RISE RAPS-EDS Collaboration Research Project Executive Summary

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INTRODUCTION

Avalere analyzed data from eight Medicare Advantage Organizations (MAOs) representing 1.1 million beneficiaries in more than 30 unique plans operating across the country to understand the impact of shifting the determination of plan risk scores from the Risk Adjustment Processing System (RAPS) to the new Encounter Data System (EDS). Centers for Medicare and Medicaid Services (CMS) intends to transition gradually to EDS-based payments, starting with 10 percent of the payment based on EDS in 2016, increasing to 25 percent in 2017 and 50 percent in 2018.[1]

CMS has said the diagnoses captured in EDS should not be different from those identified in RAPS. However, we found that this transition will significantly reduce the identification of diagnoses used to calculate the risk scores that reflect the disease burden of the plans membership. Average risk scores resulting from the EDS process were 26 percent lower in the 2015 payment year (based on 2014 claims data) and 16 percent lower in the 2016 payment year (based on 2015 claims data) compared to RAPS. The lower risk scores were primarily the result of 35-40 percent fewer Hierarchical Condition Category (HCC) diagnoses identified in EDS compared to RAPS.

The risk score differences will have significant negative implications for MAOs and the 18 million beneficiaries they serve. As an example, using an $800 bid rate, if there had been a full transition from RAPS to EDS in 2016, this would equate to an average reduction of 16.1 percent in PMPM rates, representing a decrease of $260.4 million per year for the average plan in our study. The 90/10 phase in in 2016 would result in a 1.6% reduction in PMPM rates which would translate to $25.2 million per-plan in lower payments on average.

In spite of recent actions taken by CMS to improve EDS, a new Government Accountability Office (GAO) report documents numerous problems MA plans have had in submitting data and receiving reliable edits from the agency.[2]

A full report including extensive detailed information from the study will be released in February 2017.

Public comments are due by January 27, 2014.

BACKGROUND

CMS uses a risk adjustment process to modify Medicare Advantage (MA) plan payments to better reflect the composition of each plan's enrollees. Payments to each MA plan are modified based on risk scores that reflect enrollees' health status and demographic characteristics derived from member claims data. MA plans are currently transitioning from the traditional Risk Adjustment Processing System (RAPS)—where risk adjustment

filter rules are applied by health plans—to the new Encounter Data System (EDS)—where Medicare Advantage Organizations (MAOs) submit their members' claims and CMS applies the filtering logic.

The EDS is intended to be revenue budget neutral because the change in format for the encounter data collection process was expected to result in the same risk scoring.[3] However, the two approaches involve very different levels of information in their respective processes.

The RAPS system involves only five necessary data elements (dates of service, provider type, diagnosis code and beneficiary Health Insurance Claim (HIC) number), while the EDS system utilizes all elements from the claims (i.e., HIPAA standard 5010 format 837).

For the 2017 payment year, CMS has announced it will calculate a weighted risk score based on 75 percent RAPS and 25 percent EDS in the final reconciliation payment.[4] Plans are concerned that the transition to EDS will lead to lower risk scores inconsistent with the agency's intent. While CMS made changes to the EDS logic in 2016 to correct some identified issues, the 2016 risk scores analyzed in this study demonstrate that a significant difference (16%) between RAPS and EDS scoring exists. MAOs seek a solution where RAPS and EDS submissions are in complete alignment, ensuring the full risk adjustment payment from CMS without loss attributed solely to system changes.

OBJECTIVE

The goal of this research was to test the neutrality theory using sample data from representative MAOs. This study aimed to evaluate the risk score and financial impact of the transition by comparing results reported back to plans from running the same set of claims data through the RAPS process to results from the EDS process.

RESULTS

Member Characteristics The MA plan and study population characteristics are shown in Table 1. The eight participating health plans ranged in size from small (5,200 members) to large (409,000 members) in 2015 and were similar size in 2014. The study analyzed a large representative sample that included 1.1 million Medicare beneficiaries in each year, with members represented from all 50 states.

We used the same plans in 2014 and 2015 so the composition of plans in the study was consistent across the two years. The distribution of the study population by gender and age was stable from 2014 to 2015 so changes in risk scores observed over this period are also not attributable to shifts in demographics.

Table 1: Study Population Plan and Member Characteristics		
	2014	**2015**
Plan & Member Characteristics		
Number of Plans (H-Contracts)	8 (36)	8 (33)
Number of Members: Total	1,078,000	1,116,000
Mean	135,000	140,000
Range	5,500 – 408,000	5,200 – 409,000
Gender (N%)		
Male	465,000 (43.2%)	482.800 (43.3%)
Female	613,000 (56.8%)	633,300 (56.7%)
Age in years: N (%)		
< 65	160,200 (14.9%)	178,200 (43.3%)
65 – 69	208,000 (19.3%)	254,700 (22.8%)
70 – 74	264,400 (24.5%)	268,000 (24.0%)
75 – 79	192,000 (17.8%)	187,800 (16.8%)
80 and over	253,400 (23.5%)	227,300 (20.4%)
Dual Eligible (N%)	288,700 (26.8%)	299,400 (26.8%)

Risk Scores EDS average risk scores were significantly lower compared to RAPS risk scores (Table 2). The EDS average risk score was 26 percent lower than the RAPS risk score in the 2015 payment year, and 16 percent lower in the 2016 payment year. The smaller difference between EDS and RAPS risk scores observed in 2016 can be attributed in part to the corrections CMS made to the EDS logic by improving the MAO-004 reports (e.g., fixing excluded reason for visit codes on header records, assuring valid HIC numbers, linking diagnoses from chart reviews to encounter records), but may also be due to plans taking actions to address errors identified in their EDS submission process.

Financial Impact The potential estimated impact on PMPM revenue is significant based on our sample of plans and MA beneficiaries (Table 2). For demonstration purposes, we assumed a default bid rate of $800 PMPM (risk score = 1.0). The average PMPM rate for the 2016 payment year (based on 2015 claims data) was $963 based on 100 percent RAPS, $948 based on the 90/10 blend, $925 based on the 75/25 blend, and $809 based on 100 percent EDS. This represents a 16% reduction in PMPM payments in 2016 based on 100 percent shift to EDS, a 1.6 percent reduction based on the 90/10 blended rate, and a 3.9 percent reduction in PMPM based on the 75/25 blended rate.

To demonstrate the potential financial impact using the average study plan membership in 2015 x the PMPM difference of $15 based on the 90/10 blended RAPS/EDS rate x 12 months, the difference translates to a reduction of $25.2 million in risk adjusted funds per year (for a plan with 140,000 members). A transition to payments based on 100 percent EDS would have resulted in an average reduction of $260.4 million per year in risk adjusted funds for the same plan.

Table 2: RAPS and EDS — Risk Score and Financial Impact		
	2014 (2015 Payment Year)	**2015 (2016 Payment Year)**
Average Risk Score: Mean (Range)		
RAPS	1.16 (1.0 - 1.7)	1.20 (1.0 - 1.7)
EDS	0.86 (0.4 - 1.1)	1.01 (0.9 - 1.5)
Financial Impact: PMPM; Mean (Range)		
100% RAPS	$927 ($798 - $1,392)	$963 ($781 - $1,383)
100% EDS	$692 ($332 - $882)	$809 ($700 - $1,167)
90% / 10% Blend	$904 ($758 - $1,341)	$948 ($773 - $1,361)
75% / 25% Blend	$869 ($687 - $1,264)	$925 ($761 - $1,329)
100% RAPS vs. 100% EDS		
Difference: Mean (Range)	$235 ($94 - $510)	$155 ($18-$310)
% Reduction: from 100% RAPS	25.4%	16.1%
100% RAPS vs. 90% / 10% Blend		
Difference: Mean (Range)	$24 ($9 - $51)	$15 ($2 - $31)
% Reduction: from 100% RAPS	2.5%	1.6%
100% RAPS vs. 75% / 25% Blend		
Difference: Mean (Range)	$58 ($23 - $128)	$38 ($5 - $78)
% Reduction: from 100% RAPS	6.3%	4.0%

HCCs A difference in risk scores implies either a difference in the total number of HCCs identified, a difference in which specific HCCs were identified (because HCCs have different weights and therefore make differential contributions to the risk score), or a combination of both. In general, our findings did not reveal any significant differences in the distribution of HCCs that were identified for scoring. Rather, the data suggest there was difference in the overall number of HCCs accepted.

Table 3 lists the top ten HCCs from RAPS and their frequency of occurrence for both RAPS and EDS. The same HCCs comprised the top ten using EDS, although their relative frequencies varied slightly from RAPS. The frequency of each of the top ten HCCs was consistently lower in EDS than in RAPS. On average, these HCCs were identified in approximately 10% of the members based on RAPS in both 2014 and 2015 (for 2015 and 2016 payment years). However, when assessed using EDS, the average rate identified was 5.9% based on 2014 data. The rate increased somewhat in 2015 to 7.4% after CMS and health plan corrective actions.

In summary, 35-40% fewer HCCs were identified on average by EDS compared to RAPS using a large representative sample of 2014 and 2015 MAO claims data. This difference results in significantly lower risk scores and lower PMPM rates using EDS compared to RAPS.

Table 3: Top Ten Most Frequently Occurring HCCs					
HCC	Description	Frequency (% of HCCs)			
		2014		2015	
		RAPS	EDS	RAPS	EDS
18	Diabetes with Chronis Complications	14.1%	8.9%	15.6%	12.3%
108	Vascular Disease	13.9%	6.8%	14.2%	10.1%
111	Chronic Obstructive Pulmonary Disease	13.9%	8.0%	13.4%	9.9%
19	Diabetes without Complication	11.6%	8.4%	10.8%	8.9%
85	Congestive Heart Failure	10.9%	6.4%	10.6%	8.1%
96	Specified Heart Arrhythmias	10.4%	7.2%	10.0%	8.3%
58	Major Depressive, Bipolar, and Paranoid Disorders	7.6%	3.8%	8.2%	5.3%
22	Morbid Obesity	6.4%	3.0%	6.6%	4.4%
40	Rheumatoid Arthritis and Inflammatory Connective Tissue Disease	5.2%	3.3%	5.1%	3.9%
12	Breast, Prostate, and Other Cancers and Tumors	5.0%	3.8%	4.9%	4.2%
Average Frequency of Top 10 HCCs		9.9%	5.9%	10.0%	7.4%

CONCLUSION

The transition to calculating risk scores based on plan encounter data submissions was projected to be budget neutral to Medicare Advantage plans. A recent GAO study documented numerous technical difficulties experienced by plans in submitting their data and receiving accurate and actionable reports from the agency to correct the problems. Until rigorous measures to evaluate the claims-based errors are taken and increased transparency in EDS reporting is provided, the continued transition to an encounter data- and participating plans.

This project represents a collaboration between RISE, industry health plan partners, Inovalon, and Avalere.

REFERENCES

1. CMS 2017 Final Rate Announcement (April 4, 2016), p. 61. Found at https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/Announcement2017.pdf

2. GAO-17-223 (January 2017) found at http://www.gao.gov/assets/690/682145.pdf Accessed on January 20, 2017

3. See for example GAO-17-223, page 2, "CMS does not expect the diagnoses in MA encounter data to differ from those in RAPS."

4. HPMS memo from Dec 29th, 2016

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