

## Social Risk Factors and Performance Under Medicare's Value-Based Purchasing Programs

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### Policy Statement Title

Report to Congress: Social Risk Factors and Performance Under Medicare's Value-based Purchasing Programs.<sup>1</sup>

### Organization

US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

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December 21, 2016.

### Policy Context

Value-based purchasing (VBP), or pay-for-performance, comprises a growing portion of Medicare payment and the changes in physician payment enacted in the Medicare and Children's Health Insurance Program Reauthorization Act are likely to accelerate these trends even further.<sup>2</sup> Simultaneously, there is growing consensus that social risk factors—such as income, race and ethnicity, and community environment—play a major role in health.<sup>3–5</sup> Persistent and meaningful gaps exist in health and even in life expectancy based on these factors.<sup>6–9</sup>

These 2 issues intersect in VBP. If beneficiaries with social risk factors have worse health outcomes because of factors beyond providers' control, providers could be unfairly disadvantaged under VBP. On the contrary, if beneficiaries with social risk factors have worse health outcomes because the providers serving them provide low-quality care, the financial incentives and accountability of VBP could be an important strategy for improving care and reducing disparities.

In 2014, Congress passed the Improving Medicare Postacute Care Transformation Act (IMPACT),<sup>10</sup> which required that the Office of the Assistant Secretary for Planning and Evaluation (ASPE) at the US Department of Health and Human Services complete an empirical report addressing the issue of social risk in Medicare's current VBP programs to assist Congress in further decision making on this issue.

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The report covered here is the first component of the required work, which was submitted to Congress in December 2016.

The ASPE report may have particular salience to cardiovascular clinicians, who practice every day in an environment significantly impacted by VBP. Many current quality measures in inpatient and outpatient VBP programs are cardiovascular in nature; patients with acute myocardial infarction and heart failure are the focus of many of the outcome measures in these programs, including readmission and mortality rates.

### Major Findings/Recommendations

The report analyzed dual enrollment in Medicare and Medicaid as a marker for poverty, residence in a low-income-zone improvement plan code tabulation area, Black race, Hispanic ethnicity, disability, and residence in a rural area. Medicare payment programs were included in the report if they incorporated quality or resource-use measures (Table).

The report outlines 2 broad findings. First, beneficiaries with social risk factors had poorer outcomes on many quality measures, including processes (eg, blood pressure screening), clinical outcomes (eg, cholesterol control or readmissions), safety (eg, infection rates), patient experience (eg, communication from doctors and nurses), and resource use (eg, spending per hospital admission episode). This was true even when comparing beneficiaries within the same hospital, health plan, accountable care organization, physician group, or facility. Dual enrollment was typically the most powerful predictor of poor performance among those social risk factors examined.

The second finding was that providers that disproportionately cared for beneficiaries with social risk factors tended to perform worse on quality measures. Although a portion of the difference was related to the social risk factors of the patients they served, differences were evident even after adjusting for beneficiary social risk profile. As a result, providers serving these populations (safety-net hospitals, physician groups with a high proportion of low-income patients, etc) were more likely to face financial penalties across the 5 Medicare VBP programs in which penalties are currently assessed, including programs in the hospital, physician group, and dialysis facility settings. They were also less likely to receive bonuses in Medicare advantage.

It was also reported that in every care setting, be it hospital, health plan, accountable care organization, physician group, or facility, there were some providers that served a high proportion of beneficiaries with social risk factors who achieved high levels of performance, suggesting that high performance for at-risk populations is feasible with the right strategies and supports.

These findings suggest that both patient social risk factors and provider performance contribute to the worse outcomes

**Table. Medicare Payment Programs Examined in the Assistant Secretary for Planning and Evaluation Report to Congress on Social Risk Factors**

	Program
1	Hospital Readmissions Reduction Program
2	Hospital Value-Based Purchasing Program
3	Hospital-Acquired Condition Reduction Program
4	Medicare Advantage (Part C) Quality Star Rating Program*
5	Medicare Shared Savings Program
6	Physician Value-Based Payment Modifier Program†
7	End-Stage Renal Disease Quality Incentive Program
8	Skilled Nursing Facility Value-Based Purchasing Program‡
9	Home Health Value-Based Purchasing Program‡

\*Includes part D metrics where applicable.

†This program will be replaced by the Merit-based Incentive Payment System in 2019.

‡The skilled nursing facility value-based purchasing program and home health value-based purchasing program are too new to have program-level data yet available for analysis; thus, for the purpose of the report, only certain measures that may be used in these 2 programs were analyzed.

seen for each. However, the analyses do not identify the underlying causes of such findings. Beneficiaries with social risk factors may have worse outcomes because of higher medical risk, worse functional status, cognitive limitations, challenges in adhering to medications or lifestyle recommendations, or bias. Providers serving these beneficiaries may have worse performance because of unmeasured differences in patient population, a mismatch between resources and clinical workloads, fewer community resources, or simply worse quality of care.

The complexity of this issue suggests that a single fix will not be adequate to address the problem. Instead, a broad set of strategies and considerations will be required. The report outlines 3 main strategies for consideration:

The first strategy is to measure and report quality for beneficiaries with social risk factors because what is not measured can not be optimally addressed. This would require enhancement of data collection to overcome issues of sample size and the development of statistical techniques for stratified reporting. Relatedly, the development of measures specifically focused on health equity could help highlight existing disparities and provide impetus to reduce them.

The second strategy is to set high, fair quality standards for all beneficiaries. This does not imply that measures broadly should or should not be adjusted for social risk, but rather that each quality measure should be examined to determine whether adjustment for social risk factors is appropriate. The National Quality Forum is currently completing a broad analysis of new and existing measures in regard to this issue,<sup>11</sup> and their findings will also significantly inform this debate. Additionally, all measures could be examined to determine whether differences in unmeasured medical risk, including things like frailty, functional status, disability, and disease severity, might explain some of the relationships between social risk and outcomes.

The third strategy is to reward and support high quality for beneficiaries with social risk factors. This includes creating

specific, targeted payment adjustments within VBP models to incent a focus on improving health for vulnerable populations. Such bonus opportunities could also offset any real or perceived disincentives under value-based payment models to providing care for these individuals. Providing technical support to providers who serve high-risk individuals, and developing innovative care solutions via demonstrations that focus on socially at-risk groups, may also have the potential to reduce disparities.

## Discussion

As reported here and elsewhere,<sup>12</sup> the ASPE report to Congress provided a comprehensive review of the interplay between Medicare payment systems and social risk. In addition to providing specific considerations, the report aimed to broaden the conversation about the interaction between VBP and social risk. Although many have advocated for simply adjusting quality measures for social risk, doing so too broadly risks masking disparities and fails to address the pervasive, persistent underlying issues at hand. While there may be cases in which adjustment is appropriate, the report also encourages stakeholders to consider strategies beyond measure adjustment to improve the quality of care provided to socially at-risk patients and to support providers caring for these beneficiaries. Here, in particular, there may be opportunities for further clinical innovation and research, as addressed below.

### Application to Cardiovascular Disease Care Quality Improvement

As noted above, the findings of the ASPE report are relevant to cardiovascular disease because of the sheer number of quality measures related to cardiovascular disease that make up the backbone of many Medicare VBP programs. Acute myocardial infarction and heart failure, 2 main conditions in many VBP programs, have been the focus of many quality improvement efforts from the cardiovascular community,<sup>13</sup> and such efforts will be even more important under VBP. Ideally, VBP could serve as a catalyst to innovation in achieving good cardiovascular outcomes for individuals with social risk factors, who have been convincingly shown to face significant disparities in these areas.<sup>14</sup> Engagement of the cardiovascular community on ways to do so could be particularly helpful as policymakers seek to optimize these programs to achieve their stated goals while avoiding unintended consequences.

### Research

The ASPE report outlines several areas in which further research is needed, many of which the cardiovascular research community may be particularly well-poised to address. For example, the report identifies the need for ongoing evolution in methodology on risk-adjustment, which may include advances in emerging data sources (electronic health records and patient-reported outcomes) and emerging methods (machine learning and advanced statistical techniques). The cardiovascular community has led in these areas before and continues to produce cutting-edge research on these topics.

Another area of research identified in the report is research designed to identify the best practices for improving health outcomes in individuals with social risk factors. Here, mixed methods research might play an important role in helping clinicians and policymakers understand how some providers are able to achieve excellent care and outcomes for their vulnerable populations. There are many promising interventions in these areas in cardiovascular care, for example, on reducing readmissions or improving control of cardiovascular risk factors, that need to be further understood, scaled, and disseminated to truly address health disparities in cardiovascular disease and more broadly.

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### Disclosures

The authors are current or former employees or contractors for the US Department of Health and Human Services.

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