**Invited Commentary** 

## **HEALTH CARE REFORM**

## Social and Behavioral Determinants of Spending

Karen E. Joynt Maddox, MD, MPH

**A growing proportion** of state and federal health care dollars are spent via managed care, in which government pays private companies to administer insurance coverage on its be-



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half. Recent reports suggest that as many as 77% of Medicaid beneficiaries are enrolled in some type of man-

aged care plan, and Medicare Advantage, which is Medicare's managed care option, now enrolls nearly a third of Medicare beneficiaries.

In general, managed care plans operate by receiving a perbeneficiary payment from Medicaid or Medicare for their patients. These payments are risk-adjusted, meaning that Medicaid and Medicare pay plans more to take care of older, sicker patients because their health care expenditures are expected to be higher than younger, healthier patients. However, while risk adjustment generally accounts for medical comorbidities, it may or may not include adjustment for social determinants of health such as poverty and homelessness, or for mental or behavioral health conditions. Because these social determinants of health often result in higher health costs, above and beyond medical comorbidities, failure of risk adjustment methods to account for them could result in underpayment to managed care plans. As a result, the plans will either avoid high-risk beneficiaries or exit the market altogether. Therefore, adequate risk adjustment is critical to the success of any managed care market.

In this issue of JAMA Internal Medicine, Ash et al<sup>3</sup> provide important insights into this concept by analyzing the impact of social determinants on costs of care in MassHealth. MassHealth is Massachusetts' Medicaid plus Children's Health Insurance Program, and as such provides health care coverage for adults and children who are poor or disabled, as well as those who need long-term care. Ash et al<sup>3</sup> report wide variation in costs of care based on age and comorbidities, which is expected: for example, MassHealth beneficiaries who are 45 years or older cost, on average, about 3 times as much as those who are younger than 18 years. More interestingly, however, the study also finds that social determinants and behavioral health needs matter, often even more than medical comorbidities. Individuals with a diagnostic code for homelessness in their claims cost more than 5 times as much as the average individual, for example; this and other social determinants are not included in MassHealth's current risk adjustment scheme.

The study doesn't stop there. The authors go on to develop and test a *new* payment model that includes homelessness and other social determinants, such as neighborhood disadvantage, as well as mental illness and disability. They demonstrate that the addition of these variables to the risk adjustment model significantly improves the match between payments and spending, particularly for important

vulnerable populations. Importantly, the new model is budget-neutral: it doesn't add money to the system, but rather, within a set budget, distributes payments between plans in a way that more equitably matches plan payment to beneficiary spending.

The new payment model will obviously be a boon to MassHealth plans that serve patients with socioeconomic challenges and behavioral health needs, and hopefully also to the patients they serve. With payments that more closely meet patient spending, plans that care for complex beneficiaries may have the resources to innovate around care coordination and integration. Since patients with complex social needs and mental health needs stand to benefit the most from such innovations, this could be an important first step in beginning to address disparities in care for vulnerable populations in Massachusetts. Furthermore, given that high-need patients are disproportionate drivers of health care spending, investments in improving care for these groups may be a critical long-term strategy for cost containment.

But what are the broader implications of these findings? The first is extension of these findings to the Medicare Advantage program, under which private plans received about \$190 billion from the federal government in 2016. The Medicare Advantage payment program already pays plans more to provide coverage for poor beneficiaries, identified based on their dual enrollment in Medicare and Medicaid. Further adjustment for additional social determinants of health, such as the factors identified in the MassHealth population, could be explored to determine if such additions might improve any underpayment for beneficiaries with these determinants in the Medicare Advantage payment system.

A second implication of the findings by Ash et al<sup>3</sup> is related to how we hold clinicians accountable for costs of care, particularly those who care for poor patients with social and mental health needs. Pay-for-performance, referred to within Medicare as value-based purchasing (VBP), is now present in most clinical settings, and most VBP programs include metrics of costs of care. Under these metrics, clinicians are held accountable for patients' spending, on an episodic or annual basis. However, cost measures generally do not account for social determinants of health.

For example, in Hospital VBP, the mandatory Medicare payfor-performance program in the hospital setting, the single most heavily weighted measure in the program is the Medicare Spending per Beneficiary measure, which assesses hospital performance on costs of care over a 30-day episode. This measure does not include any adjustment for social determinants, although it does include mental health diagnoses and disability. Prior studies have shown that care for poor patients is more expensive under this measure, and that safetynet hospitals perform more poorly on the measure—a differ-

ence that is in part due to the higher proportion of poor patients for whom they provide care.<sup>5</sup> In part owing to these differences, safety-net hospitals and other clinicians who care for these patients can face higher penalties under VBP.<sup>6</sup>

A similar concern exists in the outpatient setting. In the forthcoming Merit-based Incentive Payment System for physicians, there are dozens of proposed cost measures under consideration. However, most of the measures that have been proposed are not adjusted for social determinants of health.<sup>7</sup> As these are further developed, attention should be paid to determining the relationship between social determinants and spending on each measure, to avoid penalizing

clinicians who care for vulnerable populations for spending beyond their control.

It is well established that social determinants of health as well as behavioral health needs impact medical spending. Until we recognize that there are consequences—real ones, for patients, health plans, and clinicians—of failing to account for these factors in measures of medical spending, we risk penalizing the health plans and clinicians that serve some of our most vulnerable populations in some of the most challenging situations in medicine. Massachusetts has taken an important step toward recognizing these realities with their updated risk adjustment system for health plans, and the rest of the country should take note.

## ARTICLE INFORMATION

Author Affiliations: Brigham and Women's Hospital, Boston, Massachusetts; Harvard T. H. Chan School of Public Health, Boston, Massachusetts; now with Washington University School of Medicine, St Louis, Missouri.

Corresponding Author: Karen E. Joynt Maddox, MD, MPH, Washington University School of Medicine, 660 S Euclid Ave, St Louis, MO 63110 (kjoyntmaddox@wustl.edu).

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