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Medicare Advantage Risk Scores: Are You Competitive?

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A number of years ago, we published articles in *Health Watch* summarizing the number of hierarchical condition categories (HCCs) per Medicare Advantage (MA) beneficiary.[1] The goal of those articles was to help MA organizations compare their own experience to a benchmark of the average number of HCCs per MA member. While a number of changes have occurred in the MA landscape in the past five years, including the impact on payment rates from the fee-for-service (FFS) phase-in, continuing changes in star ratings, and the phase-in of diagnoses from the Encounter Data System (EDS), the requirement that MA plans ensure their risk scores appropriately reflect the health status of their populations continues to be a primary key to their success.

This article updates those prior articles with 2016 payment year (PY) information. This article also summarizes the difference in the average number of HCCs submitted through the Risk Adjustment Processing System (RAPS) when compared to EDS.

BACKGROUND

The Centers for Medicare & Medicaid Services (CMS) assigns a risk score to every MA beneficiary based on age, gender, disability status, Medicaid status and "health" status. For most MA plans, more than 80 percent of revenue is risk-adjusted. While the demographic component of the risk score is the same for members in the same category (e.g., male, age 68), the health status can vary significantly because it's based on the "diseases" the member had in the prior year. CMS determines the HCCs for each member based on ICD-10 diagnosis codes from health care claims. A member is assigned an HCC if an ICD-10 diagnosis code has been submitted by an MA plan or Medicare FFS in the year prior to the payment year. For example, ICD-10 code E09 (Diabetes mellitus due to underlying condition without complications) maps to HCC 19.

The 2017 Part C risk-adjustment model has 79 unique HCCs with an additive risk adjustment factor assigned to each HCC. (CMS uses a different model for end-stage renal disease (ESRD) members that has 87 HCCs.) As an example, if a non-Medicaid eligible member who is over age 65 has ICD-10 code E09 submitted and no other diabetes-related codes, then that member's risk score would increase by 0.097. This would result in an additional payment to a typical MA plan of about $60 per member per month (PMPM). Hence, identifying and submitting all appropriate ICD-10 diagnosis codes to CMS results in a higher risk score for the member and an increased payment to the MA plan.
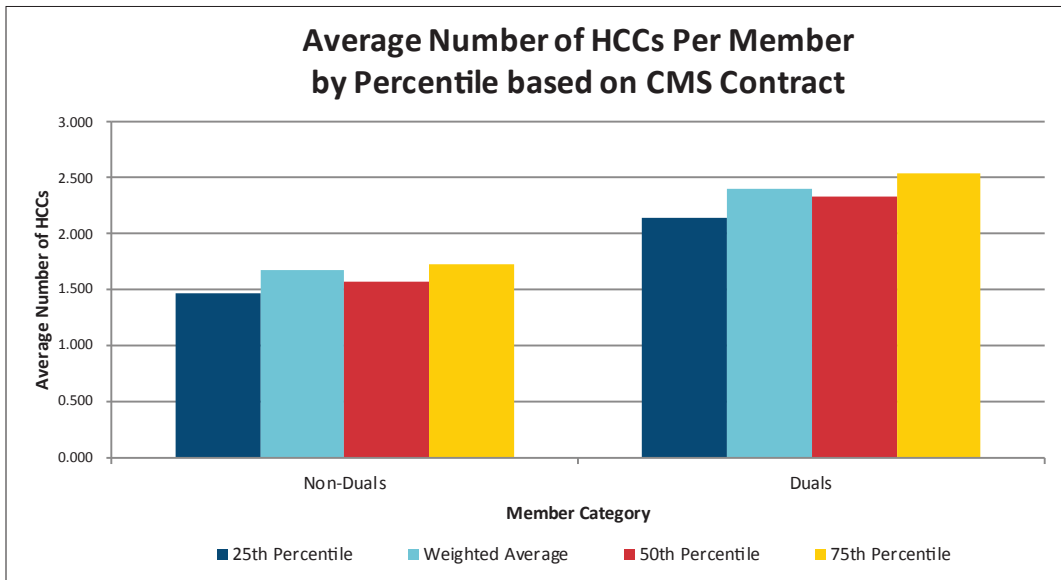
REVENUE OPPORTUNITY IN ACCURATE DIAGNOSTIC CODING

Ensuring that all appropriate diagnoses for an MA plan's members are submitted to CMS is a key to an MA plan's success because submitting diagnoses is one of only a few areas where an MA plan can directly affect its revenue retroactively. Star ratings and the filed bid also have a significant impact on revenue; however, MA plans have little opportunity to retroactively impact those items. MA plans can retroactively impact risk scores and revenue because CMS allows them to submit diagnosis codes for 13 months after the end of the calendar year. MA plans *can* review physician and hospital charts, submit additional diagnoses to CMS and receive retroactive payments for any newly identified HCCs. Reviewing charts is a cost to the plan and it requires cooperation from the physicians and hospitals to allow the medical coders access to their charts. MA plans need to ensure that the cost of the chart reviews is reasonable relative to the expected increase in revenue. Understanding where an MA plan's diagnosis coding efforts stand relative to other plans is critical in determining what should be the level of investment in chart reviews.

To develop a range in the average number of HCCs per member for the MA market, we reviewed data for more than 120 MA contracts that included more than 2.7 million unique members. The data includes 2016 beneficiaries and their 2015 diagnosis data. The data in this article includes only members in coordinated care plans (local health maintenance organizations (HMOs), local preferred provider organizations (PPOs) and regional PPOs). It also includes members in dual eligible special needs plans (D-SNPs). The results exclude private fee-for-service (PFFS) plans, chronic and institutional SNPs (C-SNPs and I-SNPs), and members who are institutional or ESRD. In addition, we excluded new enrollees because they do not have any published HCC information and their risk scores are purely based on demographics and MA-beneficiary status.

STUDY RESULTS

The HCC analysis contains a number of insights that can help MA plans evaluate whether their current risk scores (or segments of their population) justify the cost of additional chart reviews. Key findings include:

Figure 1
2018 HCC Survey Results Based on 2016 Payment Year Data and 2015 RAPS Diagnoses (Coordinated Care Plan Members,[1] HCC79 Model; Includes All 79 HCCs[2])

Average Number of HCCs Per Member by Percentile based on CMS Contract

Average Number of HCCs per Member[2] Includes All 79 HCCs

	Non-Duals	Duals
25th Percentile	1.465	2.134
Weighted Average	1.682	2.403
50th Percentile	1.572	2.329
75th Percentile	1.725	2.544

[1] Excludes C-SNP, I-SNP and PFFS members, and new enrollee, institutional and ESRD members.
[2] Percentiles and weighted averages are after normalizing for age/gender and region.
For more information on CCS, see *https://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp* (accessed June 22, 2018).

- **The average number of HCCs varies meaningfully by organization, even after normalizing for age/gender and geography.** In organizations at the 25th percentile, non-dual members have 1.465 HCCs and dual members have 2.134 HCCs. For organizations at the 75th percentile, non-dual members have 1.725 HCCs and dual members have 2.544 HCCs. For both non-dual and dual members, organizations at the 75th percentile have approximately 20 percent more HCCs per member than organizations at the 25th percentile. Figure 1 summarizes the average number of HCCs for non-dual members and dual members at the 25th, 50th and 75th percentiles, as well as the overall weighted average for all plans. (Note that in developing the percentiles, we only included contracts that had at least 1,000 non-dual members and 400 dual members.)

- **Dual-eligible members have a significantly higher number of HCCs than non-dual members.** On average, non-dual members have 1.682 HCCs while dual members have 2.403 HCCs. These absolute values increased from our prior analyses, and also reflect a slight increase in the "gap" between the number of HCCs for dual and non-dual members.

- **The number of HCCs increases steadily as members aged 65 and over increase in age (except for members over the age of 90).** From an average age of 67 to an average age of 77, the average number of HCCs for non-duals increases by between 40 percent and 50 percent. The average number of HCCs then increases another 30 percent from an average age of 77 to an average age of

87. The average number of HCCs then remains relatively flat as people reach age 90 and above. The increase is less dramatic for dual members since they have more HCCs at their initial entries into Medicare. Figure 2 provides a detailed summary of the average number of HCCs by age and gender.

- **Non-dual males age 65 and over have more HCCs than non-dual females age 65 and over.** The average number of HCCs for non-dual males is 13 percent to 21 percent greater than the average for non-dual females. This difference is evident for all members aged 65 and over. Dual males have between 1 percent and 13 percent more HCCs than dual females, with the percentage difference increasing by age.

- **There is geographic variation in the average number of HCCs.** There are differences in the average number of HCCs by the geographic location of the members. The South region, in particular, has a higher number of average HCCs than the rest of the country. Figure 3 (on page 20) provides a summary of the variation in HCCs by region.

- **The average number of HCCs is higher based on diagnoses from RAPS than based on diagnoses from EDS.** On average, non-dual members have 1.682 HCCs under the HCC79 model based on diagnoses submitted as RAPS and 1.624 HCCs under the HCC79 model based on diagnoses submitted through EDS. Dual members have 2.403 HCCs under the HCC79 model based on diagnoses submitted as RAPS and 2.301 HCCs under the HCC79 model based on diagnoses submitted through EDS. The higher number of HCCs from diagnoses submitted as RAPS when compared to diagnoses submitted through EDS is due primarily to the following HCCs:

  - HCC 18 (Diabetes with Chronic Complications)
  - HCC 22 (Morbid Obesity)
  - HCC 58 (Major Depressive, Bipolar and Paranoid Disorders)
  - HCC 85 (Congestive Heart Failure)
  - HCC 96 (Specified Heart Arrhythmias)
  - HCC 108 (Vascular Disease)
  - HCC 111 (Chronic Obstructive Pulmonary Disease)

WHAT SHOULD MA PLANS BE REVIEWING?

Based on the data we reviewed for this study, MA plans need to first understand their current membership mixes in order to determine if they are capturing and submitting all appropriate diagnoses or if there are opportunities to find and submit "missing" diagnoses. Key questions for an MA plan to ask are:

- **Is the MA plan seeing a significant difference in the number of HCCs between dual and non-dual members?** If not, it may want to focus on the coding for dual members because the data indicates that dual members have more HCCs than non-dual members, and dual members would be more likely to have "missing" diagnoses in this situation. On the other hand, if the gap between the average number of HCCs for dual and non-dual members for an MA plan is wider than the gap in Figure 1, then focusing on non-dual members is likely the best place to start because the non-dual members may be the ones missing diagnoses.

- **Is the MA plan seeing an increase in the average number of HCCs by age? How much of an increase?** If the increase is significant, then focusing on younger (and potentially newer) members may be better than focusing on older members, and vice versa if there is little increase by age.

OTHER CONSIDERATIONS

With the possible financial impacts of risk-adjustment data validation (RADV) audits going forward, plans should also ensure that they have sufficient documentation for their submitted diagnoses. While submitting all appropriate diagnoses is important for positive financial performance, plans should also review members with diagnoses without other indications that they have a specific disease (i.e., members with a diabetes HCC who do not have any diabetic supplies filled during the year) to ensure the coding is accurate. While this may not have any immediate impact on revenue, submitted diagnoses that are supported by medical records may assist in reducing risk from a RADV audit. In addition, this type of analysis can identify members with diseases who are not following an appropriate drug regimen that can help control medical costs.

KEY METHODOLOGICAL CONSIDERATIONS

Please note the following important information in reviewing and interpreting these results:

- For all of the plans included in this analysis, we received the "final" Model Output Report (MOR) data files that included all 2015 diagnoses submitted as RAPS through Jan. 31, 2017, and as EDS through May 1, 2017.

- Because we did not observe significant differences in the overall average number of HCCs between employer group and individual members after accounting for age/gender

Figure 2
2018 HCC Survey Results Based on 2016 Payment Year Data and 2015 RAPS Diagnoses (Coordinated Care Plan Members,[1] HCC79 Model; Includes All 79 HCCs)
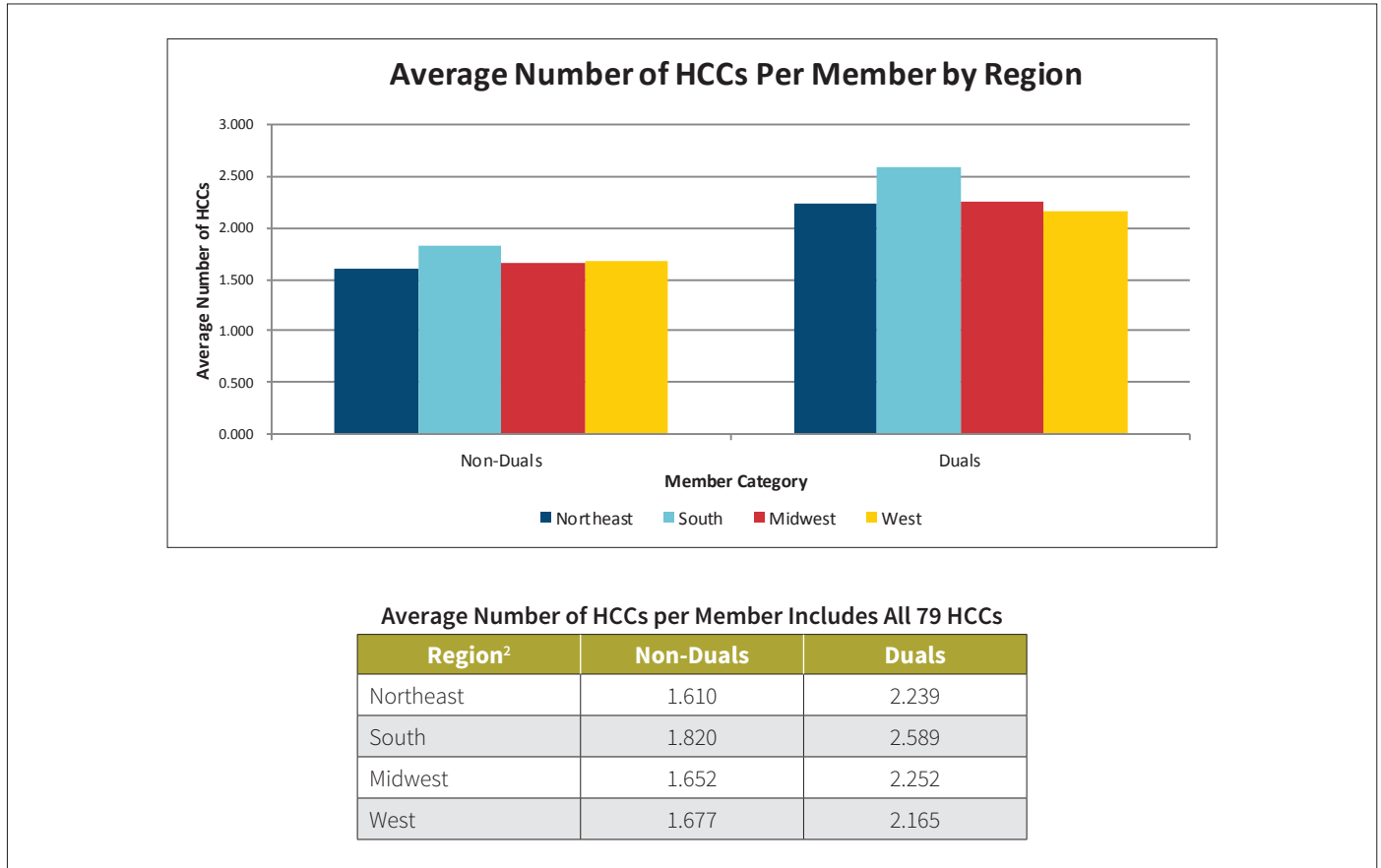
Average Number of HCCs Per Member by Age Group and Gender
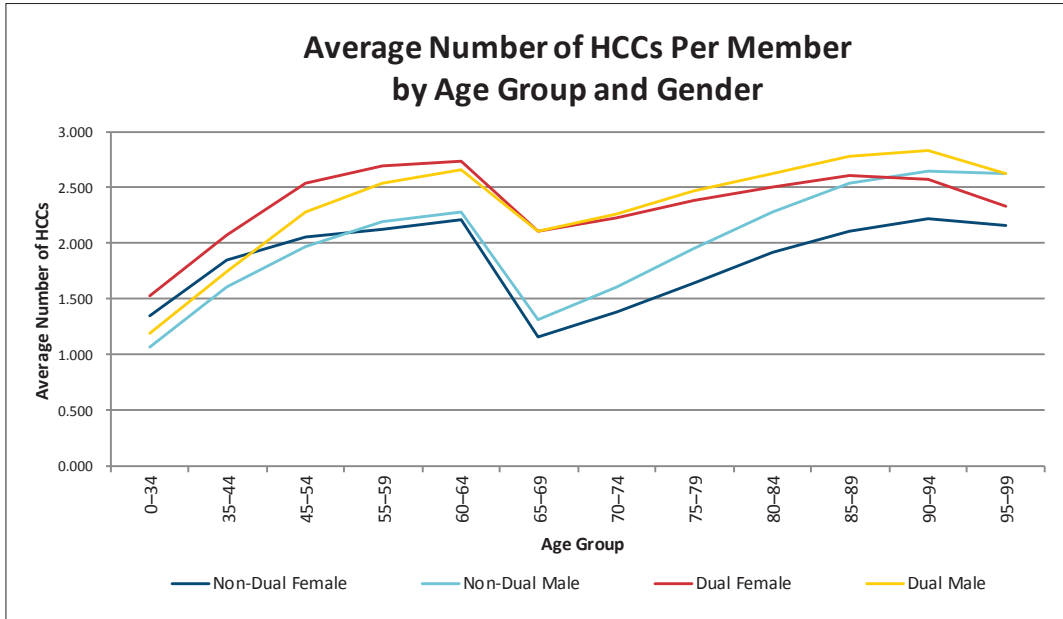
Average Number of HCCs per Member Includes All 79 HCCs

Age Range	Non-Duals		Duals	
	Female	Male	Female	Male
0–34	1.350	1.069	1.530	1.193
35–44	1.858	1.604	2.075	1.753
45–54	2.059	1.977	2.535	2.286
55–59	2.125	2.187	2.691	2.538
60–64	2.218	2.290	2.739	2.668
65–69	1.160	1.311	2.104	2.112
70–74	1.381	1.610	2.238	2.268
75–79	1.647	1.955	2.382	2.465
80–84	1.912	2.282	2.514	2.633
85–89	2.116	2.546	2.613	2.782
90–94	2.222	2.649	2.568	2.835
95–99	2.165	2.621	2.335	2.628
All ages	1.582	1.804	2.363	2.295

[1] Excludes C-SNP, I-SNP and PFFS members, and new enrollee, institutional and ESRD members.

Figure 3
2018 HCC Survey Results Based on 2016 Payment Year Data and 2015 RAPS Diagnoses (Coordinated Care Plan Members,[1] HCC79 Model; Includes All 79 HCCs)

Average Number of HCCs Per Member by Region

Average Number of HCCs per Member Includes All 79 HCCs

Region[2]	Non-Duals	Duals
Northeast	1.610	2.239
South	1.820	2.589
Midwest	1.652	2.252
West	1.677	2.165

[1] Excludes C-SNP, I-SNP and PFFS members, and new enrollee, institutional and ESRD members.
[2] Regions are based on the U.S. census definitions.

and dual status, we included both individual and employer group members in the analysis used in the exhibits.

- The data included in this report was accumulated across organizations with different structures (e.g., staff model HMOs vs. independent practice associations (IPAs)), different membership volume, demographics, geographic location and other pertinent differences. Hence, the information may not be directly comparable to any specific organization. However, the data is fairly representative as a whole, such that reasonable conclusions may be drawn from it.

- In order to make the data more comparable, we "normalized" the average number of HCCs included in the percentile exhibits for age/gender and geography. For example, all plans in the West had their average number of HCCs adjusted by the West geographic factor before being assigned a percentile.

- The survey authors did not verify the accuracy or completeness of the data included in the analysis; hence, if data was incomplete or inaccurate, the results for that plan may impact the overall results and conclusions. ■

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ENDNOTE

1 *Health Watch*, "Medicare Advantage Hierarchical Condition Categories: Targeting Chart Reviews," by Corey Berger and Eric Goetsch, January 2011, and "Medicare Advantage Hierarchical Condition Categories: Updated Study Results," by Corey Berger and Eric Goetsch, October 2012.