	Aggregated Number of Services
Acute Inpatient	3,017,618	1,546,030	4,563,648
SNF	2,566,763	26,556,312	29,123,075
Outpatient	24,103,313	21,850,578	45,953,891
E & M	93,651,933	49,351,937	143,003,870
Lab / Testing	42,338,841	24,955,338	67,294,179
DME	16,984,107	26,116,779	43,100,886
Prescription Drug	390,445,509	62,523,785	452,969,294

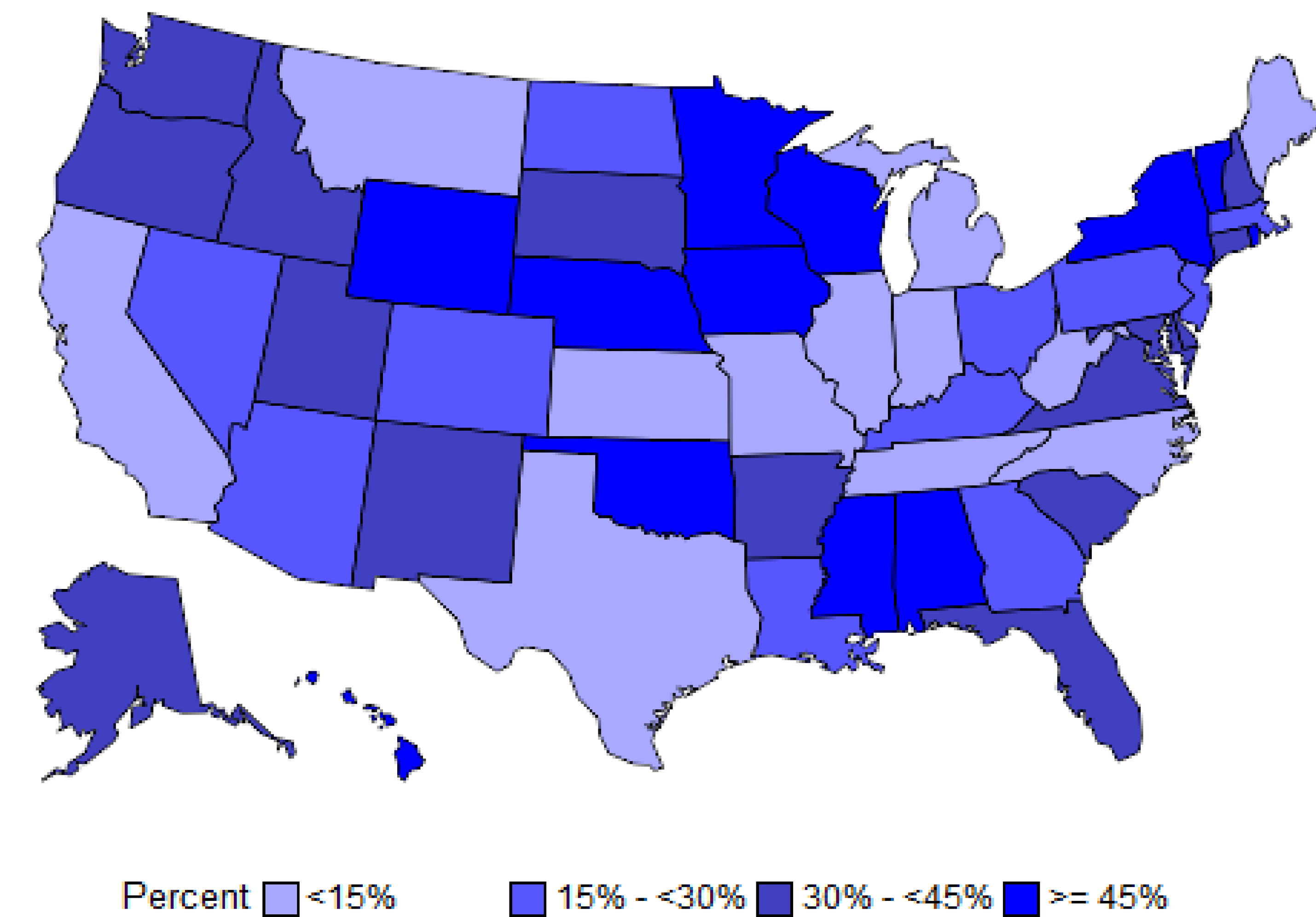
A total of 6.3% of Medicare claims for the full dual enrolled Medicare-Medicaid beneficiaries were also identified in Medicaid (Figure 1). The setting where claims were most often present in both Medicare and Medicaid was for acute inpatient hospitalizations (23.1% of Medicare hospitalization claims for duals), followed by outpatient clinic, and physician E&M. Laboratory and testing (2.8%) and prescription drugs (2.0%) had the lowest percentage of Medicare claims with a corresponding Medicaid claim in 2010 for the full dual Medicare-Medicaid enrollees.

Figure 1: *Percent of Medicare claims with a corresponding service found in Medicaid claims by Setting in 2010.*



There was substantial geographic variability in the percentage of Medicare inpatient claims with a corresponding Medicaid claim by state (Figure 2). In fact, for four states more than half of the Medicare acute inpatient claims for dually enrolled beneficiaries were also identified in Medicaid: Oklahoma (51.3%), Vermont (50.8%), Hawaii (50.4%) and Wisconsin (50.1%); compared to national average of 23.1%. Less than one percent of Medicare acute inpatient claims had a corresponding claim in Medicaid for 3 states: Kansas (0.7%), Illinois (0.6%) and Missouri (0.6%).

Figure 2: *The Percent of Medicare Inpatient Claims with a Corresponding Medicaid Claim for the Full Dual Medicare-Medicaid Beneficiaries by State in 2010.*



We use the number of Medicare and Medicaid claims as a proxy for service use. We calculated per capita utilization by setting (see Table 3). Historically, calculations of per capita service use might involve summing the total number of Medicare claims and the total raw number of Medicaid claims (as they appear in Table 2) and then dividing by the number of full dual beneficiaries. However, by adjusting the Medicaid claim count to avoid double counting claims when Medicare was the primary payer, we obtain adjusted per capita service use statistics. The raw and adjusted per capita number of claims is shown in Table 3. We do not adjust the Medicare claim count since it is the primary payer (column A). The unadjusted Medicaid (column B) and unadjusted sum of Medicare and Medicaid claims (column C) is presented for illustrative purposes. For determining per capita utilization, we remove the Medicaid claims that overlap and appear in both Medicare & Medicaid (column E), then determine the adjusted per capita use statistics (column E).

To quantity the extent of the duplication in the Medicare and Medicaid files, we compare the raw and adjusted per capita service use statistics by setting (column F). The impact on service use statistics in this population ranges between 0.9% in Skilled Nursing Facilities up to 15.3% for acute inpatient claims (Table 3); put another way – we would overestimate per capita hospitalizations among the full dual population by more than 15 percent if we failed to account for overlapping claims from the two payers (i.e., claims for the same service from the same provider for the same patient on the same day).

Table 3: *Impact to Per Capita Utilization Rates Adjusting for Medicare Claims with a Corresponding Medicaid Claim.*

	(A)	(B)	(C)	(D)	(E)	(F)
Setting	Medicare Claims Per Capita	**Raw** Medicaid Claims Per Capita	Sum of Medicare and Medicaid Claims Per Capita	**Adjusted** Medicaid Claims Per Capita	Sum of Medicare and **Adjusted** Medicaid Claims Per Capita	Percent Difference
Acute Inpatient	0.42	0.21	0.63	0.12	0.54	15.3%
SNF	0.36	3.69	4.05	3.66	4.01	0.9%
Outpatient Clinic	3.35	3.04	6.39	2.30	5.65	11.5%
E & M	13.02	6.86	19.88	4.36	17.38	12.6%
Lab / Testing	5.89	3.47	9.36	3.30	9.19	1.8%
DME	2.36	3.63	5.99	3.20	5.56	7.1%
Prescription Drug	54.28	8.69	62.97	7.60	61.88	1.7%

CONCLUSIONS

The examination of services found in Medicare and Medicaid claims data files independently for the dually enrolled population would result in an overestimation of utilization. In 2010, 6.3% of the Medicare claims had a corresponding claim in found in Medicaid. There were dramatic differences in the percent of Medicare claims found in Medicaid depending on the setting with the largest percentage (23.1%) of Medicare acute inpatient claims having a corresponding Medicaid claim while prescription drugs had the lowest number of Medicare claims with a corresponding Medicaid claim (2.0%).

Overall, the impact of overlapping acute inpatient Medicare-Medicaid claims for the Medicare-Medicaid full dual population differs by state. The data showed the variation to range from less than 1% of Medicare claims being found in Medicaid claims up to over 50% for some states.

By using the MMLEADS V2 dataset, where the corresponding claims between Medicare and Medicaid payers are identified, a more accurate per capita utilization rate can be determined. The total costs associated with both the Medicare and Medicaid services are not impacted through using this methodology; the Medicare claims accurately reflect payments from Medicare – and the Medicaid claims accurately reflect payment by Medicaid for the service.

IMPLICATIONS

Researchers wanting to examine patterns of care for the dually enrolled Medicare-Medicaid enrollees can utilize the V2 MMLEADS data files. These files are unique in that they have combined the services found in Medicare and Medicaid claims and allow researchers a more accurate means of counting services for this population. Furthermore, the MMLEADS files provide comparison groups - including all Medicare beneficiaries, partial Medicare-Medicaid enrollees, and people enrolled only in Medicaid who have a disability.

Depending on the type of service that researchers are examining, the overlapping Medicare and Medicaid can lead to a large overestimation of utilization among a vulnerable population.

This material was developed under contract with the Center of Medicare & Medicaid Services.

A data dictionary that includes all variables available in the MMLEADS V2 data files can be found at: https://www.ccwdata.org

To obtain the MMLEADS V2 files, contact ResDAC at http://www.resdac.org/