Targeting High-Need Beneficiaries in Medicare Advantage: Opportunities to Address Medical and Social Needs

Eva H. DuGoff, William Buckingham, Amy J. H. Kind, Sandra Chao, and Gerard F. Anderson

ABSTRACT

ISSUE: Serving Medicare beneficiaries with complex health care needs requires understanding both the medical and social factors that may affect their health.

GOAL: Describe the prevalence and characteristics of high-need individuals enrolled in the Medicare Advantage program.

METHODS: Analysis of the 2015 Medicare Health Outcomes Survey.

KEY FINDINGS: Thirty-seven percent of enrollees in large Medicare Advantage plans have high needs, requiring both medical and social services. Individuals with high needs are more likely to report having limited financial resources, low levels of education, social isolation, and poor health.

CONCLUSION: Federal policymakers should consider allowing Medicare Advantage plans to identify high-need beneficiaries based on their medical and social risk factors, rather than just medical diagnoses. Doing so would enable plans to deliver better-targeted services that meet their members' needs and facilitate implementation of the CHRONIC Care Act provision that allows plans to offer nonhealth supplemental benefits.

TOPLINES

- Thirty-seven percent of Medicare Advantage enrollees have chronic conditions or functional limitations requiring a range of medical and social services; many also contend with low income, low education, and isolation.
- To deliver targeted services that meet beneficiaries' needs, Medicare Advantage plans should identify patients based on medical and social risk factors, not just medical diagnoses.



INTRODUCTION

U.S. health care spending is driven by individuals with clinically complex conditions, particularly those with multiple chronic conditions and functional impairments. Such individuals spend an average of three times more than those who have multiple chronic conditions but not functional impairments.¹ And yet while cost is one way to identify those with substantial health care needs, it may not be a reliable way to target services because people's health care spending can vary substantially from year to year. Moreover, costs tell us little about the types of medical care or supplemental services that individuals may need.²

A recent National Academy of Medicine report recommends segmenting high-cost populations to better understand their unique needs.³ While this approach has yielded new evidence about the needs of beneficiaries enrolled in the Medicare fee-for-service program and the general U.S. adult population, we know little about the health and social needs of Medicare Advantage enrollees.4 One of three Medicare beneficiaries — more than 20 million individuals — is enrolled in a Medicare Advantage plan. These plans are well positioned to address the needs of their enrollees because they can provide nonmedical benefits not available through traditional Medicare, such as in-home supportive services, homesafety modifications, transportation, and memory fitness benefits. Under the recent guidance, plans can offer these benefits with a clinician's recommendation. Starting in 2020, Medicare Advantage plans, under the CHRONIC Care Act, will be able to offer these benefits to those with one or more comorbid and complex chronic conditions.

In this brief, we examine the medical needs and social circumstances of Medicare Advantage beneficiaries. Given recent evidence finding that where and how people live influences their health outcomes,⁵ we also examine people's neighborhood disadvantage (assessed by factors including residents' education, employment, and income) as well as their risk for social isolation.⁶

There are several strategies for defining individuals with high needs. We draw on work done by researchers at Harvard University, Johns Hopkins University, and the Commonwealth Fund,⁷ using data collected by health plans and findings from the Medicare Health Outcomes Survey (MHOS).⁸ (See "How We Conducted This Study" for more information.) We examined the following groups of beneficiaries enrolled in Medicare Advantage plans:

- High-need younger adults: individuals eligible for Medicare because of disability.
- High-need older adults: individuals age 65 and older living with three or more chronic conditions and difficulty with a basic or instrumental activity of daily living (ADL).

We compare these two groups with the following:

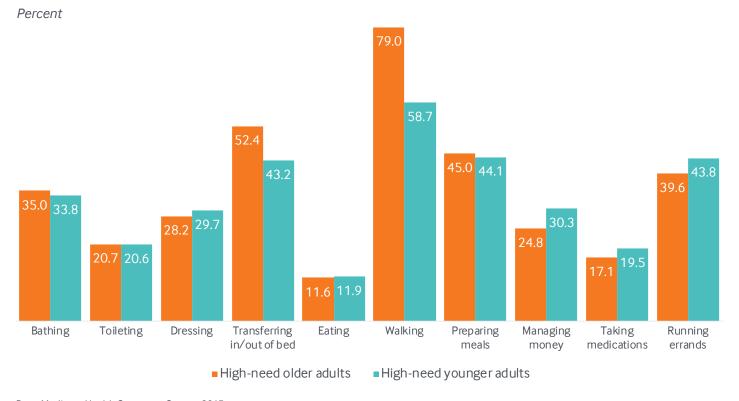
 Older adults with multiple chronic conditions: individuals age 65 and older who have multiple chronic conditions and no difficulty with an ADL.

STUDY FINDINGS

Characteristics of Medicare Advantage Beneficiaries with High Needs

In 2015, nearly half of Medicare Advantage beneficiaries (43.6%) reported difficulty with at least one activity of daily living, and a third (32.6%) reported having two or more. Among high-need older adults, 70.5 percent reported having two or more limitations. Among high-need younger adults eligible for Medicare because of disability, 81.6 percent reported having at least one limitation. (See Appendix A for a table for selected characteristics of survey respondents.) Difficulty walking was the most commonly reported limitation (Exhibit 1). Using the 2015 MHOS, we classified 37.8 percent of respondents as high need: 21.3 percent were age 65 and older living with three or more chronic conditions and a functional limitation (high-need older adults) and 16.5 percent were under age 65 (high-need younger adults).

Exhibit 1. Limitations Reported Among High-Need Medicare Advantage Enrollees, 2015



Data: Medicare Health Outcomes Survey, 2015.

Compared with non-high-need adults, both older and younger high-need adults were more likely to be African American and enrolled in Medicaid as well as Medicare (Exhibit 2). High-need older adults were also more likely than older adults with multiple chronic conditions to be enrolled in their Medicare Advantage plan for three or more years. Compared with older adults with multiple chronic conditions, high-need younger adults were less likely to be female, and more likely to live in the South and to have been enrolled in a plan for less than a year. The proportions of high-need younger and older adults in each state are reported in Appendix B.

High-Need Adults Are More Likely to Have Socioeconomic Risks

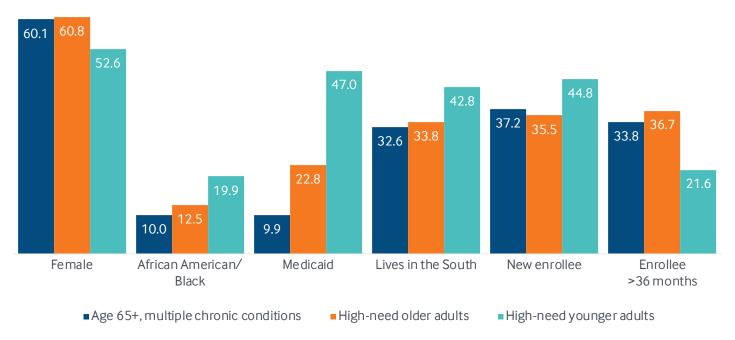
People with low socioeconomic status, measured by low income or low levels of education, are more likely to have worse health outcomes than those with higher income or education.

While only 22.6 percent of older adults with multiple chronic conditions reported that their household income was less than \$20,000 a year, one of three high-need older adults and nearly half of high-need younger adults reported this (Exhibit 3). While this income differential could be the result of disability, these differences also could be because of events earlier in life. High-need older adults were almost twice as likely to report not having a high school degree compared with non-high-need adults.

High-need younger and older adults were more likely to live in disadvantaged neighborhoods than non-high-need adults. Nearly 20 percent of high-need older adults and 27.9 percent of high-need younger adults lived in a disadvantaged neighborhood, defined as being in the top 15th percentile of the Area Deprivation Index (ADI). This validated index using data collected by the U.S. Census/American Community Survey accounts for residents' education, income, home and car ownership, and other factors.¹⁰

Exhibit 2. Characteristics of High-Need Medicare Advantage Enrollees

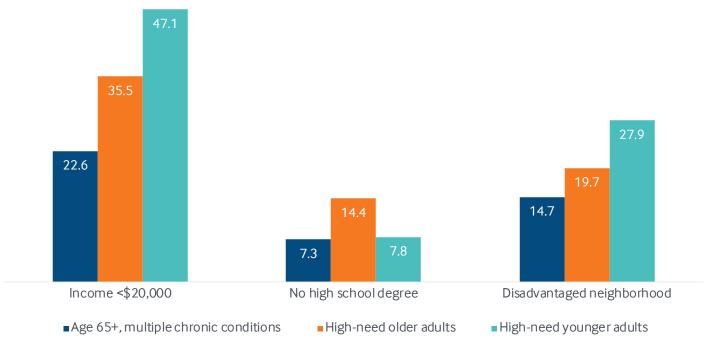
Percent



Data: Medicare Health Outcomes Survey, 2015.

Exhibit 3. High-Need Medicare Advantage Enrollees Are More Likely to Have Low Incomes, Limited Formal Education, and Live in Disadvantaged Neighborhoods





Data: Medicare Health Outcomes Survey, 2015.

High-Need Adults Are More Likely to Be Socially Isolated

Low levels of social integration have been associated with worse health outcomes and higher mortality rates. 11 Consistent with other studies in this field, we use people's living arrangements (i.e., whether they live alone) and marital status to assess their risk for social isolation. We found that high-need older adults were somewhat more likely to report living alone than older adults with multiple chronic conditions. Half of high-need older adults and high-need younger adults reported not being married compared with 40 percent of older adults with multiple chronic conditions (Exhibit 4).

High Needs and Health Status

Fair or poor health. Over half of high-need older adults and nearly two-thirds of high-need younger adults reported being in fair or poor health (Exhibit 5). In comparison, only 17 percent of older adults with multiple chronic conditions reported this.

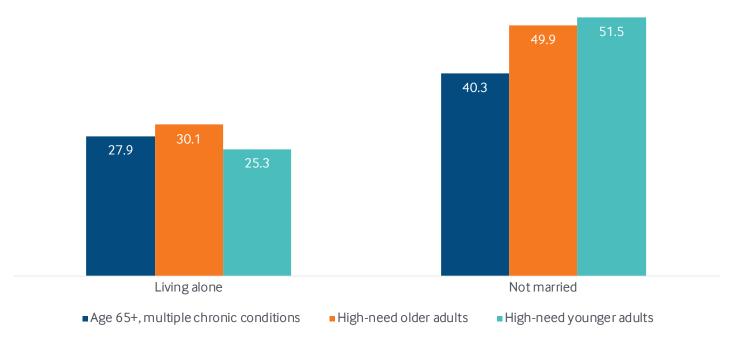
Memory problems. Self-reported problems with memory are one indication of cognitive decline, which could make it harder for people to manage their treatment regimens and otherwise live independently.¹² While only 1 percent of older adults with multiple chronic conditions reported experiencing memory problems, nearly 15 percent of high-need older adults and 22.6 percent of high-need younger adults reported having memory problems more than five days a week.

Obesity. Obesity is a risk factor for poor health outcomes. More than one-third of high-need older adults and nearly half of high-need younger adults reported being obese compared with 30 percent of older adults with multiple chronic conditions.

Falls. Injury because of falls is a significant risk among older adults, and falls can result in substantial health care spending. While 17 percent of older adults with multiple chronic conditions reported having fallen in the past 12 months, four of 10 high-need older adults and high-need younger adults reported a fall.

Exhibit 4. High-Need Older Adults Enrolled in Medicare Advantage Are More Likely to Report Social Isolation Risk Factors

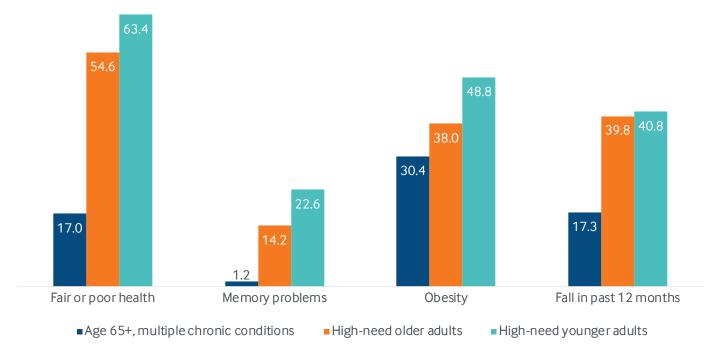




Data: Medicare Health Outcomes Survey, 2015.

Exhibit 5. High-Need Medicare Advantage Enrollees Are More Likely to Report Poor Health





Data: Medicare Health Outcomes Survey, 2015.

SUMMARY AND IMPLICATIONS

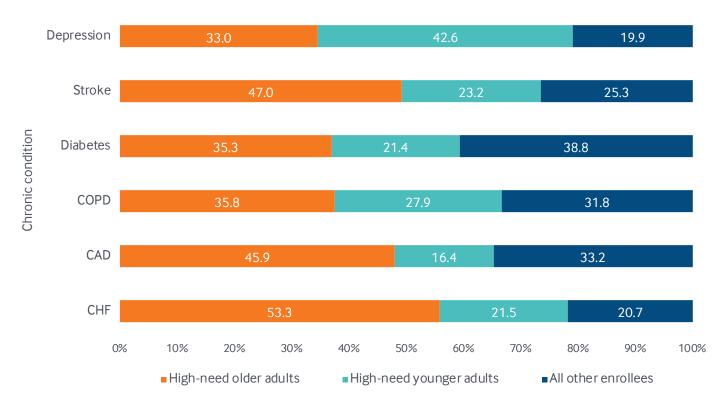
The Centers for Medicare and Medicaid Services expects more than 22 million Medicare beneficiaries to enroll in Medicare Advantage plans in 2019.¹³ As these plans continue to attract new enrollees and retain current ones, their role in serving individuals with complex health and social needs will grow.

In this analysis, we find that more than one-third of Medicare Advantage enrollees can be categorized as highneed, including those who have three or more chronic conditions and a functional limitation or who are under age 65 and disabled. Older and younger adults with high needs are more likely than other beneficiaries to be at risk for poor health because of their social circumstances, including living in disadvantaged neighborhoods, having lower incomes, and being socially isolated. We know from previous studies that high-need individuals are at great risk of emergency department use, hospitalizations, and skilled nursing stays.¹⁴

Efforts to target high-need individuals frequently focus on specific chronic conditions, as in Special Needs Plans or the Medicare Advantage Value-Based Insurance Design Program. Yet our analysis shows that this targeting approach captures many individuals who do not have high needs; we estimate that nearly 40 percent of those with diabetes, for example, do not have high needs (Exhibit 6). Focusing on those with multiple chronic conditions and limitations with activities of daily living or disabled beneficiaries under age 65 is a better way to identify high-need individuals.

These findings suggest that high-need Medicare Advantage beneficiaries experience a wide range of risk factors that may affect health. These enrollees may benefit from having services tailored to their needs. For example, those with functional impairments may benefit from transportation services, while those who live alone may value meal delivery.

Exhibit 6. Distribution of Medicare Advantage Enrollees According to Segments, by High-Cost Chronic Condition



Note: COPD = chronic obstructive pulmonary disease, CAD = coronary artery disease, CHF = congestive heart failure. Data: Medicare Health Outcomes Survey, 2015.

Starting in 2020, Medicare Advantage plans will have greater flexibility in targeting copayments, items, and services under the CHRONIC Care Act. As federal policymakers consider how to implement these flexibilities, it is important to consider that a disease-based approach alone will not identify those with high needs. Consistent with National Academy of Medicine recommendations, federal policymakers should consider

allowing plans to implement more nuanced targeting of eligible enrollees to account for their enrollees' limitations with activities of daily living, behavioral health needs, and social and economic risk factors. ¹⁵ Furthermore, assessing the appropriateness of an item or service with respect to a particular disease instead of the person's needs may miss important opportunities to improve health and reduce unnecessary spending.

HOW WE CONDUCTED THIS STUDY

All estimates are based on an analysis of the 2015 Medicare Health Outcomes Survey (MHOS). The 2015 MHOS included 567,241 respondents. The survey uses a stratified random sampling design where 500 to 1,200 individuals are selected from Medicare Advantage contracts. We created survey weights based on the sampling design and nonresponse rates to be representative of the Medicare Advantage plans with more than 500 enrollees. The brief displays results for the survey-weighted data.

In the survey, respondents answer questions about their health and sociodemographic characteristics. In addition, the MHOS file includes Centers for Medicare and Medicaid Services administrative data on individual characteristics such as original reason for entitlement and Medicaid enrollment, and Medicare Advantage contract characteristics such as type and tax status.

These data include a sufficiently large sample size to allow for subgroup analyses by high-need category. Consistent with previous studies, we define high-needs groups using self-reported chronic conditions and difficulties with basic activities of daily living (bathing, dressing, transferring in and out of bed, eating, toileting, and walking) and instrumental activities of daily living (preparing meals, managing money, taking medications, and running errands).

In this analysis, we focus on three segments: 1) adults under age 65 with a disability (high-need younger adults); 2) adults age 65 and older who are living with three or more chronic conditions and a functional limitation (high-need older adults); and 3) adults age 65 and older without multiple chronic conditions or a functional limitation (relatively healthy older adults). This approach does not include individuals who did not respond to questions about chronic conditions or activities of daily living, and those who reported a functional limitation but did not report three or more chronic conditions.

NOTES

- 1. Karen E. Joynt et al., "Contribution of Preventable Acute Care Spending to Total Spending for High-Cost Medicare Patients," Journal of the American Medical Association 309, no. 24 (June 26, 2013): 2572–78; and Susan L. Hayes et al., High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care? A Population-Based Comparison of Demographics, Health Care Use and Expenditures (Commonwealth Fund, Aug. 2016).
- 2. Joynt et al., "Contribution of Preventable," 2013; and Geoffrey F. Joyce et al., "The Lifetime Burden of Chronic Disease Among the Elderly," *Health Affairs* Web Exclusive, published online Sept. 26, 2005.
- 3. Hayes et al., *High-Need, High-Cost Patients*, 2016; and Peter Long et al., eds., *Effective Care for High-Need Patients: Opportunities for Improving Outcomes, Value, and Health* (National Academy of Medicine, 2017).
- 4. Hayes et al., *High-Need, High-Cost Patients*, 2016; and Karen E. Joynt et al., "Segmenting High-Cost Medicare Patients into Potentially Actionable Cohorts," *Healthcare* 5, nos. 1–2 (Mar. 2017): 62–67.
- 5. Amy J. H. Kind et al., "Neighborhood Socioeconomic Disadvantage and 30-Day Rehospitalization: A Retrospective Cohort Study," *Annals of Internal Medicine* 161, no. 11 (Dec. 2, 2014): 765–74; and Fredrick Kunkle, "Stress of Poverty, Racism Raise Risk of Alzheimer's for African Americans, New Research Suggests," *Washington Post*, July 16, 2017.
- 6. Thomas K. M. Cudjoe et al., "The Epidemiology of Social Isolation: National Health & Aging Trends Study," *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, published online Mar. 26, 2018; Anthony D. Ong, Bert N. Uchino, and Elaine Wethington, "Loneliness and Health in Older Adults: A Mini-Review and Synthesis," *Gerontology* 62, no. 4 (2016): 443–49; and James S. House, Karl R. Landis, and Debra Umberson, "Social Relationships and Health," *Science* 241, no. 4865 (July 29, 1988): 540–45.

- 7. Hayes et al., *High-Need, High-Cost Patients*, 2016; Long et al., *Effective Care for High-Need Patients*, 2017; and Joynt et al., "Segmenting High-Cost Medicare," 2017.
- 8. Hayes et al., *High-Need, High-Cost Patients*, 2016; Long et al., *Effective Care for High-Need Patients*, 2017; and Joynt et al., "Segmenting High-Cost Medicare," 2017.
- 9. Paula Braveman and Laura Gottlieb, "The Social Determinants of Health: It's Time to Consider the Causes of the Causes," *Public Health Reports* 129, Suppl. 2 (Jan.–Feb. 2014): 19–31.
- 10. Gopal K. Singh, "Area Deprivation and Widening Inequalities in U.S. Mortality, 1969–1998," *American Journal of Public Health* 93, no. 7 (July 2003): 1137–43.
- 11. House, Landis, and Umberson, "Social Relationships and Health," 1988.
- 12. Laura A. Rabin et al., "Subjective Cognitive Decline in Older Adults: An Overview of Self-Report Measures Used Across 19 International Research Studies," *Journal of Alzheimer's Disease* 48, Suppl. 1 (Sept. 24, 2015): S63–S86.
- 13. Centers for Medicare and Medicaid Services, 2019

 Medicare Advantage and Part D Prescription Drug Program

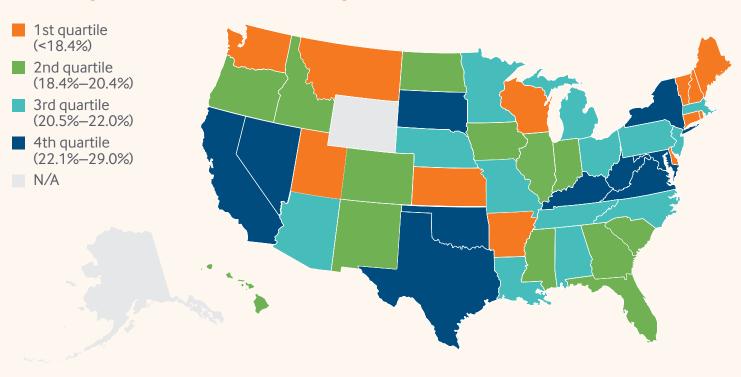
 Landscape (CMS, Sept. 28, 2018).
- 14. Hayes et al., *High-Need*, *High-Cost Patients*, 2016; and Long et al., *Effective Care for High-Need Patients*, 2017.
- 15. Long et al., Effective Care for High-Need Patients, 2017.

APPENDIX A. SAMPLE CHARACTERISTICS OF ADULTS IN THE MEDICARE HEALTH OUTCOMES SURVEY, 2015

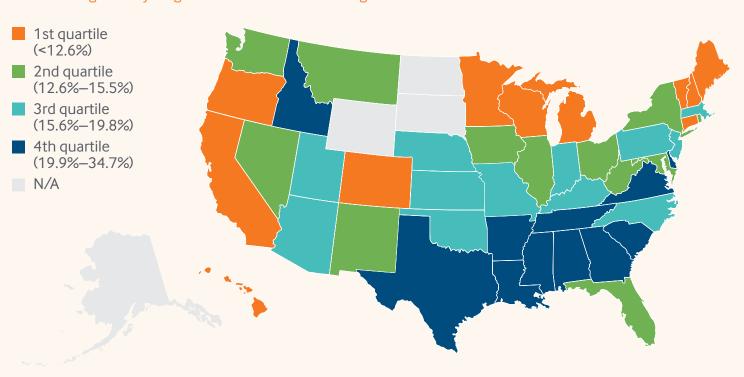
	Overall	All other beneficiaries	High-need older adults	High-need younger adults
N	16,986,315	10,562,765	3,611,653	2,811,898
Age (%)				
18–49	5.4	1.1	0	28.7
50–64	13.3	2.4	0	71.3
65–69	24.9	31.9	23.9	0
70–74	21.7	26.9	23.3	0
75–79	14.7	17.3	18.8	0
80–84	10.1	10.8	15.7	0
85 and older	9.9	9.6	18.3	0
Female (%)	56.2	55.6	60.7	52.6
Race/Ethnicity (%)				
White	57	57.2	60	52.4
Asian	3.1	3.2	3.4	2.3
Black	7.7	5.3	8.4	15.5
Hispanic	10.9	7.7	14.2	18.7
Not reported	21.3	26.5	14	11.1
Income (%)				
Less than \$10,000	9.5	5.4	13.4	20.1
\$10,000-\$19,999	14.5	9.8	19.8	25.6
\$20,000-\$29,999	12.3	10.8	15	14.1
\$30,000–\$49,999	15.7	16.3	16.6	12.5
\$50,000 or more	17.6	22.3	12.7	6.2
Not reported	30.3	35.4	22.5	21.4
Medicaid (%)	19.7	11.2	23.5	47.2
Limitations with activities of daily living (%)				
None	45.9	68.9	0	18.4
1 or more	44.3	15.3	100	81.6
Missing	9.8	15.8	0	0
Chronic conditions (%)				
None	8.4	12.8	0	5.4
1–2	36	54.9	0	23.9
3–5	42.1	28.9	69.3	47.5
6 or more	13.6	3.4	30.7	23.2

APPENDIX B. PROPORTION OF HIGH-NEED OLDER AND YOUNGER ADULTS IN MEDICARE ADVANTAGE BY STATE, MEDICARE HEALTH OUTCOMES SURVEY, 2015





Percent of high-need younger adults in Medicare Advantage



ABOUT THE AUTHORS

Eva H. DuGoff, Ph.D., M.P.P., is an assistant professor in the Department of Health Services Administration at the University of Maryland School of Public Health and an affiliate of the University of Maryland Center on Aging. She is also a visiting assistant professor in the Department of Population Health Sciences at the University of Wisconsin-Madison School of Medicine and Public Health, and an affiliate of the Center for Demography and Ecology, Center for Demography of Health and Aging, and Institute for Research and Policy at the University of Wisconsin-Madison. Her research focuses on the quality and organization of medical care and identifying opportunities to improve patient experiences and health outcomes of older adults in the Medicare fee-for-service and Medicare Advantage programs. Dr. DuGoff received her doctorate from the Johns Hopkins Bloomberg School of Public Health and master's degree from the George Washington University.

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