Including dementia in the Part C Medicare risk adjuster: Health services issues

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For over 30 years, Medicare Advantage (MA) plans have had their federal revenue adjusted to reflect the expected cost of their enrollees.

The risk adjustment mechanism currently used is the Hierarchical Condition Category (HCC) risk adjuster, which assigns a risk score to each beneficiary based on their diagnoses and demographic characteristics. Currently, there are 83 HCCs in the Centers for Medicare and Medicaid Service (CMS)-HCC model. An individual's risk score is the sum of the weights assigned to each category, although some of the categories interact. The current HCC model has distinct factors for each of seven subpopulations (see Table 1 below). The average HCC score across all beneficiaries is close to 1.0.

In December 2018, CMS released its proposed 2020 risk score methodology for MA plans. The proposal describes proposed updates to the existing HCC risk adjustment model and suggests an alternative model, which includes two additional HCCs for dementia. These categories were selected for inclusion by CMS because CMS considered them clinically meaningful, not discretionary, and good predictors of medical expenses. In adding the dementia category, CMS reduced the weights for other categories, so that the average HCC score would not change. We note that the RxHCCs, which are used for the Medicare Part D benefit, and end stage renal disease (ESRD) risk score model already include categories for dementia.

Based on the RxHCC and ESRD risk models, dementia would include Alzheimer's disease, a few specified forms of dementia, and some non-specific forms of dementia.³ Although CMS proposes two HCCs, the weights are the same for both, which, according to the proposal, will help avoid upcoding.⁴

Under the proposed alternative risk adjuster, dementia would be included in the risk adjustment calculation for all populations, except institutionalized beneficiaries. The CMS proposal states that because a large proportion of institutionalized beneficiaries have dementia, the model accurately predicts these patients' costs without requiring an explicit adjustment for dementia. The weights for the dementia disease categories range from about 0.2 to 0.5, depending on the individual's subpopulation (See Table 1 below). These weights are similar in magnitude to other chronic conditions, such as congestive heart failure and diabetes. The weight applied in a risk adjustment model indicates the predicted marginal cost to Medicare of a patient with that condition.⁵

FIGURE 1: PROPOSED RISK SCORE WEIGHTS FOR DEMENTIA HCCS BY MEDICARE SUBPOPULATION

MEDICARE SUBPOPULATION	DEMENTIA WITH COMPLICATIONS (HCC 51) AND DEMENTIA
	WITHOUT COMPLICATIONS (HCC 52)
Community non-dual aged	0.346
Community non-dual disabled	0.224
Community full dual aged	0.453
Community full dual disabled	0.256
Community partial dual aged	0.420
Community partial dual disabled	0.257
Institutional	N/A

- 1 CMS. Advance Notice of Methodological Changes for Calendar Year 2020 for the Medicare Advantage CMS-HCC Risk Adjustment Model. December 20, 2018. Retrieved on February 8, 2019, from https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/Advance2020Part1.pdf.
- CMS. Advance Notice of Methodological Changes for Calendar Year (CY) 2019 for Medicare Advantage (MA) Capitation Rates, Part C and Part D Payment Policies and 2019 draft Call Letter. February 1, 2018. Retrieved on February 8, 2019, from https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/Advance2019Part2.pdf.
- 3 CMS. 2019 Midyear_Final ICD-10-CM Mappings. Retrieved on February 8, 2019, from https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors-Items/RiskModel2019. html?DLPage=1&DLEntries=10&DLSort=0&DLSortDir=descending.
- 4 CMS. Advance Notice of Methodological Changes for Calendar Year 2020 for the Medicare Advantage CMS-HCC Risk Adjustment Model. December 20, 2018. Retrieved on February 8, 2019, from https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/Advance2020Part1.pdf.
- 5 Ibid.

The incremental cost borne by Medicare for beneficiaries with dementia has been controversial. Researchers using the Health and Retirement Study (HRS) data from 2005 to 2010 concluded that Medicare expenditures were similar among members who died from dementia, heart disease, cancer, or other causes.6 However, news organizations have reported that the expected increasing numbers of beneficiaries with Alzheimer's costs may bankrupt the Medicare program. Some stories report that Medicare beneficiaries with Alzheimer's have Medicare costs up to three times those of beneficiaries without Alzheimer's.^{7,8} Alzheimer's disease is the most common form of dementia among Medicare beneficiaries.9 However, there is no curative or disease-modifying therapy for Alzheimer's or dementia, which supports the HRS findings and the relatively low proposed HCC scores. The costs for custodial care, which can be high, are borne by Medicaid and families, not Medicare.

Experts suggest that over 5.5 million Americans have Alzheimer's disease. Yet it is likely that Alzheimer's disease is underdiagnosed. The Alzheimer's diagnosis is a rule-out diagnosis based on the lack of another medical explanation for changes in a patient's memory, behavior, and personality. An autopsy is required to confirm a patient's specific type of dementia, but these are rarely done. The fact that Alzheimer's and dementia are not included in CMS HCC risk adjustment system may also contribute to their undercoding – there would be more incentive for plans to focus on coding improvement for dementia if there were an associated revenue increase. Unlike other chronic conditions, such as diabetes or congestive heart failure, no disease-modifying treatment currently exists for Alzheimer's disease.

- 6 Kelley S, McGarry K, Gorges R, Skinner S. The burden of health care costs for patients with dementia in the last 5 years of life. Ann Intern Med. 2015;163(10):729.
- 7 Alzheimer's Staggering \$259B Cost Could Break Medicare. Forbes. By Bruce Japsen. March 7, 2017. Retrieved on February 8, 2019, from https://www.forbes.com/sites/brucejapsen/2017/03/07/u-s-cost-of-alzheimers-eclipses-250-billion/#61bdf1a371e5.
- 8 Alzheimer's Documentary: Epidemic Could Bankrupt Medicare and Medicaid. Healthline. Retrieved on February 8, 2019, from https://www.healthline.com/health-news/ alzheimers-epidemic-could-bankrupt-medicare-medicaid.
- 9 NIH: National Institute on Aging. What Is Alzheimer's Disease? Retrieved on February 8, 2019, from https://www.nia.nih.gov/health/what-alzheimers-disease.
- 10 NIH: National Institute on Aging. Alzheimer's Disease Fact Sheet. Retrieved on February 8, 2019, from https://www.nia.nih.gov/health/alzheimers-disease-fact-sheet.
- NIH: National Institute on Aging. Diagnosing Dementia. Retrieved on February 8, 2019, from https://www.nia.nih.gov/health/ diagnosing-dementia.
- Autopsy Rate and Physician Attitudes Toward Autopsy. Medscape. By Harold Sanchez, MD. April 28, 2017. Retrieved on February 8, 2019, from https://emedicine.medscape.com/article/1705948-overview.

Alzheimer's and dementia may also be more likely to be diagnosed in an acute setting. Hospital care providers may be more likely to observe dementia or submit a health insurance claim for dementia than community care physicians. Hospital settings often capture more complete diagnosis codes than other settings. In addition, hospitalization may exacerbate a beneficiary's dementia symptoms and hospital caregivers are likely to spend more time observing the patient than community care providers. Consequently, the reporting of dementia diagnosis in hospitalized patients could be incidental and the hospitalization may be caused by the identified dementia.

Stakeholders should also consider that Alzheimer's and dementia may not substantially increase costs for MA plans. Most Alzheimer's patients are very advanced in age and some are receiving hospice care, which is paid for under fee-forservice Medicare and not by the MA plans. The presence of degenerative disease, which reduces quality of life, may influence the amount of care a patient (and family) is willing to undergo. HRS suggests families and Medicaid, not Medicare bear the expense of custodial care.¹³

Another consideration is the challenge of risk score optimization. In our examination of Medicare claims, diagnosis codes for Alzheimer's and dementia do not appear every year for patients with the condition, which is consistent with the absence of disease-modifying treatment. The presence of the new HCCs would create a financial incentive for MA plans to capture the relevant diagnosis codes. As with other HCCs, plans that expend the effort to capture these diagnoses will benefit from risk adjustment more than other plans.

While dementia and Alzheimer's are currently underdiagnosed, the inclusion of these conditions in the CMS-HCC risk adjustment model represents an opportunity to improve their coding. Better coding of dementia and Alzheimer's disease may result in better care planning for these patients. While this would not likely reduce costs for dementia patients, it could improve the quality of care if MA plans made sure providers reflect the conditions in their patients' treatment plans.

Kelley S, McGarry K, Gorges R, Skinner S. The burden of health care costs for patients with dementia in the last 5 years of life. Ann Intern Med. 2015;163(10):729.

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