

# Building a Framework for Paying for Social Determinants of Health in Medicare

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## Introduction

Special Needs Plans (SNPs) are a unique subset of Medicare plans authorized to enroll specific populations of beneficiaries, namely dual eligibles, persons with multiple chronic conditions, and persons who are institutionalized or certified for nursing home care. Congress established SNPs in order to enable health plans to target programs of care for beneficiaries whose health care needs are more complex than those served by regular Medicare Advantage (MA) plans and may not be well served by the traditional fee-for-service (FFS) program. As a result of targeting enrollment, 90 percent of all SNP enrollees are dual eligibles, compared to 19 percent of beneficiaries in traditional Medicare.

By definition, dual-eligibles have lower income than non-dual eligibles. However, dual eligibles also have lower socioeconomic status (SES) than non-dual beneficiaries. According to data from the Medicare Payment Advisory Commission (MedPAC), duals are 5 times more likely to live below poverty, 2 times more likely to have no high school diploma, and 38 times more likely to have no retiree coverage to supplement Medicare benefits (See Table 1).

**Table 1: Social Indicators for Medicare Dual and Non Dual-Eligible Beneficiaries**

	Dual-Eligible Beneficiaries	Non Dual-Eligible Beneficiaries
Living Below 100% Federal Poverty Level	48%	8%
Living Below 200% Federal Poverty Level	91%	33%
No High School Diploma	55%	22%
African-American	18%	8%
Hispanic	14%	7%
Retiree Supplemental Insurance From Employer	1%	38%

*Source: MedPAC Databook, 2011*

A long-standing body of research shows that low socioeconomic status— which is prevalent among dual eligibles—plays a significant role in a person’s health. Low levels of income, educational attainment, and job status have a direct impact on how individuals use the health care system (particularly preventive health services), their rates of adhering to treatment guidelines, and outcomes of care. Research shows that the SES effects on health persist even when other important factors, such as insurance coverage, are taken into account. Such findings, and the persistence of such findings, have led researchers to conclude that socioeconomic characteristics of individuals are “social determinants” of health.

Research also has found a host of individual characteristics “downstream” from socioeconomic status that can affect a person’s use of care and health outcomes. Downstream characteristics are important for providers, plans and health policymakers to consider because they are more readily within the sphere of influence of the health system than socioeconomic status. The presence and intensity of social factors can complicate or facilitate patients’ interactions with the health system. As a result, social characteristics of individuals can geometrically affect cost and quality of care,

just as certain illnesses of individuals can affect the cost and quality of care. Given the strength of research related to social determinants of health, policymakers should be encouraged to consider how Medicare payment can be designed to reflect social factors.

The goals of paying for social determinants of health under Medicare would be to:

1. Reduce and eliminate health care disparities among Medicare beneficiaries that derive from differences in their social circumstances.
2. Pay providers and plans more accurately for social or “non-health” factors that affect the cost of delivering care.

This paper explores issues in modifying Medicare payment to reflect social determinants of health. The paper provides a brief overview of long-standing research establishing the link between social determinants and health. It also discusses Medicare’s current payment policies and how they account for social determinants of health. Payment policies for both Medicare Advantage and the traditional fee-for-service program are described. Finally, the paper provides a framework for developing Medicare payment options that could address social determinants of health.

This paper incorporates comments from SNP Alliance members and invited participants in an all-day meeting where an initial draft of the paper was discussed among other topics. Research continues to support the conclusion that social factors affect health, yet much of the evidence is not widely known by policymakers in Congress. SNPs have many years of relevant experience that can help educate policymakers about the research and the real world challenges that social factors have in determining health. Moreover, SNPs can use their experience to design new public policies that better address social determinants of health through the Medicare and Medicaid programs.

## Overview of the Social Determinants of Health

A sizable body of evidence from the social epidemiological literature shows that non-health characteristics of individuals contribute significantly to a person’s health. Researchers have found that a person’s health care use and outcomes are embedded in socioeconomic factors of individuals as well as collective factors in society, not just biological factors such as a person’s age, sex, or genetic makeup. For years, social epidemiologists have demonstrated the effect of external factors such as a person’s income and socioeconomic status, which has led to the widely accepted view that a person’s income, education, and occupation are *social determinants* of health.

The direct link between income and health is well established: the higher a person’s income, the better a person’s health.<sup>1</sup> Researchers explain that the pathway for income to affect health is multi-faceted:

- Higher income allows for basic material consumption that is important for health, including nutrition, safe housing, and recreation.

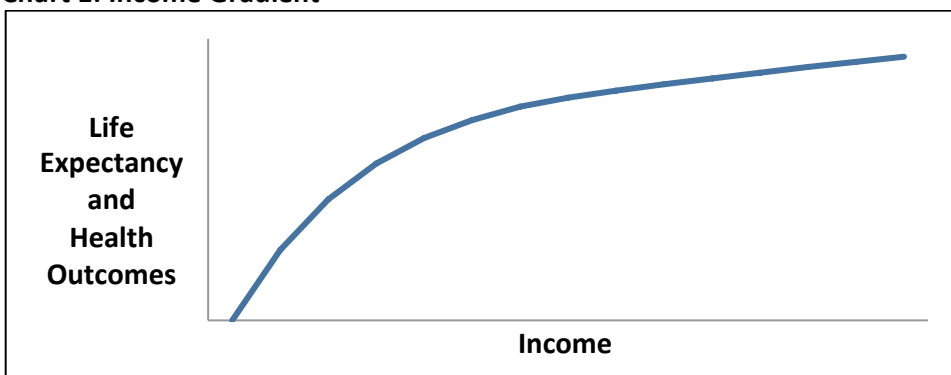
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<sup>1</sup> Kawachi I, Kennedy BP. Income Inequality and Health: Pathways and Mechanisms. *Health Services Research*. 1999.

- Higher income also facilitates access to medical care as it can cover copayments for doctor visits and treatments as well as premiums for insurance coverage. (Health insurance coverage is associated with better health outcomes, but the effect of income persists even after controlling for insurance coverage.)
- Higher income is also associated with healthier lifestyles, such as lower tobacco use, and facilitates other behavioral factors that affect health, such as exercise and physical activity. Moreover, studies show that the income effect on health persists even when risky and harmful behaviors (such as smoking) are controlled for.

One of the most salient findings from the literature is that income has a persistent effect on health outcomes throughout the income scale.<sup>2</sup> No matter where a person sits on the income scale, health as measured by mortality and morbidity improves with income, and vice versa. There is no cut off point between those at the bottom and those at the next level of income. Researchers refer to this relationship as the “income gradient” as shown in Chart 1. The gradient is steeper at lower levels of income but persists even at the highest income levels. Research suggests the gradient is weaker for the elderly but still significant.<sup>3</sup>

**Chart 1: Income Gradient**



Source: “Income Inequality and Health: Pathways and Mechanisms.” *Health Services Research*. 1999

Numerous studies have also established a link between a person’s socioeconomic status —as measured by income, education, and occupation—and health.<sup>4</sup> Indicators of SES intend to measure the economic, social, and even political circumstances in which people live as well as an individual’s rank and influence in society. Persons with less income and education are found to use fewer health services than their peers with higher income and education. People with lower SES also use less preventive care, including screenings, vaccinations, and primary care visits. As with income, research has repeatedly demonstrated that SES influences an individual’s health and longevity along a gradient, even when a multitude of other factors (age, sex, health insurance status, health behaviors, etc.) are taken into account.

The pathway of how SES effects health has become the subject of more intense research in recent

<sup>2</sup> Deaton, Angus. *Medicare Advantage Star Ratings: Where Do We Go From Here?* Health Affairs. 2002.

<sup>3</sup> Lynch and Kaplan. *Chapter 2, Socio-economic position*. Social Epidemiology. 2000.

<sup>4</sup> Mechanic. *Disadvantage, Inequality, and Social Policy*. Health Affairs. 2002

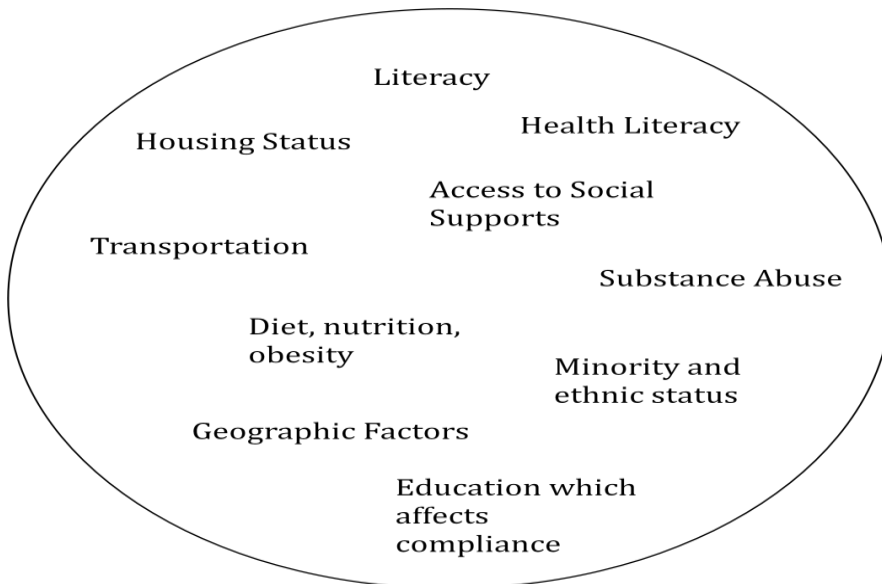
years to better understand more precisely how these factors influence health.

- Educational attainment is believed to have a profound effect on health by increasing a person’s knowledge and skills that enable more effective navigation of life’s practical and social aspects. With better skills and knowledge also comes a greater capacity to engage and understand the medical system and prescribed treatments<sup>5</sup>, commonly known as an individual’s health literacy.
- Occupational status can influence health through physical and psychological factors. Some jobs have more risk than others, i.e., firefighters. Low occupational status is associated with prolonged stress when workers have low decisional input over their work. Chronic stress and psychological distress from work can lead to high blood pressure and diabetes. SES differences in health appear to narrow after age 65, but they are still significant.<sup>6</sup>

### “Downstream” Factors That Affect Health

In addition to socioeconomic status and its components (income, education, and job status), researchers have identified numerous other social factors that are associated with socioeconomic status and that affect outcomes of care, including quality and cost of care. For this paper, we focus on 12 social factors that SNP plans see as the most challenging to beneficiaries’ health and the costs of providing care (See Chart 2).

**Chart 2: List of Social Factors of Concern to SNPs That Affect Health**



Source: SNP Alliance, 2013

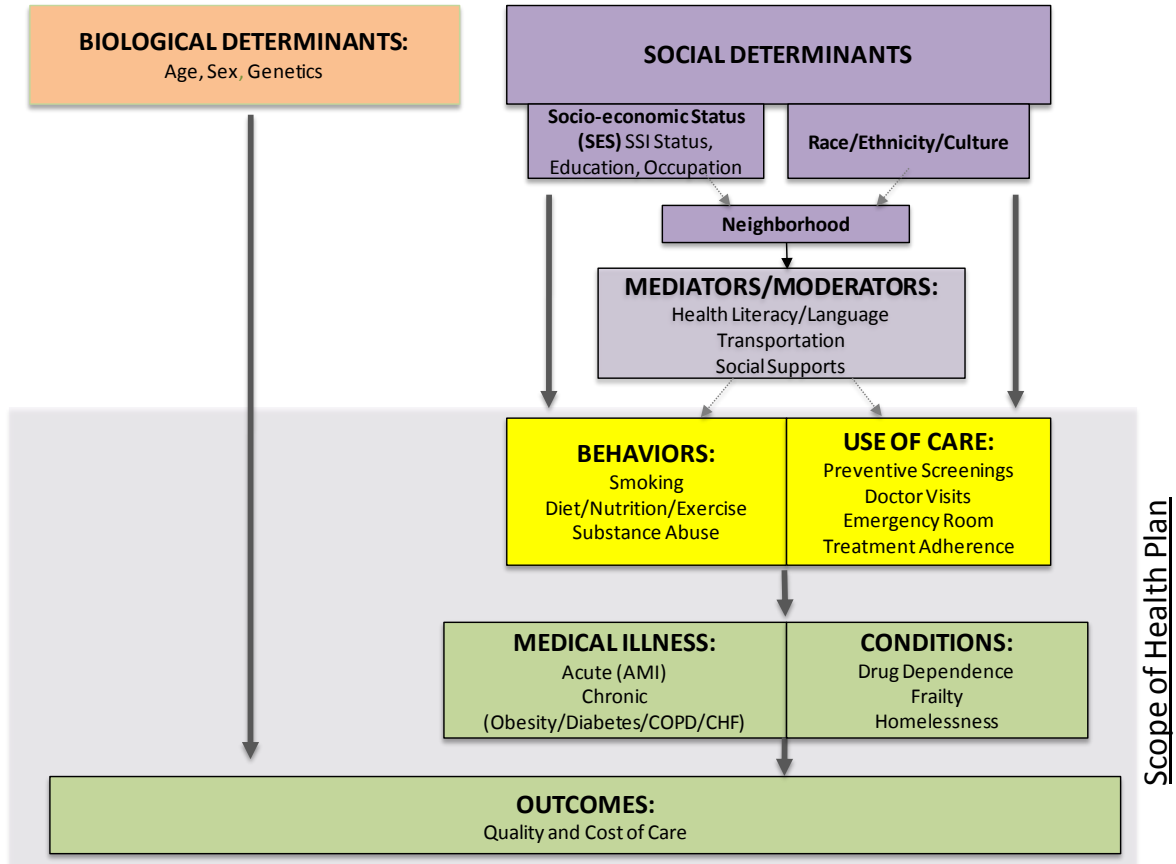
Researchers are still exploring the complicated relationships among these and other factors affecting health. Below is a conceptual framework that we use in this paper to organize and discuss how categories of social determinants interrelate (See Chart 3). Most social factors affecting health, except race and ethnicity, occur “downstream” from socioeconomic status.

<sup>5</sup> Marmot. *The Influence of Income on Health: Views of an Epidemiologist*. Health Affairs. 2002.

<sup>6</sup> Adler, Newman. *Socio-economic Disparities in Health: Pathways and Policies*. Health Affairs. 2002.

Researchers conceptualize these factors as “downstream” because they 1) emerge later in life as a result of lifelong differences in socioeconomic status, and 2) are closer to the health system and health outcomes.

**Chart 3: Determinants of Health Care and Outcomes**



Source: authors' framework based on studies cited in this report describing social determinants of health

Research shows that some downstream factors act as moderators or mediators of low socioeconomic status. Moderators affect the direction and strength of the relation between socioeconomic status and outcomes of care. For example, the presence of social and family supports can moderate an adolescent’s risk for substance abuse and dependence later in life, despite the presence of other risk factors such as a single-parent household. Moderators are protective factors. Mediators are mechanisms through which an individual’s socioeconomic status is able to influence their health outcomes. For example, a person’s level of health literacy has been shown to mediate effects of education on health. Unlike moderators, mediating factors have direct effects on health that are independent and in addition to the effects of socioeconomic status. Consequently, interventions that target moderators and mediators are likely to improve health and possibly lower health costs. Policymakers should be made aware of the important effects of these social factors on health so that they can consider providing resources to the health system to address them.

Research also shows that certain health behaviors, such as smoking, poor diet, and substance

abuse, are associated with low socioeconomic status and by extension some mediators of socioeconomic status. These behaviors exacerbate risk factors for chronic disease and poor health outcomes, including higher mortality. An individual's use of health care and the health system are also linked to socioeconomic status and mediators. For example, the propensity to keep doctor's appointments is driven partly by an individual's access to transportation services and social supports for childcare.

Many downstream factors are *person-level characteristics* that have been known for decades to affect health, such as smoking. Others are more newly understood to affect health, such as health literacy. Environmental factors, such as pollution, also have been shown to influence health. More recently, researchers have explored geographic factors such as "neighborhood" characteristics that function as social determinants of health. Neighborhoods with low SES, for example, often provide less access to fresh fruits and vegetables, leading to lower consumption of these foods in older adults, which can cause documented declines in muscle strength, walking ability, and mortality.<sup>7</sup> Neighborhoods look to be a powerful predictor of health as they embody multiple risk factors simultaneously, such as resident income and education, health literacy, existence of parks for outdoor activity, food availability, and so forth.

Downstream social factors appear "upstream" to clinicians and health plans. They often precede the illnesses and conditions that the health system is called upon to treat. Some factors, such as homelessness, require models of care that differ radically from traditional approaches. The presence of multiple social factors, such as low literacy, mental illness and substance abuse, can complicate care delivery—requiring care that is more intensive than conventional approaches.

It is a major challenge for clinicians and plans that so many social factors determining health occur "upstream" from the health system. Nevertheless, downstream social factors are relevant to clinicians and plans because some of them are likely to be within the sphere of influence of the health system compared to socioeconomic status. Individuals who present with medical conditions and have poor social conditions that negatively affect their health behavior or use of care will likely require more intensive and non-traditional approaches to treatment. For some individuals, social circumstances are more pressing on their health than a specific medical condition.

### **A Closer Look at Three Social Factors of Concern to SNPs**

Research continues to inform our understanding of how the myriad social factors work (and work together) to affect health outcomes. As the relationships become better understood, clinicians, plans, and policymakers should use the information to create more effective methods of intervention, prevention and payment to address them. Table 2 describes in detail the health effects of and interventions for health literacy, homelessness, and substance abuse.

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<sup>7</sup>E. Nicklett et al., "Neighborhood Socioeconomic Status is Associated with Serum Carotenoid Concentrations in Older Community-Dwelling Women," *Journal of Nutrition*, 2011



**Table 2: Health Effects of Literacy, Homelessness and Substance Abuse**

Social Determinant	Pathway	Outcomes	Intervention
<b>Low Health Literacy</b>	<ul style="list-style-type: none"> <li>• Lowers patient engagement in health</li> <li>• Impairs function of patients and consumers in the health care system</li> <li>• Complicates communication between physicians and patients</li> </ul>	<ul style="list-style-type: none"> <li>• High rates of missed appointments</li> <li>• High rates of ER use</li> <li>• Low rates of flu and pneumococcal vaccinations</li> <li>• Low rates of preventive screenings</li> <li>• Low rates of comprehension of ER instructions</li> <li>• Less knowledge of chronic conditions, such as hypertension, diabetes, asthma and effects of smoking</li> <li>• Less consistent control of chronic conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Longer office visits, more time with clinicians to deliver information and answer questions</li> <li>• Provider/plan outreach to monitor care</li> <li>• Simplified, yet accurate instructions post visit/admission</li> <li>• More frequent follow up care via phone, in-home, and in office</li> <li>• Provider/plan knowledge of literacy level of patients</li> <li>• Cultural competency of provider/plan</li> </ul>
<b>Homelessness</b>	<ul style="list-style-type: none"> <li>• Creates high risk for physical injury, substance abuse, mental health disorders</li> <li>• Impairs access to appropriate primary and preventive health care</li> </ul>	<ul style="list-style-type: none"> <li>• Higher acute care needs</li> <li>• Untreated mental health illness and substance abuse</li> <li>• Exacerbated chronic conditions</li> <li>• Physical stress related conditions</li> <li>• Conditions related to poor nutrition</li> </ul>	<ul style="list-style-type: none"> <li>• Full integration of physical and mental health services via care teams</li> <li>• Integrate substance abuse-related care (see below)</li> <li>• Coordination with community social services organizations</li> <li>• Cultural competency and racial sensitivity</li> </ul>
<b>Substance Abuse</b>	<ul style="list-style-type: none"> <li>• Deleterious effects on almost every system in the body</li> <li>• Creates higher risk for physical violence and risk</li> </ul>	<ul style="list-style-type: none"> <li>• Higher rates of hospital care</li> <li>• Causes or contributes to 70 other medical illnesses/conditions:                             <ul style="list-style-type: none"> <li>-- Higher rates of heart disease, cancer, high blood pressure</li> <li>-- Higher rates of depression, anxiety, PTSD, bipolar disorder and schizophrenia</li> </ul> </li> <li>• Co-occurs with wide range of medical and social conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Long-term chronic disease management</li> <li>• Sustained coordination between physical and mental health providers</li> <li>• Medication and/or behavioral therapy</li> <li>• Intensive follow up after hospitalization or relapse</li> <li>• Lifelong monitoring and care</li> </ul>

Source: Marmot; Kushel, et.al." Housing Instability and Food Insecurity as Barriers to Health Care Among Low-Income Americans"; CASA:Columbia "Addiction Medicine: Closing the Gap between Science and Practice"; as well as author and SNP alliance input

Addressing the needs of beneficiaries who experience these social factors requires intensive interventions from providers and health plans that are not accounted for in current Medicare payment. Notably, the interventions listed above all require significant investment in non-traditional forms of care, such as sustained coordination between providers, intensive outreach activities, and more time from clinicians to conduct patient education and engagement. Outcomes for beneficiaries with low health literacy, for example, include missed medical appointments and impaired understanding of the health system, which can lead to limited contact with primary care physicians and over use of hospital care. Intensive and on-going investment in patient education and engagement is needed to reverse these outcomes. For the HIV/AIDS and SPMI populations, for example, SNP providers make daily contact to remind patients to take their medications, as they are central to controlling their conditions. Providing outreach and appropriate care to homeless beneficiaries can be more complicated, as it requires community outreach and extensive coordination between clinical and community providers. Beneficiaries with substance abuse often have unmet mental health needs and more complex medical conditions that are caused by, or exacerbated by, substance overuse. Medical interventions for patients with these social factors will need to include social interventions such as patient outreach, sustained patient engagement, and intensive medical care coordination with multiple providers.

## **Selecting Social Factors for Health Policy Solutions**

As mentioned, researchers have found numerous social factors that can complicate interactions with the health system and lead to poor health outcomes. Some social factors that affect health are being addressed through federal, state, or local programs. But many gaps remain. Which social factors should be addressed through health policy? Which ones are best addressed through Medicare payment? Criteria could be applied to enable policymakers to select social determinants for which health policy solutions, including modifications to Medicare payment, would be appropriate and effective. Useful criteria include:

- **Strong evidence base.** A strong base of evidence of the negative health effects of the social determinant should exist. Addressing certain social factors may yield better health and cost outcomes than others.
- **Complexity/severity.** Certain social determinants could be more salient for health policy solutions because they create more complexity or severity of illness than others.
- **Proximity to health system.** The health system must be able to identify beneficiaries with a social determinant of interest and able to intervene to reduce or eliminate the negative health effects of it, i.e., the social determinant and effective interventions must be within the sphere of influence of providers and health plans in the health system.
- **Interactions.** Some social determinants encompass or interact with others so that mitigating or eliminate their effects would produce positive spillover effects for others. Health literacy and neighborhood health may be examples.
- **Acceptance.** A social factor or associated health interventions may have social or political stigmas that make it more important or more difficult to address on a federal level.



## The Role of Race/Ethnicity in Determining Health

Members of racial and ethnic minority groups are a growing part of the Medicare population. By 2025, minority persons will constitute 33 percent of all Medicare beneficiaries, up from 15 percent in 1995.<sup>8</sup> A recent peer-reviewed study shows that SNPs are disproportionately serving ethnic and minority groups relative to their presence in SNPs’ operational areas, whereas non-SNP MA plans are serving a proportionate share of ethnic and minority groups compared to their operational areas.<sup>9</sup> The study also found that SNPs substantially concentrate beneficiaries in each racial/ethnic group more often than non-SNP MA plans (See Table 3).<sup>10</sup> Therefore, evidence of the role of race/ethnicity in determining health is relevant for SNPs.

**Table 3: Racial Characteristics of SNP Enrollees**

Race/Ethnicity	SNPs	Non-SNP MA
White	35.2%	71.3%
Black	13.4%	7.2%
Latino	35.7%	8.1%

Source: Weinick, R. et al. *Does the Racial/Ethnic Composition of Medicare Advantage Plans Reflect Their Areas of Operation?* Health Services Research, 2013

The role of race/ethnicity in determining health has been a rapidly growing focus of research and policy analysis in recent years. Research has found that minorities in the U.S. have higher overall rates of illness and mortality compared to non-Hispanic whites.<sup>11</sup> Minorities also experience health disparities compared to individuals of higher socioeconomic status. Policymakers have become increasingly concerned about health disparities linked to race because they can signal differences that arise from disparities in socioeconomic status or discrimination within the health system.<sup>12</sup>

The relationship between race/ethnicity and health is complicated by a strong correlation with the components of socioeconomic status. On the one hand, research has shown consistently that education and income are associated with lifelong health and survival outcomes that transcend the independent effects of race. On the other hand, recent research also suggests that racial/ethnic group membership can partially moderate, i.e., dampen, the negative effects of education and income on health. The Affordable Care Act of 2010 will significantly close racial disparities in access to care by expanding Medicaid and providing federal subsidies for private health insurance. Research shows, however, that having health insurance itself does not

<sup>8</sup> *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, Institute of Medicine, National Academies Press, 2003

<sup>9</sup> Weinick, R., et al., “Does the Racial/Ethnic Composition of Medicare Advantage Plans Reflect Their Areas of Operation?” Health Services Research, 2013. doi: 10.1111/1475-6773.12100

<sup>10</sup> Ibid.

<sup>11</sup> Reece, A.E., et al., “New Incentive-Based Programs: Maryland’s Health Disparities Initiatives, Journal of the American Medical Association,” July 17, 2013).

<sup>12</sup> Olshansky, J., et al., “Differences in Life Expectancy Due to Race and Educational Differences are Widening, and Many May Not Catch Up,” Health Affairs, August 2012.

overcome all of the barriers to quality care or fully close disparities in health. Thus, policies that reduce socioeconomic disparities in health would inevitably overlap in addressing racial disparities in health due to the association between race/ethnicity and socioeconomic status.

Currently, researchers have inconsistent views about the independent health effects of race/ethnicity and socioeconomic status. Some studies suggest that most racial/ethnic disparities in health outcomes are no longer statistically significant after adjusting for socioeconomic status and other social differences that have been observed among racial/ethnic groups.<sup>13</sup> MedPAC noted in a recent report to Congress that health disparities in race/ethnicity tend to disappear when income is accounted for.<sup>14</sup> Other literature reviews, notably by the Institute of Medicine in its report *Unequal Treatment*, conclude otherwise: differences in health care use by racial/ethnic groups persist even after controlling for sociodemographic and clinical factors.<sup>15</sup>

The IOM's view in no way suggests that socioeconomic status is not relevant when looking at racial disparities. On the contrary, under the IOM view, providers and health plans would be fully accountable for overcoming disparities in the use of health care services (and some argue quality of care delivered) that derive from socioeconomic status. Therefore, socioeconomic status and related factors could identify beneficiaries and geographic areas where interventions should be targeted in order to help overcome barriers and reduce disparities between socioeconomic groups and by extension racial/ethnic groups.

## Does Medicare Payment Account for Social Determinants of Health?

The Medicare program is the largest payer of health care services in the U.S. Medicare pays for covered benefits under two payment methods: fee-for-service (FFS) under the traditional program, and capitated payments under the Medicare Advantage (MA) program. Congress and the Centers for Medicare and Medicaid Services (CMS) frequently modify these payment methods, often with the goals of increasing **payment accuracy**, encouraging more **efficient use of services**, or ensuring **access to care**. Some Medicare payments are adjusted for health characteristics of beneficiaries that affect costs of care. At times Congress has addressed broad health system goals through Medicare payment.

*Payment Goals.* The concepts of payment accuracy, efficiency, and access are broad yet they have been narrowly applied under Medicare. Payment accuracy, for example, has been concentrated on the production costs of discrete units of medical care covered under FFS, rather than on a broader set of services that might include health and social care related to the cost of providing higher quality care. One reason for the narrow focus could be that Medicare's statutory benefits are rooted in indemnity medical insurance practices that existed when Medicare was established

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<sup>13</sup> Nicklett, Emily. *Socioeconomic status and race/ethnicity independently predict health decline among older diabetics*. BioMed Central. 2011.

<sup>14</sup> MedPAC. Report to the Congress. June 2013.

<sup>15</sup> *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, Institute of Medicine, National Academies Press, 2003

in 1965. As a result, the goals of payment accuracy, efficiency, and access have been constrained by traditional definitions of acute, post acute, and physician care with an emphasis on procedure or visit-based services. Only recently under the Affordable Care Act (ACA) did Congress expand the goal of payment accuracy to include quality and allow CMS to innovate payments through the Center for Medicare and Medicaid Innovation (CMMI). Payment innovations could help sever Medicare's deep ties to FFS and cover a broader array of services than those currently specified in statute, as long those services are shown to achieve more efficient and higher quality care.<sup>16</sup> Payment innovations also could be used to test whether programs that address the effects of social determinants of health achieve the same goals.

*Payment Adjustments.* Congress requires CMS to adjust Medicare payments under MA and FFS for health characteristics of beneficiaries and patients that increase or decrease expected costs of care, referred to as health and case-mix adjustment. The authority to health and case-mix adjust Medicare payments has been narrowly applied to include a limited set of *medical* characteristics of beneficiaries and not broader social characteristics that also affect health and costs of care. CMS includes an indicator or dual-eligible status in the MA health risk adjustment model as described below. As a general matter, however, CMS does not currently reflect social characteristics of beneficiaries in Medicare payment adjustments, even if they are known to affect health or costs of care. CMS may be influenced to reflect social determinants of health in health and case-mix adjustment if doing so achieved payment accuracy, efficiency, or improved access. If CMS does not believe current law allows relevant social characteristics of beneficiaries to be included in payment adjustments, then Congress would need to authorize it. Congress recently established payment adjustments for acute care hospitals and MA plans meet quality of care benchmarks. These modifications increase payments to hospitals and MA plans that achieve higher quality care and decrease payments for lower quality care. Payment adjustments could be established when providers and plans reduce health disparities between socioeconomic groups.

*Separate Payments for Health System Goals.* Congress has acted on several occasions to address broad health system goals through Medicare payment. For example, Congress added Graduate Medical Education (GME) payments to hospital payments in order to provide federal resources for medical education in the U.S., which adds significant resources to the health system each year. These and other Medicare payment policies are important precedents that indicate Congress may be willing to consider ways of reducing the effects of social determinants of health.

Below is a basic description of MA and FFS payment systems, with highlights of certain features relevant to designing Medicare payment options.

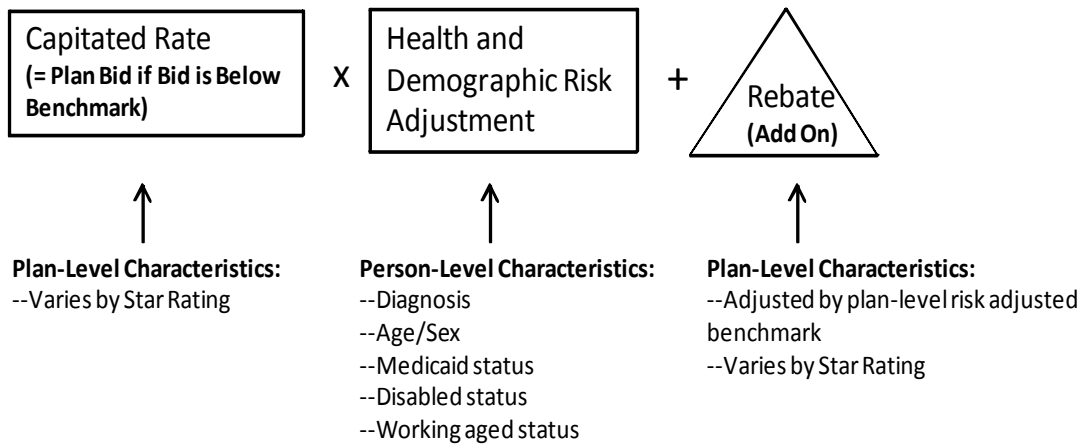
**MA Payments.** Congress pays private health plans a monthly, capitated amount to provide

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<sup>16</sup> Under ACA, Congress also established new payment for patient health risk assessments and education when conducted within an Annual Wellness Visit but not in conjunction with any other services or specific conditions.

original Medicare benefits (excluding hospice care) to beneficiaries who chose to enroll in them. Currently, capitated payments to MA plans are adjusted for the health and demographic status of the beneficiaries who enroll in them. Total payments to plans include a capitated payment, risk adjustment based on health and demographic factors, and “add-on” payments in the form of rebates, as demonstrated in Figure 2.

**Figure 2: MA Payment, Adjustments and Add-Ons**



Source: adapted from MedPAC Payment Basics, 2012

**Capitated Payment.** The MA capitated rate for each plan equals each plan’s bid (i.e., expected revenue requirements including administrative expenses and profit) up to a maximum benchmark amount. Plans can earn “add-on” payments, or rebates, only if their capitated rates or bids are below the benchmarks for their service areas. Per the ACA, MA benchmarks are based on Medicare’s FFS per capita costs in each county (minus hospice and certain FFS add-on payments). In counties with low FFS costs, Congress set MA benchmarks above FFS to give plans more resources to operate and provide access to plans. In counties with high FFS costs, Congress set MA benchmarks below FFS to give plans incentive to provide efficient care.

As a result of ACA changes to MA payment, FFS has become the cost standard for MA plans. MedPAC views setting FFS as a cost standard for MA as a way to achieve “payment neutrality” between the two programs. However, strictly enforcing payment neutrality between MA and FFS could have the unintended effect of making FFS the care standard for MA plans as well. As mentioned, FFS does not cover a wide range of health services, such as care management and patient engagement interventions, which are needed to achieve quality outcomes for beneficiaries with complex medical needs and/or disadvantaged social conditions. For plans that serve certain subsets of dual eligibles, such as those with dementia, HIV/AIDs, homelessness and SPMI, broader health and intensive patient management services should comprise a significant share of treatment costs.

**Risk Adjustment.** Congress requires CMS to adjust MA capitated payments for the health risk of MA enrollees in order to calibrate capitated rates to expected medical costs. Upward adjustments

are required when plans enroll beneficiaries with higher than average health risk; while downward adjustments are required when plans enroll beneficiaries with lower than average health risk. The MA health risk adjustment model includes demographic and a limited set of medical conditions, as shown in Chart 4. The risk model has been described as statistically parsimonious because it covers a small number of medical conditions (70 diagnoses) compared to the number catalogued by medical practitioners (about 18,000 in version 10 of the International Classification of Diseases or ICD-10).<sup>17</sup> While the 70 medical conditions in the risk model are known to significantly affect health costs of the general Medicare population, the risk model excludes costly conditions and co-occurring conditions that are likely to be associated with lower socioeconomic status. Drug/alcohol dependence and mental illnesses (such as depression, bipolar disorder and schizophrenia) are included in the risk model but none of these (except schizophrenia) are interacted with other conditions, even though they can complicate other medical conditions. Morbid obesity is included in the risk model although obesity is excluded. Social conditions such as low literacy are excluded as well. The lack of social factors in the MA health risk model is a major disadvantage to plans that serve a disproportionate share of beneficiaries with low socioeconomic status.

Proponents of the current risk model point to the inclusion of “SSI status” in the health risk model as a proxy for conditions and added health costs associated with low income or socioeconomic status. SSI status is intended to help adjust payment for dual eligible enrollees relative to their expected medical costs. (Mean expenditures for dual eligible beneficiaries were 29 percent higher than predicted by age, sex, and principal hospital diagnosis when the health risk model was created.<sup>18</sup>) SSI status was included in the MA risk model because it is routinely available in Medicare administrative files and considered immune from manipulation by health plans. It is considered a weak proxy, however, for income and has not been shown to account for the full range of health costs associated with socioeconomic status. In addition, SSI status does not reflect the gradient impact of income on health, as there are no added adjustments for enrollees with incomes above the SSI limits in a state. SSI eligibility rules for Medicare beneficiaries also vary widely by state, resulting in differing proportions of the poor who are dual eligible in each state and for whom plans would receive a payment adjustment. Importantly, SSI status does not reflect the independent effects of educational status, even though education is known to be a strong indicator of health care use and outcomes of care even when income is accounted for.

Congress established MA health risk adjustment with the dual goal of reducing favorable selection by plans and providing adequate resources for complex cases.<sup>19</sup> However, the overwhelming emphasis of risk adjustment has been on reducing favorable selection and not on ensuring adequate resources for complex care. Recent studies confirm that MA health risk adjustment has

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<sup>17</sup> The 10<sup>th</sup> edition of the International Classification of Diseases (ICD-10) has about 18,000 codes.

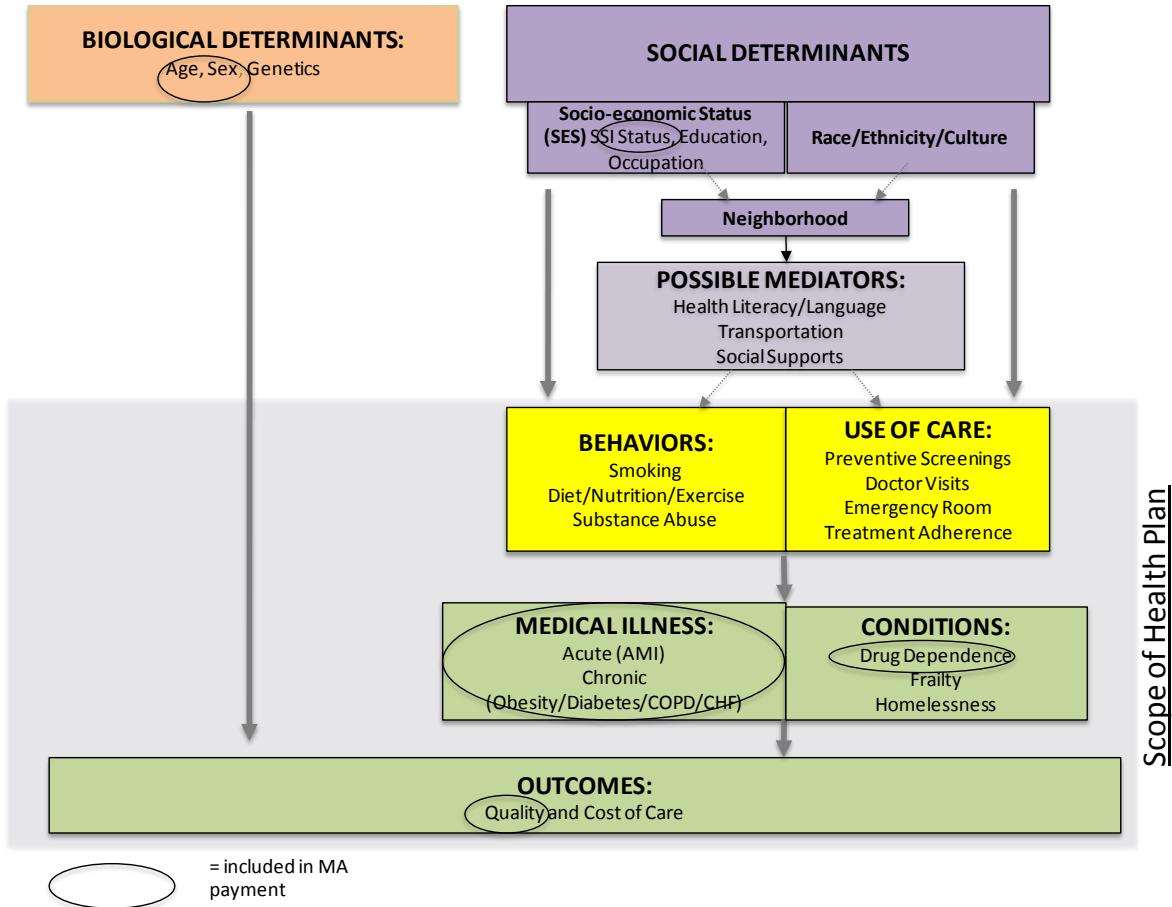
<sup>18</sup> Pope, G. et al., “Principal Inpatient Diagnostic Cost Group Model for Medicare Risk Adjustment,” *Health Care Financing Review*, Spring 2000

<sup>19</sup> Research showed plan enrollees on average were 11 percent healthier than FFS beneficiaries based on risk adjustment data available. Plans were paid 95 percent of local FFS costs so the overpayment was estimated to be 6 percent overall



achieved the goal of reducing favorable selection, yet the emphasis remains.<sup>20</sup>

**Chart 4: Determinants of Health Included in Current MA Payment**



Source: authors' framework based on studies cited in this report describing social determinants of health and "CY 2014 MA Capitation Rates and MA and Part D Payment Policies and Final Call Letter"

Other countries that use capitated payments, such as the U.K. and Canada, use broader risk adjustments than health risk, such as case-mix. Unlike health risk, case-mix usually incorporates measures of socioeconomic status, such as income. The U.K. also gives general practitioners a separate "needs based" payment if they serve patients in high disparity areas.

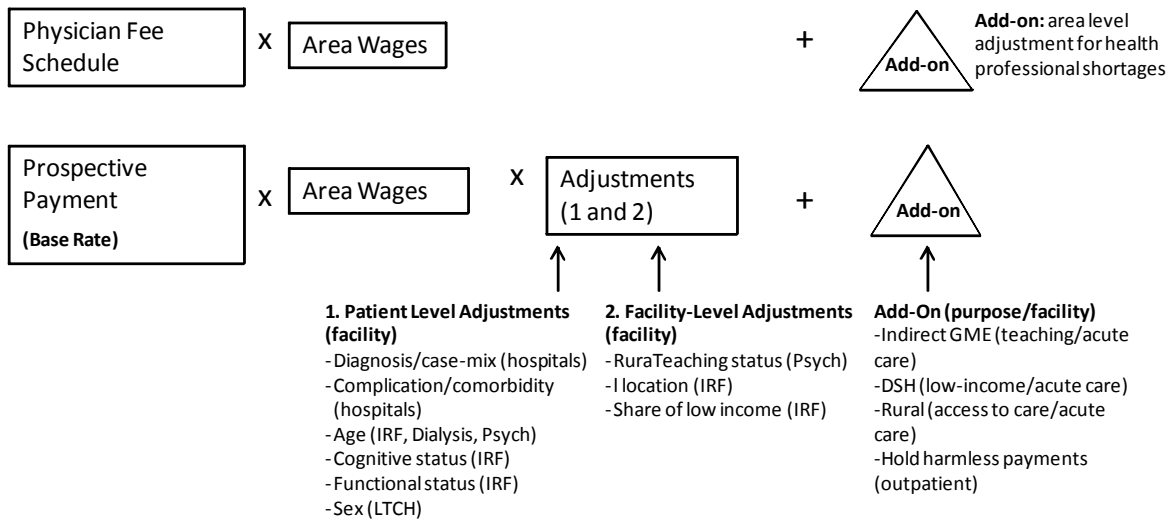
*Add-on or Rebate Payment* MA plans may provide a broader mix of health services that can be used to address social determinants of health if they earn add-on or rebate payments from Medicare by being more efficient than MA benchmarks or if they charge beneficiaries the full cost of added services. Arguably, rebates are more achievable in areas where FFS is over utilized and costly, such as areas with an oversupply of providers and less managed care. In these areas, plans may be able to earn enough rebate dollars to cover the cost of services that address the effects of social determinants of health.

<sup>20</sup> Williams, J., John Hsu, Joseph Newhouse, "New Risk-Adjustment System Was Associated with Reduced Favorable Selection in Medicare Advantage," Health Affairs, December 2012.

Rebates are more difficult to earn in areas where FFS is already efficient or where FFS is underutilized, such as many rural areas. Congress set MA benchmarks above FFS in low FFS cost areas in order to improve access to managed care. MA benchmarks in these areas are still likely too low for plans to be able to earn rebate dollars to the degree needed to pay for services that address social determinants of health. CMS recently limited the scope of services that can be funded through rebates to those that are considered medical care, which limits the ability of SNPs to address social determinants of health even if they earn rebate payments.

**FFS Payments.** FFS payments are designed to cover the average cost of delivering medical services covered by Medicare. Unlike MA payment, FFS payments are set at the service level and not the beneficiary level. Total FFS payment varies by patient according to the volume and mix of services provided and is adjusted for area wages where services were delivered, as shown in Figure 3. Under FFS, providers that deliver more services are paid more than providers that deliver fewer services. On the one hand, incentives under FFS help guarantee access to care for patients with the greatest needs for medical care; on the other hand research shows that incentives to deliver more services do not necessarily produce better health outcomes. FFS payments are made on a fee schedule or prospective payment basis and may include add-on payments. Like capitated payments, prospective payments are adjusted for individual characteristics of patients in order to calibrate payment to expected medical costs.

**Figure 3: FFS Payment, Adjustments and Add-Ons**



Source: adapted from MedPAC Payment Basics, 2012

**Fee Schedule and Prospective Payments.** Physician care and outpatient lab services are paid on a fee schedule basis. Fee schedule payments are set uniformly across patients for each service. Fee schedule amounts are adjusted for area wages but not for individual health or socio-demographic characteristics of patients. CMS recently proposed a new fee schedule payment for physicians that will provide a base payment for care management of chronic diseases. The proposed payment recognizes that even FFS payments are not adequate to support clinicians in addressing the full range of health care needs of patients with chronic illness. Unlike fee schedules, prospective payments are fixed, predetermined amounts that cover costs of delivering a set of related

services. In many respects prospective payment mirrors capitated payment in that it provides a pre-determined payment for services.

*Case-Mix Adjustments.* Under prospective payment, some patient-level characteristics are taken into account in order to adjust the base payment for expected medical costs of each patient. Case mix adjustment under FFS tends to be limited to immediate medical indicators of patients, such as admitting diagnoses, and the presence of comorbidities, and are therefore intended to reflect differences in a beneficiary's clinical status (rather than their health or social status) that could affect the cost of delivering care. A small number of prospective payment systems adjust for demographic factors of patients such as age.

*Facility-Level Adjustments and Add-On Payments.* Congress has also established a number of FFS provider and facility-level adjustments as well as add-on payments in order to address certain policy goals. Goals have included maintaining access to providers for disadvantaged and rural populations and federal support for graduate medical education and as described in Table 4. Facility adjustments and add-ons under FFS reflect an acknowledgment by Congress that certain groups of beneficiaries and geographic areas require more resources to deliver Medicare benefits than are built into typical FFS payment.

Recently, the General Accounting Office (GAO) examined the payment adjustments and add-ons under FFS prospective payment.<sup>21</sup> The GAO report states that a majority of hospitals receive more than one add-on payment. About 91 percent of hospitals receive adjustments or add-ons, all of which enhance Medicare's standard rates. GAO argues that fifteen additional payments associated with hospitals undermine the integrity of prospective payment and discourage efficient care. Some of the adjustments are simply exemptions from prospective payment altogether. Rural areas and hospitals that serve a disproportionate share of uninsured patients receive add-on payments and counter the GAO report by contending that FFS payment (based on volume of care) is inadequate to sustain provider organizations that provide access to care to low-volume and lower income areas.

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<sup>21</sup> *Report to Congressional Requesters: Legislative Modifications Have Resulted in Payment Adjustments for Most Hospitals* (GAO-13-334), General Accountability Office, April 2013

**Table 4. Examples of Add-On Payments under FFS**

Add-On Payment	Provider	Description	Policy Goal
<b>Graduate Medical Education (GME)</b>	Acute Care Hospitals	Two payments (indirect and direct) to hospitals based on their role in educating physicians and researching new technologies. Indirect payments support additional facility costs associated with higher case complexity. Direct payments pay physicians for their role as educator and the reduced caseload because of that time requirement.	Graduate medical education
<b>Disproportionate Share Hospital (DSH)</b>	Acute Care Hospitals	Assists hospitals that treat a higher percentage of low-income beneficiaries. Calculated based on the number of Medicaid days and Medicare SSI days. Adjusted for the national percentage of uncompensated care that an individual hospital provides.	Support for hospitals serving low-income populations
<b>Rural</b>	Physicians, Hospitals, IRFs,	Promotes physician and facility investment by including a 10 percent add on for Health Professional Shortage Areas, a 101 percent payment for Critical Access Hospital services, an 18.4 percent add-on for rural IRFs, a low-volume adjustment based on geographic isolation, and many more.	Access to care in low-volume areas

Source: Author analysis of AMA, Health Affairs, and OIG reports on payment add-ons

While Medicare covers numerous tests and procedures for most diseases, FFS payment excludes broader health services such as patient outreach and engagement and chronic care management (although CMS’ recently proposed new payment under the physician fee schedule will partially address chronic care). These and other health services are often necessary to care for beneficiaries with complex needs but are typically not provided under FFS because Medicare simply does not pay for them. Moreover, such services could be effective in providing higher quality care to beneficiaries with health needs generated or exacerbated by poor social circumstances.

Current FFS also payment lacks indicators for conditions that complicate care delivery such as physical disabilities, homelessness, substance abuse and obesity. For example, treating patients with physical disabilities requires investment in specialized equipment by primary care providers in order to make physical exams possible, including exam tables with electric lifts, and dental chairs that accommodate individuals with a physical disability. Extensive outreach and behavioral health management is necessary to treat homeless populations but is not captured in FFS payment. FFS does not provide payment for mobile primary care clinics, nor does it adequately

compensate providers for the additional time associated with direct outreach. Thus, FFS as a cost standard for MA could disadvantage plans that treat a disproportionate share of beneficiaries with conditions that may be underfunded in FFS. Assumptions by policymakers have been that FFS payment always leads to higher spending and that higher spending can be managed by capitation. MA savings from FFS may not always be feasible, especially in the short run, as incentives under FFS can also lead to underutilization of care and rather than overutilization.

**MA Quality Bonus Program.** The ACA established a payment adjustment for higher quality care delivered by MA plans. The MA quality bonus payment (QBP) is part of a larger effort by Congress to pay for performance and establish Medicare as a value-based purchaser of health care. Under the QBP, the MA benchmark is increased by 5 percentage points for any MA contract whose quality and performance is rated from 4 to 5 stars on a five-star scale. CMS established a national payment demonstration to expand the quality bonus program to 3 and 3.5 star plans for 2012 through 2014.

The current five-star rating system for MA plans is a composite score based on 37 different quality measures under Medicare Part C and 18 quality measures under Medicare Part D (See Table 5). The data for MA quality measures come from a range of sources, including plan encounter data and medical records (HEDIS), MA enrollee surveys (CAHPS and HOS), and administrative data on plan performance collected by CMS. Measures are assigned a weight from 1 to 3 depending on the information it intends to capture. CMS places the heaviest weight on outcome measures, such as blood pressure control and medication adherence.

**Table 5: Measures in MA Plan Quality Ratings**

	Domains	Number of Measures	Number of Measures Risk or Case-Mix Adjusted	Total Weight
<b>Part C Measures</b>	Staying Healthy: Screenings, Tests and Managing Chronic (Long Term) Conditions**	10	0	14
	Member Experience with Health Plan	6	6	8.5
	Member Complaints, Problems Getting Services, Choosing to Leave the Plan, and Improvements in the MA Plan’s Performance	4	1	5.5
	Health Plan Customer Service	4	0	5.5
	<b>Total Part C Measures</b>	<b>37</b>	<b>8</b>	<b>54.5</b>
	<b>Part D Measures</b>	Drug Plan Customer Service	5	0
Member Complaints, Problems Getting Services, and Improvements in the Drug Plan’s Performance		4	1	5.5
Member Experience with Drug Plan		3	3	4.5
Patient Safety And Accuracy of Drug Pricing		6	0	16
<b>Total Part D Measures</b>		<b>18</b>	<b>4</b>	<b>33</b>
<b>Total Measures for Parts C and D</b>		<b>55</b>	<b>12</b>	<b>87.5</b>
<i>Source: CMS Technical Notes for 2013 plan star ratings as of September 13, 2012</i>				

** This domain includes the 3 SNP-only measures		
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To date, only 12 of the 55 MA quality measures are case-mix adjusted to reflect individual characteristics of enrollees that are linked to better or worse health outcomes. All 12 of the measures relate to patient experience and complaints; therefore none of the clinical process or outcomes measures (which are weighted more heavily in a plan’s composite score) is case-mix adjusted. Case-mix attempts to control for individual factors that are known to have independent effects on a person’s health outcomes. Current case-mix adjust quality measures for characteristics such as age, education, general health rating, mental health rating, the use of a proxy in completing the survey, and dual eligibility status. Case-mix adjustment has a broader scope than health risk adjustment as it includes social factors that are known to affect health in addition to health status or disease factors.

It would be reasonable to apply case-mix adjustment to more than 12 MA quality measures, given the sizable body of evidence of the health effects of social determinants. Prior studies have shown negative effects from using unadjusted HEDIS and HOS measures to rate plans as they ignore the socioeconomic make up of the populations enrolled by plans. Plans that disproportionately serve beneficiaries in low socioeconomic areas may be disadvantaged by narrow case-mix adjustment of quality measures. Plans with higher quality ratings are able to bid against five percent higher MA benchmarks rates, enabling them to retain and offer greater extra benefits to their enrollees. As a result, inadequate case-mix adjustment can result in regressive outcomes in which beneficiaries in lower socioeconomic areas have access to plans with lower ratings and consequently less generous benefit packages. Pay- for-performance programs should encourage and reward quality care but not create financial stress for providers and plans that serve disadvantaged populations whose social conditions pose the greatest challenges for the health system.

It is important to note that health literacy and cultural competence are becoming increasingly important factors in performance assessment. The National Quality Forum (NQF) has endorsed both the CAHPS Item Set for Addressing Health Literacy as well as the CAHPS Cultural Competence Item Set<sup>22</sup>, both of which have potential to be included in MA QBP as well as hospital VBP requirements in future years. These measure sets, as well as increased research on health literacy and cultural competence, indicate that plans and providers will likely be monitored for their success and failure in educating patients and engaging them appropriately. Plans and providers should carefully consider whether these measures should be case-mix adjusted in order to control for differences in literacy and patient engagement that are derived from social factors.

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<sup>22</sup> The CAHPS Item Set for Addressing Health Literacy and The CAHPS Item Set on Cultural Competence were endorsed by NQF on August 10, 2012. Both item sets are designed to be supplemental to the CAHPS Clinician and Group Survey.

**FFS Value-Based Purchasing.** The ACA included several provisions to expand pay-for-performance under the FFS program. The goal is to adjust payments for higher quality and not just the quantity of the services provided. Many providers, such as physicians, will begin with pay-for-reporting programs. The inpatient hospital PPS is the only FFS payment system that is fully transitioned to pay-or-performance through the hospital value-based purchasing program (VBP).

CMS adopted 13 of 45 quality measures for the VBP that hospitals had been reporting under a voluntary reporting program. Measures are divided between 2 domains of care: 1) clinical process of care measure (70 percent weight) and 2) patient experience of care (30 percent). Hospitals will be paid for improving their scores and for attaining certain benchmarks. Funds for the hospital VBP come from a 1 percent across-the-board reduction in hospital prospective payments. The funds are pooled and then redistributed based on quality ratings.

Current only 1 measure in the VBP, a patient experience measure collected from the hospital CAHPS, is risk adjusted. Risk adjustment for this measure is based on cohort health status and no other person-level characteristics. CMS is proposing to use 25 measures to assess hospital quality in 2015, as shown in Table 6. All 12 of the new measures would be risk or case-mix adjusted. As in MA, only the hospital CAHPS measures would be more broadly case-mix adjusted to reflect health status and education. Outcomes measures, such as 30-day mortality rates and spending per Medicare patient, would be health risk adjusted only.

MedPAC recommends that CMS apply a broader case-mix adjuster to the hospital readmission measure, namely to include income. They argue that without broader case-mix adjustment, hospitals serving low-income populations are likely to be disadvantaged financially by the measure, especially as outcomes measures increase in weight. MedPAC has also discussed, but is yet to make a formal recommendation, that controlling for socio-demographic differences could be achieved by comparing peer groups in the same geographic region. Peer groups would be compared to a national standard of achievement set by CMS, which would allow providers who treat a disproportionate share of low-income beneficiaries to avoid a financial penalty for higher readmissions associated with low-income populations. As under MA, inadequate case-mix adjustment can result in regressive outcomes in which hospitals operating in lower socioeconomic areas have lower ratings and consequently fewer financial resources to operate.

**Table 6: Proposed Measures in FFS Hospital Value-Based Purchasing Program**

	Number of Measures (FY2015)	Risk Adjusted (Yes/No)	Notes
<b>Process</b>			
Heart Attack	3	No	
Heart Failure	1	No	
Pneumonia	2	No	
Surgery (Surgical Care Improvement P	2	No	
Healthcare associated infections	5	No	
<b>Total Process</b>	<b>12</b>		
<b>Outcomes</b>			
30-day death rates	3	Yes	Based on cohort health status
Serious Complications (AHRQ Patient	Composite	Yes	Health status
Hospital-acquired conditions	1	No	CMS is currently evaluating risk adjustment
<b>Total Outcomes</b>	<b>5</b>		
<b>Patient Experience Measures</b>			
HCAHPS	7	Case-mix adjusted	Self-reported health status, education, service line (medical, surgical, or maternity care), age, response percentile order (also known as “relative lag time” between discharge and survey completion), service line by linear age interactions, and primary language other than
<b>Efficiency</b>			
Spending per Medicare patient	1	Price Standardized and Risk Adjusted	Price standardization removes sources of variation that are due to geographic payment differences such as wage index and geographic practice cost differences, as well as indirect medical education (IME) or disproportionate share hospital (DSH) payments. Risk adjustment accounts for
<b>Total Hospital VBP Measures</b>	<b>25</b>		
Note: FY 2015 HCAHPS measures include: Communication with Nurses, Communications with doctors, responsiveness of hospital staff, pain management, communication about medicines, cleanliness and quietness of hospital environment, discharge information, and overall rating of hospital.			

Source: analysis of FY 2014 IPPS Proposed Rule

### Can Medicare Payment Account for Social Determinants of Health?

Medicare dual-eligible beneficiaries have lower socioeconomic status than their counterparts, as mentioned at the beginning of this paper. As a result, they face considerable health challenges, including less frequent use of preventive care, poorer health outcomes, and greater difficulty with activities of daily living. Minority groups represent a growing share of the Medicare and SNP populations. While research has found a number of factors associated with SES that could be used to identify related disparities and interventions, Medicare payment policies have not embraced social determinants of health, partly because Medicare benefits and payment policy are still grounded in FFS and indemnity insurance concepts. Another reason is that payment adjustments for beneficiary characteristics, such as health status, have been narrowly interpreted to include



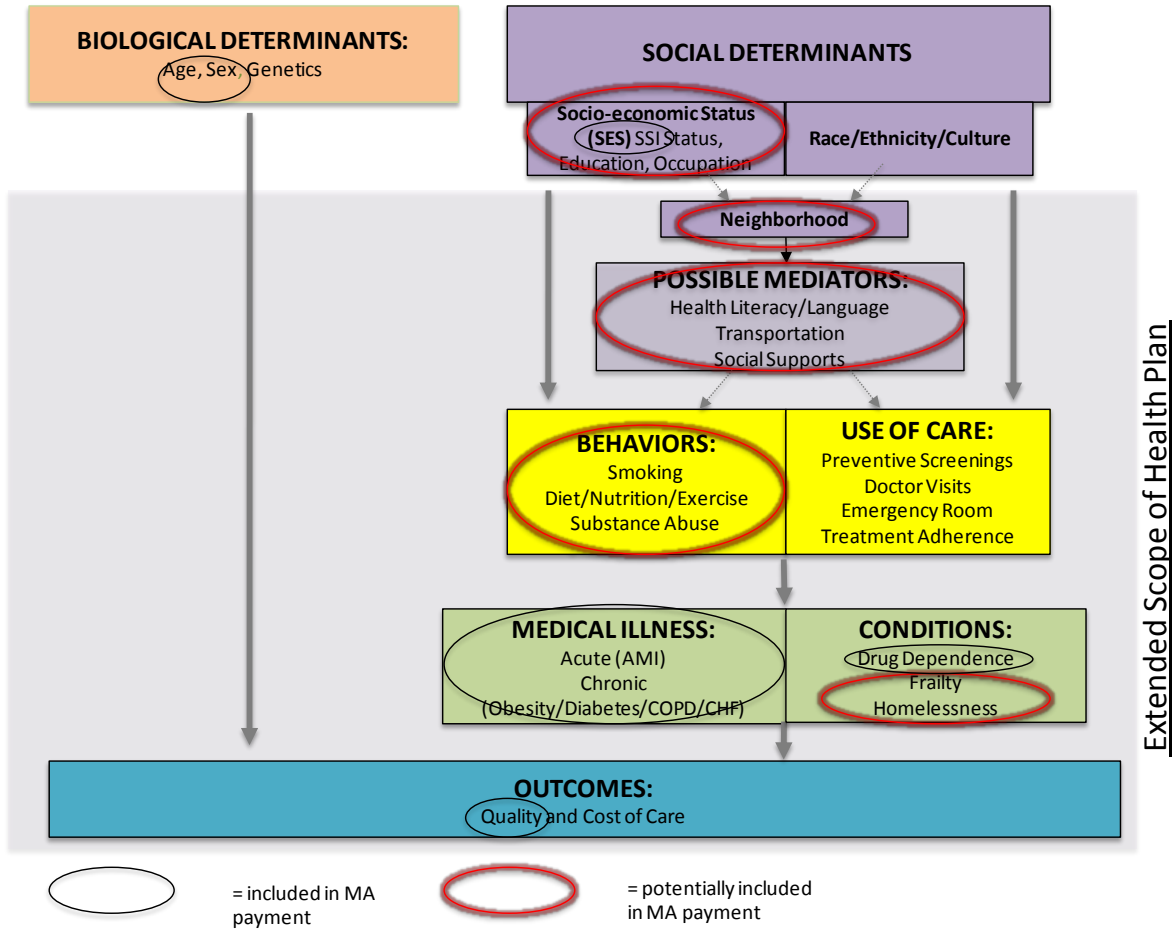
only medical diagnoses and not social factors known to affect health.

Capitated payments in both MA and FFS have required a shift in focus away from service-level care and toward person-level care. This shift creates opportunities for more sophisticated adjustments to payments to encompass individual or population-based indicators of social disparity as well as individual disease severity. To avoid unintended consequences from payment policy, distributions of global health payments in other countries, such as Canada, have incorporated some social indicators such as income. The U.K. distributes add-on payments to general practitioners that serve “disparity areas.” In both cases, the goal is to distribute resources to the health system based on the broader health and social needs of the populations served and not solely on the medical services provided.

The ACA expansion of Medicare pay-for-performance and capitated care arrangements through accountable care organizations will likely lead to greater considerations in the future of linking payment to broader person-level factors that affect health. In the absence of such considerations, programs that pay for quality or capitate payment could create the unintended consequence of disadvantaging providers and plans that serve areas with the highest disparity indicators. New payments under Medicare could be established to broaden the policy goals of payment accuracy and efficiency. Policymakers in the U.S. will need to debate and decide the merits of the case for more closely linking Medicare payment with social determinants. Based on the strength of the literature and growing concerns over widening health disparities in the U.S. a case can certainly be made that acknowledging social determinants in payment is warranted.

The following sections discuss possible approaches to expanding payments or creating new payments that account for social determinants of health under Medicare. Payment for MA plans in particular could account for a much broader array of determinants of health, as demonstrated for MA payment in Chart 5. Such payments would be used by providers and plans to cover costs of providing care to beneficiaries with health care needs that are not adequately reflected in current payment.

Chart 5: Determinants of Health That Could be Accounted for in MA Payment



Source: authors' framework based on studies cited in this report describing social determinants of health and "CY 2014 MA Capitation Rates and MA and Part D Payment Policies and Final Call Letter"

### Payment Approaches to Account for Social Determinants

At least four different payment approaches could be considered as vehicles to better reflect social determinants of health under Medicare. They include modifying the risk and case-mix adjustment system, modifying pay-for-performance programs, establishing a new adjustment to current payments, and establishing a separate add-on payment. Each of these approaches is described below and summarized in Table 7.

#### 1. Modify risk adjustment and case-mix systems.

Current risk adjustment and case-mix systems incorporate beneficiaries' demographic and health risk factors into their models (such as age, sex, diagnoses, and comorbidities). The models can be modified to include individual social factors known to affect health. While current models use SSI status as a proxy for dual-eligible income, a more accurate indicator of income could be created. Information about educational attainment could also be added to the model as it could be routinely collected by Social Security at the time of initial Medicare eligibility.

Alternatively, risk adjustment and case-mix models could be modified to include more conditions relevant for individuals with lower income and interact more conditions that are strongly linked to socioeconomic status. Substance abuse, for example, is associated with lower socioeconomic status and co-occurs with many medical conditions included in MA risk adjustment. Some measures of substance abuse are included in the MA risk model, but they are not interacted with other conditions such as heart disease, high blood pressure, and cancer that are known co-conditions. Additionally, the American Medical Association (AMA) recently declared obesity a disease. CMS could add and interact indicators of obesity, as it is highly associated with socioeconomic disadvantage. Modifications to current risk and case-mix adjustment would yield prospective payment for social indicators.

## **2. Modify pay-for-performance programs.**

Currently, a handful of quality measures used in pay-for-performance programs account for differences in quality due to social determinants. More quality measures could be case-mix adjusted to control for the SES effects on health outcomes. Education is often the only SES-related variable included in Medicare case-mix adjustment of quality measures, so adding an income variable to the case-mix adjuster would more fully account for the health effects of SES. This modification would advance the goal of case-mixing quality measures to avoid penalizing providers and plans that serve disadvantaged areas.

The IOM report *Unequal Treatment* argues that measures of utilization of health care should not be adjusted for SES. IOM's rationale is that only differences in quality that stem from health status and personal preferences are acceptable in comparing performance. If individuals with low socioeconomic status receive fewer services or lower quality care, then the health system should do more to enable them to overcome barriers to access. Among others, barriers include poor access to transportation and low health literacy.

The question of modifying payment to better account for the effects of SES may be one of placement. Unadjusted quality scores should be used to identify the SES-related disparities that exist so interventions can be deployed. However, SES disparities in quality are likely to persist unless adequate resources are provided—whether through pay for performance or as separate payments—to help correct them. Without some form of payment that accounts for the SES of the population served, paying for performance without controlling for SES will simply reduce resources to providers and plans that treat disadvantaged populations.

A salient example of how paying for performance can penalize disadvantaged areas exists in education. The No Child Left Behind (NCLB) law enacted by Congress was designed and intended to close performance gaps of schools that had worse outcomes. Much like MA, the pay-for-performance formula did not take into account added resources required to achieve those gains. The majority of schools that were poor performing had a markedly higher percentage of low-income/low-SES students; yet NCLB did not provide added resources to those schools to attract teachers and administrators that had the capacity to improve the

performance. Thus poor performing schools that largely served poor areas were penalized under NCLB, which may have led to the Department of Education to establish a waiver process for states to opt out of NCLB. To date, 41 states have done so.

### **3. Establish a separate payment.**

Separate payments addressing distinct policy goals have been established under FFS. Separate payments are lump sum amounts and can be added to risk or case-mix adjusted payments at the patient, enrollee or provider/plan level. Although scrutinized by the GAO, separate payments are likely to continue to play a role in Medicare payment policy.<sup>23</sup> Additionally, given its size, Medicare add-on payments can legitimately help accomplish national health policy goals. Goals of reducing or eliminating health disparities or supporting extensive chronic care programs, for example, could be addressed through separate Medicare payments.

Separate payments could be designed to target providers and plans that treat certain patients. Or separate payments can be designed to target providers and plans that operate in certain geographic areas. For example, separate payments could be made to providers and plans in areas where health disparities have been persistently high. Alternatively, separate payments could target areas where poor socioeconomic circumstances are prevalent. Separate payments could also be made in areas where both health disparities and poor socioeconomic conditions exist.

Any geographic area with sufficiently defined boundaries and where social indicator data can be collected or aggregated could be the basis for establishing a separate payment. States, counties, urban/rural areas could be selected. Recently, researchers have aggregated data on health and socioeconomic indicators at the “neighborhood” level. Neighborhoods may have special appeal to policymakers because they are well accepted as geographic and social concepts. Also, because neighborhoods are smaller in scope than counties or states, they would have less tendency to over or understate information and can be used to target interventions and resources.

Separate payments offer the most flexibility in terms of payment design. Separate payments addressing social determinants of health and/or disparities could be designed as prospective, retrospective, or concurrent payment. Technically, separate payments established under FFS would be reflected in MA benchmark rates to the extent they are utilized and paid out under FFS. If underutilized in FFS, however, a separate payment will be underrepresented in MA benchmarks. It is possible to exclude from MA benchmark rates any separate payment made under FFS, such as the proposed payment for chronic care management in the physician fee schedule, in order to apply the separate payment directly to MA plans. Policymakers who

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<sup>23</sup> Republicans requested the GAO report so they may look at separate payments less favorably than Democrats. However, Republicans asked for an analysis of PPS hospitals exclusively (not other providers or plans), which indicates their concern may be about the number of separate payments for hospitals and not separate payments per se

want to strictly adhere to payment neutrality between FFS and MA would not be inclined to allow separate payments to be paid under MA that did not flow directly from FFS.

**4. Establish a new payment adjustment.**

Currently a small number of FFS payment systems adjust rates beyond case-mix adjustment. For example, institutional rehabilitation facilities (IRFs) receive payment adjustments for the following reasons: 1) location in rural area, 2) treatment of low-income patients, and 3) teaching status. Adjustments differ from separate payments in that they are a percentage increase of base rates per patient whereas separate payments are generally lump sum values.

Payment adjustments are similar to separate payments in that they can be made under MA and FFS and designed to address certain social conditions, areas served by providers and plans or populations served by providers and plans. For example, an adjustment could be created to increase payments for providers and plans that operate in “health disparity areas.” If applied to MA, then a new payment adjustment would yield a prospective payment at the plan level. If applied to physician care under the fee-schedule, then the adjustment would yield a concurrent payment. It also would be possible to create retrospective adjustments to Medicare payments in order to cover demonstrated costs of specific interventions that address social determinants.

**Table 7: Potential Features of Payment for Social Determinants of Health**

		Type of Payment				Basis of Payment			Timing of Payment		
	Type of Determinant	Modify Risk or Case Mix Model	Modify Quality Measure	Separate Payment	New Payment Adjustment	Person	Plan	Area	Pro-spective	Retro-spective	Con-current
Minority/ethnicity status	Social					not recommended					
Education level	Social	√	√	√	√	√	√	√	√	√	
Income (low)	Social	√	√	√	√	√	√	√	√	√	
Neighborhood	Social	√	√	√	√			√		√	
Health literacy	Mediator		√	√	√		√			√	
Housing status	Mediator			√		√	√			√	√
Access to social supports	Mediator			√		√	√			√	√
Transportation	Mediator			√		√	√			√	√
Language barriers	Mediator		√	√		√	√			√	√
Substance abuse	Behavior	√	√ <sup>(1)</sup>	√	√	√	√		√		√
Diet, nutrition	Behavior	√	√ <sup>(1)</sup>	√	√	√	√		√		√
Obesity	Condition	√ <sup>(2)</sup>	√ <sup>(3)</sup>	√	√	√	√	√	√		√

1. Presumes process measures could be constructed to address educational and treatment protocols for managing these risk factors.  
 2. On June 18, 2013, the American Medical Association (AMA) voted to recognize obesity as a disease and not a behavioral condition.

Source: authors’ analysis of 12 social determinants of concern to SNP Alliance.

## Data Considerations in Measuring Social Determinants

Data issues will figure prominently in designing any payment that accounts for social determinants of health. More frequently than not, worthy policy ideas fall by the wayside because the data needed to implement them is non-existent, difficult and costly to collect, can be manipulated or gamed, or cannot be validated by Medicare. Data considerations can be used to select among social determinants for Medicare payment in addition to helping design payment. Table 8 summarizes these data considerations for the 12 social indicators of interest to SNPs.

First, social indicators of interest need to be measured. Medicare does not collect data on many important social indicators, such as beneficiary income. One of the reasons that health risk adjustment and case-mix adjustment focus primarily on diagnoses is because Medicare can collect the data administratively through claims and encounter data. Congress could authorize CMS to access information from other agencies

Second, the cost of collecting data will vary depending on the indicator. Costs of collecting data could also vary depending on whether the payment is made at the beneficiary, provider/plan, or geographic area. Using data already collected or methods already in place—such as claims and surveys—would be more economical.

**Table 8: Data Issues in Measuring Social Determinants of Health**

	Type of Determinant	Is Data Collected By Medicare Now? √=Yes	If Yes, Who Collects	Unit of Data	Could Data Be Collected By Other Agencies? √=Yes	Who Else Could Collect Data?	Would Accurate Data Be Costly to Collect?	Could Medicare Validate Data? √=Yes
Minority/ethnicity status	Social	No	SSA	Bene	√	Census, CAHPS	√	No
Educational Attainment	Social	No			√	Census, CAHPS	√	√
Income	Social	No	SSA	Bene	√	IRS, Census	No	No
Neighborhood	Social	No	Census	Area			No	No
Health Literacy	Mediator	No			√	CAHPS	√	√
Homelessness	Mediator	No			√	Provider/Plan, Survey	√	√ (if survey)
Access to social supports	Mediator	No			√	Provider/Plan, Survey	√	√ (if survey)
Transportation	Mediator	No			√	Provider/Plan, Survey	√	√ (if survey)
Language barriers	Mediator	No			√	Provider/Plan, Survey	√	√ (if survey)
Substance abuse	Behavior	√	Physician/Plan	Bene	√	SAMHSA	No	√
Diet, nutrition	Behavior	√	Physician	Bene	√	Plan	No	No
Obesity	Condition	√	Physician/Plan	Bene	√	CDC	No	√

Source: authors' analysis of 12 social determinants of concern to SNP Alliance.

## **Other Considerations for Designing Payment**

Beyond data, other considerations will figure prominently in policy discussions about paying for social determinants of health. These issues are briefly highlighted below.

1. **Linking payment to outcomes.** Policymakers are committed to paying for performance under Medicare not simply paying for service or volume. One way to link payment for social determinants to results is to modify existing payments streams that already have pay-for-performance components in place. Currently, only payments for MA and acute care hospitals are linked to quality, with more FFS payment systems linked to quality expected to come online down the road. New measures could be added to the existing quality measure sets for plans and hospital that set measurable goals for payment for social determinants. A measure of health literacy of plan enrollees could be added to the MA Star Rating program, along with a separate payment to address low health literacy, for example. More direct links can be established for separate payments by making them retrospective and contingent upon achieving specific results. For example, payment could be made for specific interventions that are delivered for homelessness, obesity, or health literacy.
2. **Budget neutrality.** Congressional approval of proposals that increase spending will be more difficult to achieve. Payment for social determinants can address issues that have been ignored by Medicare or paid inadequately, thus justifying higher spending. Additionally, some interventions targeting social determinants of health may be able to lower total spending overtime with sustained implementation. Nevertheless, questions of budget neutrality will figure prominently in any legislative or regulatory proposal because of the heightened focus in Congress on deficit reduction. Current risk and case-mix models have budget neutrality mechanisms built in and thus could be more viable mechanisms to address social determinants.

Budget neutrality is not required of demonstrations or pilots funded through the Centers for Medicare and Medicaid Innovation (CMMI). Expectations for new payment models are that they will deliver lower costs, higher quality, or both over time. Care innovation projects funded through CMMI grants have been expected to find their own sources of future payment once they are operational.

3. **Duplication with Medicaid.** Policymakers will not want to duplicate Medicaid benefits or its responsibilities for caring for vulnerable populations. For example, payment for programs that address transportation needs or social support services will need to be carefully tailored to avoid replicating responsibilities. Another way to avoid duplication is to integrate any new program funded by Medicare with existing benefits or programs covered by States under Medicaid.