BETTER MEDICARE ALLIANCE | **Center for Innovation** *in* Medicare Advantage

Innovative Approaches to Addressing Social Determinants of Health for Medicare Advantage Beneficiaries

Study conducted by NORC at the University of Chicago
Commissioned by Better Medicare Alliance's Center for Innovation in Medicare Advantage

AUGUST 2021

Table of Contents

Executive Summary

In recent years, Medicare Advantage (MA) plans have increasingly turned their attention to addressing their beneficiaries' social determinants of health (SDOH), the non-medical factors that influence health outcomes. The focus on SDOH reflects broader trends in the U.S. health care system, including growing recognition that SDOH may have a more significant influence on health outcomes than clinical care and the increasing levels of social need within the Medicare population. Increased activity around SDOH also coincides with recent policy changes within Medicare Advantage, such as the opportunity to offer supplemental benefits that are not primarily health-related and new business and technology innovations from startups and companies focusing on the health sector.

SDOH and Health Outcomes

One widely cited analysis from the University of Wisconsin Population Health Institute concludes that Social and Economic Factors drive 40% of health outcomes, with closely linked factors such as Physical Environment and Health Behaviors accounting for another 10% and 30%, respectively. Clinical Care accounts for the remaining 20%.
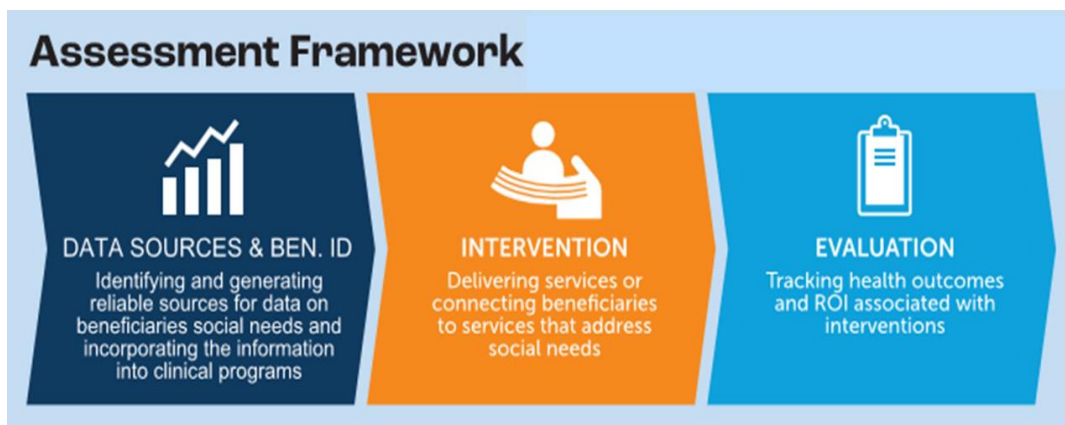
Source: University of Wisconsin Population Health Institute. "County Health Rankings Model." County Health Rankings & Roadmaps, 2014.

On behalf of the Better Medicare Alliance's Center for Innovation in Medicare Advantage, NORC at the University of Chicago (NORC) assessed the current landscape of SDOH services within Medicare Advantage; highlighted best practices within the rapidly evolving operational environment; and identified policy recommendations to further enable health plans, providers, and their community-based organization (CBO) partners to address beneficiary social needs. NORC identified and reviewed published literature related to SDOH data programs and interventions within Medicare Advantage. NORC also conducted qualitative, semi-structured interviews with leadership and subject matter experts from health plans, Medicare-focused health care providers, CBOs that partner with health plans to address beneficiary social needs, and vendors that provide services that enable such partnerships. Finally, NORC consulted with leading Medicare policy experts to solicit additional input on potential changes to further enhance SDOH services within Medicare Advantage.

Health plans report significantly increasing efforts around SDOH in recent years. While initiatives exist across a wide range of social needs, resources and investments have focused on four primary areas: food insecurity, housing instability and homelessness, transportation access, and loneliness and social isolation. To address these needs, health plans have focused on developing internal capabilities and strategic partnerships across three primary competencies: data sources and beneficiary identification, interventions, and evaluation.

Health plans report significant new investments made towards obtaining insights into the social needs of their beneficiaries through internal outreach such as member surveys, the acquisition of data from external sources, and emerging provider data partnerships. The data are fed into increasingly sophisticated models to predict both clinical and social risks. New supplemental benefit flexibilities have allowed plans to deliver a dramatically expanded array of services targeted to beneficiaries with chronic conditions most in need and likely to benefit. New referral platforms are helping to connect beneficiaries to CBOs and confirm that services are received. Health plans are testing a variety of methods to reimburse for social services and evaluate the results of interventions.

Assessment Framework

DATA SOURCES & BEN. ID
Identifying and generating reliable sources for data on beneficiaries social needs and incorporating the information into clinical programs

INTERVENTION
Delivering services or connecting beneficiaries to services that address social needs

EVALUATION
Tracking health outcomes and ROI associated with interventions

Despite the enhanced activity, addressing SDOH remains a considerable challenge. The services to address social needs exist outside of the traditional health system, and such needs are often deeply entrenched in issues of poverty and inequality. However, more routine policy and operational barriers hold back the true potential of Medicare Advantage to address SDOH. This paper includes recommendations that (1) federal policymakers, (2) government agencies such as the Department of Health and Human Services (HHS) and the Centers for Medicare & Medicaid Services (CMS); and (3) health care leaders should consider to have a broader impact on beneficiary SDOH and health outcomes.

Policy Recommendations to Enhance Approaches to Addressing Social Determinants of Health in Medicare Advantage

Data Sources and Beneficiary Identification:

- CMS should strengthen guidance and add standards for collecting SDOH information in Medicare. Options to increase data collection on beneficiaries' social needs include expanding the use of the D-SNP Model of Care Health Risk Assessment (HRA) and adding consistent SDOH data elements to Medicare Wellness Visits. More comprehensive and standardized data collection would enable better data sharing and evaluation.

- HHS and state Medicaid agencies should seek to share information on beneficiaries' eligibility for and enrollment in social support programs across Medicare Advantage, Medicaid managed care, and Traditional fee-for-service (FFS) Medicare. Federal and state government agencies should provide information to health plans on beneficiary enrollment in Supplemental Nurtrion Assistance Programs (SNAP) and other human services programs that address SDOH. In addition, HHS should initiate efforts to streamline enrollment processes in social support programs and explore ways to provide relevant information to health providers to ease enrollment in such programs.

- CMS should promote the identification of social needs by health providers by encouraging the use of The International Classification of Diseases, Tenth Edition (ICD-10) Z codes, which identify non-medical factors that influence health status and currently have limited provider use. Provider uptake could be increased with additional training, guidance on follow-up referrals, and possible financial incentives.

- CMS should support health plan and provider efforts to standardize SDOH data elements and data exchange protocols.

Interventions:

- CMS should permanently authorize Value-Based Insurance Design (VBID) authority to promote SDOH innovation in Medicare and investments in efforts that require multi-year continuity to achieve effectiveness. Efforts should be made to simplify and streamline offerings and use of supplemental benefits related to SDOH.

- CMS should provide greater transparency into supplemental benefits for providers and beneficiaries by listing them in a standardized format on the Medicare Plan Finder and developing standard language that health plans can use in promoting such benefits to beneficiaries and other stakeholders. Eliminating unnecessary restrictions that inhibit access to supplemental benefits could help promote referrals by providers and use by beneficiaries.

- The Centers for Medicare and Medicaid Innovation (CMMI) should continue to develop innovation models that provide Medicare Advantage plans, providers, and CBOs additional flexibility and encourage partnerships between medical and social programs to better address SDOH for beneficiaries.

Evaluation:

- CMS should consider ways to encourage the sharing of best practices by health plans, providers, and social support services to address SDOH within Medicare in order to enhance learning and scaling effective interventions. CMS should make aggregate data available to health plans, researchers, and, when possible, the public.
- CMS should work with the health care community to identify potential quality measures related to addressing SDOH within Medicare Advantage and the broader Medicare program.
- CMS should explore adjusting Medicare Advantage payment in annual risk adjustment to include the assessment of social risk factors of plan beneficiaries.
- CMS should explore modifying Medicare Advantage Stars quality performance measures to account for social risk factors of plan beneficiaries.

Introduction

Medicare Advantage (MA) has been a source of innovation within the broader Medicare program since its inception—from introducing new benefits[i] to pioneering payment and care delivery arrangements to better addressing the needs of seriously ill beneficiaries.[ii] In recent years, health plans have increasingly turned their attention to addressing their beneficiaries'

social determinants of health (SDOH), the non-medical factors that influence health outcomes. As defined by the U.S. Department of Health and Human Services (HHS) Office of Disease Prevention

What are Social Determinants of Health (SDOH)?

Social determinants of health (SDOH) are the conditions in the environments where people

are born · live · learn · work · worship · age

that affect a wide range of
HEALTH, FUNCTIONING, and QUALITY-OF-LIFE OUTCOMES

and Health Promotion's Healthy People 2030 campaign, SDOH are "the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."[iii]

The heightened focus of Medicare Advantage organizations on SDOH reflects a broader trend both within the American health care system and in non-health sectors.[iv] HHS has positioned addressing SDOH as one of the five overarching goals of its Healthy People 2030 campaign, grouping social determinants into five separate domains (Economic Stability, Education Access and Quality, Health Care Access and Quality, Neighborhood and Built Environment, and Social and Community Context) and establishing measurable objectives and working groups targeted at many specific issues within each domain.[v] Likely driven by a high concentration of social needs in its beneficiary population and additional benefits available in Medicaid, many early

efforts to address SDOH have been developed and implemented by state Medicaid agencies and Medicaid Managed Care Organizations (MCOs).[vi] As discussed later in this report, there is evidence that plans operating in both lines of business have extended programs initially implemented for the Medicaid population to MA beneficiaries. More recently, some health systems and other provider organizations have also started making significant investments in SDOH through community benefits.[vii]

Medicare beneficiaries experience many of the same social needs as the general population, but certain social risk factors are more pronounced in the program's more elderly and disabled membership. Screening and survey data has frequently identified food, housing, and transportation as leading social risks, and all health plans and provider organizations interviewed for this report confirmed that they are working to address these issues in their beneficiary and patient populations.[viii] Additionally, all health plans interviewed identified social isolation and loneliness as a primary area of focus. Without exception, interviewees agreed that the COVID-19 pandemic and resulting economic disruption had exacerbated social needs of Medicare beneficiaries.
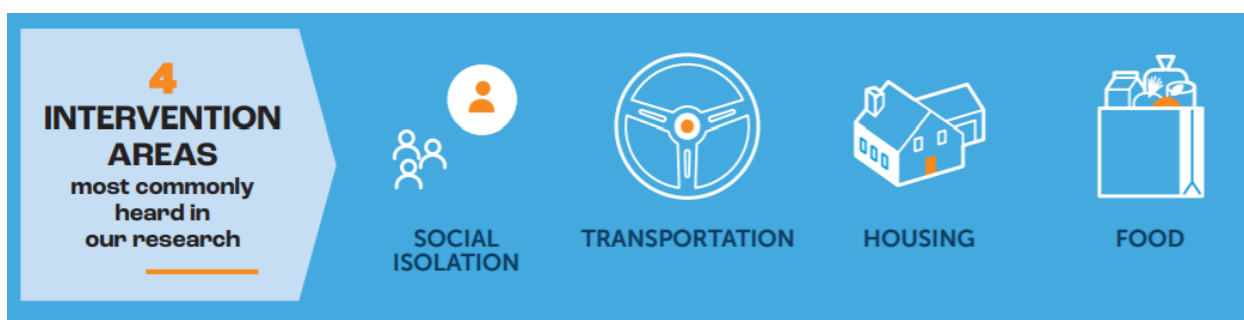
Health plan efforts to address SDOH are particularly important in light of the disproportionate and growing share of individuals dually eligible for Medicare and Medicaid enrolling in Medicare Advantage relative to Traditional fee-for-service (FFS) Medicare—a strong indication of a greater level of social needs in the Medicare Advantage population.[ix] Health plans are not new to developing interventions to meet beneficiary social needs, and previous analyses identify promising initiatives for populations within Medicare Advantage such as dual-eligible individuals[x] or within health plans serving government programs more broadly.[xi] However, recent policy changes specific to Medicare Advantage, including the authority to offer supplemental benefits that are not primarily health-related, have prompted a dramatic increase in plan activity to address social needs, while emerging data technologies and plan data capabilities enable better targeting and delivery of services. At the same time, health plans are forming new relationships with startups and deepening their established partnerships with community-based organizations (CBOs). This report provides an overview of best practices for identifying and addressing the social needs of Medicare Advantage beneficiaries in the context of this rapidly evolving policy, technology, and business landscape and identifies policy recommendations to further enable health plans and their partners to address beneficiary social needs.

Methodology

Researchers at NORC reviewed published literature about SDOH data programs and interventions by health plans and their partner organizations to identify areas where health plans have taken action and where potential gaps exist. The literature also contributed to the conceptual framework of the paper and identified potential areas for policy recommendations. The literature included government program evaluations, academic research papers, reports by think tanks and research and consulting firms, industry white papers, news articles, and press releases and other promotional materials.

Between April and June 2021, NORC conducted qualitative, semi-structured interviews with more than 20 experts from 14 organizations representing health plans, providers, health plan associations, not-for-profit social service organizations, and service and technology vendors. Information obtained during the interviews, combined with the secondary research, identified three primary areas of activity in which health plans have focused existing efforts to address SDOH. The interviews informed the findings and resulting policy recommendations. Finally, after completing interviews, NORC conducted qualitative, semi-structured interviews with four policy experts to further inform the policy recommendations.

Background

The health care industry and policy community agree that social needs play a substantial role in determining health outcomes. One widely cited analysis estimates that social and economic factors determine 40 percent of the length and quality of Americans' lives, twice as influential as factors related to clinical care.[xii] **The World Health Organization, an early funder and convening body for SDOH research, likewise identifies research suggesting SDOH account for 30 to 55 percent of health outcomes.**[xiii] Additionally, a growing body of evidence demonstrates that specific SDOH interventions can improve health outcomes.[xiv] All organizations interviewed for this report agreed that SDOH play an important role in driving health outcomes, and all believed that programs they operated or partnered with were, to at least some extent, effective in addressing beneficiary social needs and ultimately improving outcomes.

Despite the broad agreement on the importance of SDOH across health payers, providers, and policy leaders, several factors conspire to make SDOH difficult for the health care system to address. Most obviously, the organizations that typically address social needs like food insecurity, housing instability and homelessness, and family and social supports exist outside the traditional health care system, limiting the ability of health plans or providers to address or coordinate such services directly. Such issues are also deeply tied to persistent problems of poverty and inequality, leading some experts to question the ability of the health care system to address them effectively. "We want community health workers and community-based organizations to be able to do what they do best, and get reimbursed for it without 'medicalizing' them. For example, we don't want social service providers to go through extensive background

checks and the kind of in-depth vetting process we use in the medical system. People with lived experience are often best suited to provide peer support to others experiencing things like homelessness or substance use, even if they have a criminal record. We need a different way of vetting community based organizations for participation in paid arrangements that doesn't force them into the medical paradigm," said Melissa Sherry, PhD, Vice President of Social Care Integration at Unite Us, a technology company that builds end-to-end solutions for social care.

In addition to the inherent complexity of SDOH issues, there are numerous technological and policy barriers preventing health plans and their partners from identifying beneficiary social needs and taking even basic steps to address those needs. Technology limitations include an inability to identify social needs due to a lack of timely data and difficulties sharing information between providers and social service organizations. Policy barriers include Medicare program prohibitions or limitations on offering benefits for services that are not primarily health-related.

> The barriers are that we have a system that is about sick care. It's about providing drugs. It's about providing hospitalizations and SNF visits. And it's about services and stuff from medical providers. That's the system, all the payments are based on that. And yet we have clear proof and data that social determinants of health matter as much or more than those medical issues. But that's not the system that we built decades ago and [still] exists today.
>
> *-Mark Newsom, Principal, Health Evaluations LLC*

Despite these barriers and complexities, health plans and their partners remain committed to addressing SDOH, believing that interventions can effectively improve beneficiary health and control medical costs, particularly for more expensive populations served by Medicare Advantage. Additionally, policy changes and innovative new business and technology developments have dramatically increased the level and sophistication of Medicare Advantage health plan activity to address SDOH in recent years. The following section details the findings of interviews with health plans, provider groups that serve Medicare Advantage beneficiaries, and organizations outside the traditional health

Barriers to SDOH Interventions

Barriers within the Medicare program, the health care industry, and IT industry increase challenges to address Medicare Advantage beneficiaries' needs

SOCIAL SERVICES DISCONNECT
Social needs exists outside of the health care system which limits health plans ability to address and coordinate services

INCENTIVE MISALIGNMENT
Medicare payment rules complicate efforts to integrate interventions into health systems and as a result funding exists through grants or public funding

TECHNOLOGY LIMITATIONS
Lack of timely data and difficulties sharing information with providers and social service organization

care system that work with health plans and providers to help address Medicare Advantage beneficiaries' social needs. Based on the interviews and secondary research, the health plan

and partner activities are grouped into three domains: Data Sources and Beneficiary Identification, Intervention, and Evaluation. These domains help describe the current landscape of activity, identify best practices, and propose potential policies to enhance the ability of health plans and partnering organizations to meet beneficiary social needs.

Findings

Data Sources and Beneficiary Identification

Understanding beneficiary social needs is a major challenge for health plans. When a beneficiary goes to the doctor, the health plan receives detailed information about the beneficiary's diagnosis and services they received through their medical claims. Unfortunately, similar information about a beneficiary's social needs is not often generated in a doctor's office, and health plans have traditionally lacked visibility into the social services their beneficiaries receive outside of the health care setting. "We don't have a database where we can just say, 'Of our 23,000 members, 500 are food insecure,'" said Anne Armao, Vice President of Member Experience and Product Development at SummaCare. "Our ACO uses Epic [for medical records]; we just can't track it that way." Even the validity of race and ethnicity data reported by CMS has been questioned by researchers and policy experts.[xv] "One of the most important drivers [of health outcomes] is race and ethnicity, and that seems to be where we have the worst data. If people did not know that, they certainly learned during COVID, because as people were dying en masse, [the government] could not produce the data fast enough for us to understand who was dying. It was the local papers going through hospital documents who figured out black people were dying disproportionately," said Adaeze Enekwechi, an Operating Partner at Welsh, Carson, Anderson & Stowe and Research Associate Professor at the George Washington University Milken Institute School of Public Health, who noted that low quality race and ethnicity data extends beyond the Medicare program and exacerbates health disparities.

In the absence of traditional claims-based information, many health plans have invested heavily in sophisticated programs to collect data on beneficiary social needs from other sources. Some plans are looking to find such data wherever it is available, both internally from administrative and clinical records and beneficiary interactions, as well as by incorporating external data sources.

Internal Data Sources

Previous research identified health risk assessments (HRAs) as the primary means by which plans have identified member social needs.[xvi] A health risk assessment is an instrument used to collect health information, and can be coupled with clinical testing to provide an overview of an

individual's health status, risks, and habits.[xvii] Traditionally, health risk assessments in the Medicare program have focused on obtaining information on demographic characteristics (e.g., sex, age), lifestyle (e.g., smoking, exercise, alcohol consumption, diet), personal medical history, and family medical history.[xviii] In recent years, many health plans and providers have started to include SDOH questions on their HRAs. All health plans interviewed for this report indicated that they use HRAs to collect SDOH information, and more recently, plans and providers indicated that HRAs have become one of many internal data sources for identifying social needs as plans and providers focus on generating more regular sources of beneficiary data. "The HRA is a nice source that we've actually added very specific SDOH questions to, because a lot of beneficiaries have to get an HRA," stated Kurt Johnson, Vice President of Operations at UnitedHealth Group. "And we do millions of home visits a year, so that's a place where we've added screenings around social determinants of health. And then our call centers [have visibility] to other screenings that have taken place, so if they realize they haven't been screened they would see if the member was interested." HRAs may remain a primary area of focus for health plans with Medicare Advantage portfolios levered to Dual Eligible Special Needs Plans (D-SNPs), as their use is required under the D-SNP model of care. SCAN Health Plan indicates they are able to complete HRAs for over 80 percent of D-SNP beneficiaries, close to 80 percent of C-SNP beneficiaries, and 35 percent of non-SNP beneficiaries.

POLICY RECOMMENDATION: CMS should strengthen guidance and add standards for collecting SDOH information in Medicare. Options to increase data collection on beneficiaries' social needs include expanding the use of the D-SNP Model of Care Health Risk Assessment (HRA) and adding consistent SDOH data elements to Medicare Wellness Visits. More comprehensive and standardized data collection would enable better data sharing and evaluation.

To obtain more timely data on beneficiary social needs, some health plans report including SDOH questions on regular beneficiary surveys. Many health plans indicated that in-home interactions present a key opportunity to obtain SDOH data through direct questionnaires and more general conversations or observations about the beneficiary's living conditions and functional limitations. Health plans such as UnitedHealthcare ("UHC") and Humana have made significant investments in in-home care, and CBOs such as Meals on Wheels and Partners in Care Foundation report performing this work on behalf of health plan partners. All health plans reported that interactions with care managers are one of the most important sources of SDOH data.

Some health plans have also developed sophisticated means of mining their administrative data and beneficiary interactions for clues about SDOH needs. For example, UHC tracks the search terms used by its member relations representatives and care management staff during telephonic interactions with beneficiaries to gain insight into potential social needs.

External Data Sources

In addition to pursuing creative solutions for generating internal data, some health plans report using external data sources to identify or predict beneficiary social needs. Most report using aggregated geographic-level data, such as data from the U.S. Census or the Robert Wood Johnson Foundation's (RWJF) County Health Rankings, to understand the nature and level of social needs across their markets. Some plans also report integrating such data into their care management and clinical programs. While such data sources are important for understanding the general needs of the community, their information is not specific to individuals. To obtain more accurate individual-level information about potential beneficiary social needs, some health plans purchase consumer datasets that provide information about beneficiary demographics and lifestyle that can flag potential SDOH risks. "Three or four years ago, the only data we had to rely on were these geospatial data sets from RWJF and others. Increasingly, we're trying to get more to the individual level," said Andrew Renda, Vice President of Bold Goal and Population Health Strategy at Humana. Of note, several health plans indicated that it would be helpful to receive currently unavailable information about beneficiaries who qualify for certain government assistance programs, such as the Supplemental Nutrition Assistance Program (SNAP).

POLICY RECOMMENDATION: HHS and state Medicaid agencies should seek to share information on beneficiaries' eligibility for and enrollment in social support programs across Medicare Advantage, Medicaid managed care, and Traditional FFS Medicare. Federal and state government agencies should provide information to health plans on beneficiary enrollment in SNAP and other human services programs that address SDOH. In addition, HHS should initiate efforts to streamline enrollment processes in social support programs and explore ways to provide relevant information to health providers to ease enrollment in such programs.

Many plans expressed optimism about the International Classification of Diseases, Tenth Revision (ICD-10) "Z codes" as a future source of beneficiary SDOH data. Newly available in ICD-10, Z codes can be attached to claims and encounters to identify causes other than a disease or injury, with a subset (Z55-65) specifically assigned to SDOH. Data from the early years of Z code availability indicated a low volume of usage, with just 1.4 percent of Traditional FFS Medicare beneficiaries receiving a SDOH-related Z code attached to a claim in 2017.[xix] However, some health plans report seeing increasing progress from initiatives to promote Z code use in recent years. UHC has worked with the American Medical Association (AMA) to expand the list of Z codes related to SDOH and reports that it has formed partnerships with specific health systems in its network to encourage use of Z codes. As a result of its efforts, UHC stated that it is now seeing millions of SDOH Z codes per year across its product lines. Some health plans report

that adoption efforts by state Medicaid agencies have significantly increased provider uptake across product lines, with UHC describing such an effect in Arizona and SCAN Health Plan reporting similar results in California. Humana is piloting a program to reimburse providers for using Z codes to document social needs as part of a broader SDOH value-based payment initiative.[xx] There is also evidence that some leading-edge providers are seeing value in the use of Z codes, with ChenMed reporting that it is preparing an internal effort to encourage thorough Z code documentation including enterprise-wide use of a standard assessment tool and, more importantly, a documented care plan for social needs.

POLICY RECOMMENDATION: CMS should promote the identification of social needs by health providers by encouraging the use of ICD-10 Z codes, which identify non-medical factors that influence health status and currently have limited provider use. Provider uptake could be increased with additional training, guidance on follow-up referrals, and possible financial incentives.

Using and Sharing SDOH Data

After capturing social needs data, health plans must have a strategy for translating information into action. Certain information, such as a lack of transportation, lends itself to direct service referrals, but health plans are increasingly utilizing even such seemingly straightforward transactional data to better predict future clinical and social needs. **Some health plans report investing in artificial intelligence (AI) and predictive analytics solutions around SDOH.** Humana uses its social risk data along with artificial intelligence tools to build predictive models for individual social needs as well as an overall social needs index, which in turn is fed into their overall clinical risk stratification models. Similarly, Oak Street Health incorporates results of its social needs screening into its clinical risk models, and SCAN Health Plan assigns beneficiaries to care management tiers based on the results of its HRA screening tools, including assigning beneficiaries to specific peer-to-peer advocacy groups based on social needs, as well as using AI to predict beneficiaries who may be at risk for preventable hospitalizations or likely need long term services and support.

Health plans face challenges in receiving SDOH data from other organizations, particularly those outside the traditional health care industry providing services to address beneficiary social needs. Some new technology vendors are offering software solutions to help bridge the data gap between health care and social services (see *Referral Platforms* in the next section). Additionally, many health plans, providers, and other organizations interviewed expressed support for the University of California at San Francisco's Social Interventions Research and Evaluation Network (SIREN) Gravity Project, which aims to establish standards to capture and

exchange SDOH data across systems in the health care and social service sectors, including (but not limited to) through use of ICD-10 Z codes.

> **POLICY RECOMMENDATION: CMS should support health plan and provider efforts to standardize SDOH data elements and data exchange protocols.**

Ultimately, sharing data with providers and CBOs is necessary to facilitate efforts to address beneficiary social needs through programs not directly controlled by the health plan. The next section of this report describes some of these innovative interventions.

Delivering Interventions

Though having the necessary data programs in place to identify social needs is crucial, health plans must also operate or facilitate connections to programs that can actually address those needs. In fact, a lack of available services and solutions may compromise the very ability to collect data: "There's a lot of harm that can be done if we are screening for SDOHs and there's not a systematic response," stated Katherine Suberlak, Vice President of Clinical Programs at Oak Street Health. "We're very cognizant of that at Oak Street to where we will only screen when we have a corresponding solution to respond to an identified need." In recent years, health plans

> "When you add a code to a problem list, you have to address that code. We hold our teams very accountable for that. You must address the need. And in the past, it was always, 'How can I address it? I'm a doctor. I'm not a social worker.'"
>
> *-Colleen Mourra, Associate Director of Population Health Management, ChenMed*

have deepened existing partnerships and developed innovative new programs to address their beneficiaries' social needs. Health plans have also been able to take advantage of changing federal policy and new technology solutions to provide greater access to SDOH services.

Supplemental Benefits

Under policy changes enacted by CMS and Congress, supplemental benefits have emerged as a key means for health plans to provide access to services that address beneficiary SDOH. Supplemental benefits are services or items offered by health plans that are "primarily health-related" and not part of the Traditional FFS Medicare benefit. Supplemental benefits have traditionally been financed using "rebates," a percentage (varying from 50 to 70 percent based on quality performance) of the dollar amount by which a health plan's bid comes in below the plan service area benchmark, or through higher enrollee premiums.[xxi] Certain supplemental benefits—including dental, hearing, and vision benefits, as well as fitness programs—have

proven highly popular throughout the history of Medicare Advantage. In 2018, CMS issued guidance loosening the definition of "primarily health-related" and relaxed the requirement that supplemental benefits be offered uniformly to all beneficiaries. Subsequently, Congress passed legislation authorizing new Special Supplemental Benefits for the Chronically Ill (SSBCI) that could be "non-primarily health-related" and targeted non-uniformly to beneficiaries living with a chronic illness (as defined in the CMS Medicare Managed Care Manual).[xxii] Congress also authorized the expansion of Value-Based Insurance Design (VBID), a Medicare Advantage demonstration previously limited to a subset of states that allowed for non-primarily health-related benefits as well as non-uniform benefits with eligibility conditioned on socioeconomic status.[xxiii]

New Supplemental Benefit Authorities

CMS and Congress have worked to expand Medicare Advantage supplemental benefits through several recent innovative policy authorities, including:

- **Special Supplemental Benefits for the Chronically Ill (SSBCI)** – a provision of the Balanced Budget Act of 2018 (BBA 2018) allowing plans to offer non-primarily health-related supplemental benefits, and to target such benefits to individuals with chronic conditions

- **Value-Based Insurance Design (VBID)** – a CMMI demonstration expanded by the BBA 2018 allowing plans to offer non-primarily health-related supplemental benefits, and to target such benefits to individuals based on health conditions or socioeconomic status.

The new supplemental benefit authorities have been well received by health plans, with an explosion of participation in SSBCI's non-primarily health-related benefits to 845 separate plans in 2021, up from 245 in 2020 (the first year of SSBCI benefit availability).[xxiv] The top benefits offered in 2021 included Meals, Food and Produce, Social Needs Benefit, Pest Control, and Non-Medical Transportation.[xxv] All health plans interviewed for this report described participating in SSBCI, with many enthusiastic about the results.

Health plans described a highly experimental "test and learn" environment in the early years of the new benefits. Aetna described being able to expand its SDOH supplemental benefit strategy initiated under VBID once the new SSBCI authorities were introduced. SummaCare described working with a key vendor operating its transportation benefits to expand into benefit categories newly allowed under the expanded authorities.

SSBCI has been fantastic because as a Social HMO way back when, we could provide the benefit, but this was before there were Special Needs Plans, before there were bids the way there are bids today. But then we've always struggled with the rules, and so when the initial benefit flexibility came out about supplemental benefits, that was fantastic. Then SSBCI has been really great, and we've been offering them through SSBCI and really appreciate the flexibility that came with that and all the work that went into legislation and policy to make that happen.

-Eve Gelb, Senior Vice President of Health Care Services, SCAN Health Plan

VBID has grown steadily since expanding to a nationwide program, but at a slower rate than SSBCI. One potential reason could be hesitancy around VBID's status as a demonstration program under the Center for Medicare and Medicaid Innovation (CMMI) and its resulting uncertain future. Humana, the leading national provider of VBID benefits, indicated potential concerns about the future of the program, which it uses to offer food card benefits to beneficiaries. "VBID [benefits] are part of a CMMI demonstration project, meaning that it's not guaranteed that they'll exist in perpetuity and so advocating for extension and permanence around those types of benefits is [important]," said Humana's Renda.

POLICY RECOMMENDATION: CMS should permanently authorize VBID authority to promote SDOH innovation in Medicare and investments in efforts that require multi-year continuity to achieve effectiveness. Efforts should be made to simplify and streamline offerings and use of supplemental benefits related to SDOH.

While health plans have worked to roll out new non-primarily health-related supplemental benefits rapidly, some providers report confusion about the new benefits. Providers reported having to dedicate staff to figure out which conditions were associated with each plan's particular set of benefits. "Depending on what specific plan a patient is enrolled in, they may have [SDOH-related services] as a benefit. But that is always so hard to decipher. First of all, does the plan even have a program available? If your patient is lucky enough to be enrolled in a plan that has a needed benefit, the next step is to figure out what the eligibility criteria for them to take advantage of that benefit. Do they qualify? What do they need to sign up? Is there a deadline or timeframe?" said ChenMed's Mourra. "So if you don't have a team dedicated to this, and if your patients don't have the ability to navigate the system on their own, if a benefit is there, very often it's unused, which is very sad." Suberlak of Oak Street Health agreed, "We have a responsibility to become experts in supplemental benefit design as a way to support our patients."

In addition to providers, some community organizations have seen lower-than-expected take-up of new benefits and reported that beneficiaries may not be aware of their existence. "Once you get a plan contract, that's only step one, because getting referrals is step two, three, four, five, and six, and that's much harder," said Lucy Theilheimer, Chief Strategy and Impact Officer at Meals on Wheels America. "The care managers now have to be much more proactive in identifying [individuals with eligible chronic conditions] because it's not as clean as somebody just coming out of the hospital. They have to work even harder to identify people who are eligible for that benefit and then connect them with those services." Some health plans expressed sympathy for providers, CBOs, and seniors given the rapid proliferation of supplemental benefits. "It takes me a lot to compare all the plans in our market and the ins and outs of what's offered to benchmark how we're doing against everybody else. I can't even

imagine how it is for an older senior to make the choice," said Kerri Towsley, Manager of Product Development and Market Intelligence at SummaCare.

Health plans reported high take-up rates for certain benefits; for instance, Humana and UHC both singled out food cards. However, other benefits that are performed by outside organizations may require a higher touch to connect beneficiaries. Health plans report reaching out directly to eligible beneficiaries in an attempt to enroll them in benefits, as well as providing information to agents and brokers where allowable. Other industry and policy experts reinforced the importance of agents and brokers, and suggested a possible educational role for State Health Insurance Assistance Programs (SHIPs). Restrictions on the promotion of some of the new benefits in advertising materials may be limiting uptake, as well as difficulty in accessing information online. "I think plans need to leverage technology better to provide tools for their members and stakeholders than they are currently," said Newsom. "Plans could be doing that, CMS should be doing it, too. The plan compare tool that CMS runs itself doesn't really do a good job in this space." Gretchen Jacobson, Vice President of Medicare at The Commonwealth Fund, agreed, "Improving the plan finder so that it's easier for people to identify the plans that are offering special supplemental benefits would be a significant improvement… the current structure doesn't lend itself to allow people to simply search for plans that offer specific benefits."

POLICY RECOMMENDATION: CMS should provide greater transparency into supplemental benefits for providers and beneficiaries by listing them in a standardized format on the Medicare Plan Finder and developing standard language that health plans can use in promoting such benefits to beneficiaries and other stakeholders. Eliminating unnecessary restrictions that inhibit access to supplemental benefits could help promote referrals by providers and use by beneficiaries.

Referral Platforms

As described in the previous section on Data Sources and Beneficiary Identification, transmitting information about beneficiary social needs between health plans, providers, and CBOs providing social services is a significant challenge. In recent years, a growing number of vendors have introduced technology platforms coupled with services to develop and manage networks of community resources.[xxvi] These community resource referral platforms ("referral platforms") allow health plans and providers to directly refer beneficiaries and patients to community partners, and receive confirmation that the needed services were received. This "closed loop" system is a key advancement over a previous generation of products that simply maintained lists of community resources for different types of social need. Referral platforms

could play a key role in facilitating payment for CBO services through supplemental benefits and other new payment models.

Some vendors report they have already established such relationships with some plans, with Healthify indicating they have partnered with multiple BlueCross BlueShield affiliates to facilitate non-emergency medical transportation (NEMT) payments. While many platforms originally focused on the Medicaid market, nearly all plans interviewed for this project reported using the technology in Medicare markets as well.

To facilitate the referral process, the referral platform vendors build connections directly into health plan care management software, provider electronic health records, and in some cases even CBO customer relationship management (CRM) software. Where CBOs do not have existing software, the platforms typically offer a web-based tool to facilitate referrals.

> "How do we make sure that organizations can get reimbursed? We're trying to break down a lot of the barriers that have historically existed. For example, if you have a network of community-based organizations providing similar service types, there's really not been a standardized language that you can track funding streams across multiple organizations. Some are in Excel, some are using a homegrown system, some are on paper. So we're working through the iterations of how or what are all of the types of tools that we can give community-based organizations, to be really simple for them to then participate better in paid arrangements."
>
> *-Melissa Sherry, PhD, Vice President of Social Care Integration, Unite Us*

"Whoever the partner may be, we empower them to make highly personalized referrals to trusted community resources for their whole population," said Gillian Feldmeth, Value-Based Strategy and Evaluation Director at NowPow. "A wide variety of care professionals use NowPow to support whole-person care—that means helping people meet basic needs and stay well, manage illness and care for others. Many of our customers deeply integrate NowPow with existing technology systems, like a health system's EMR or a CBO's case management system, while others use our web-based version where they're simply logging into app.nowpow.com which can be critical to rapidly expanding care during times of crises."

CBOs are typically not charged for participating in the platform. Referral platforms have also started to market SDOH screening tools, either to perform services on behalf of health plans or to provide to CBOs to help them screen clients for additional needs. "If a health plan sent somebody over to a food bank to get a food need addressed, and then the food bank realized that that person also has a housing need, they can, through Unite Us, connect the individual directly to a housing provider. With proper data security, permissions, and consents in place to protect client privacy, that health plan can then track their member's whole social care journey," said Sherry of Unite Us.

SDOH Contracting and Payment Models

While every health plan employs personnel dedicated to building and maintaining contracts and relationships with health care providers, health plans have largely had to start from scratch in figuring out how to contract with CBOs for non-health services. "When we contract with a vendor to do some type of service, one requirement is insurance coverage for security breaches. That becomes a limiting factor, a lot of times in contracting processes," said Humana's Renda. "That's why you think about the big national organizations like Feeding America or [groups] with bigger footprints and capacity in terms of staffing and financial resources… But to address social needs that almost always are very localized, we do need to figure out how to work with smaller organizations." Health plans report testing a variety of approaches to paying for services, often based on the needs and desires of the CBOs they contract with. Rose Mollitor, Senior Director of Medicare Product Innovation at Aetna, explained her plan's approach: "It depends on the individual contract and the individual vendor. Some of them are fee-for-service based. Some of them are more of a capitated PMPM [per-member per-month], where we're paying for basically every single member on our plan for the eligible population to have access, whether or not they take advantage of it."

Some health plans report that it is easier to contract with national umbrella organizations because they can scale benefits more effectively, take advantage of more advanced contracting capabilities, or ensure high levels of liability coverage required under corporate risk management policies. Larger regional CBOs are often able to play similar roles, contracting for services on behalf of a network of smaller social service providers, explained June Simmons, CEO and President of Partners in Care Foundation: "Health plans, health systems, referral platforms (SHARPs), and community-based organizations (CBOs) each have a key and equally important role to play in co-designing an improved system that aligns social care and health care. CBOs already have regional and statewide networks in place that centralize contracting, organize and curate services, credential provider capabilities and quality, provide payment mechanisms, and provide reports on outcomes and success. These Lead Network models include groups that can target very specific populations and issues – aging, maternal/child – a wide range of specialties that serve Medicare Advantage as well as Medicaid and all other business lines."

Some organizations report that entering into contracts with health plans induces local chapters of their organization to enhance their efforts to manage data and track outcomes. "If a plan wants to contract with any Meals on Wheels provider in the country, they can contact [the national organization] and we'll deal with it, we'll manage all local engagements and requirements on their behalf and they don't have to try to deal with that," said Theilheimer.

For similar reasons, referral platforms have also begun to step in to provide contracting services on behalf of CBOs, particularly when they are offering "network" products. "The contracting piece is something that health plans are saying they don't want to own… one health

plan tried to contract with a state food bank. It took them a year and four months, and it took us 28 days. And I think part of it is, yeah, it's our sole focus, but I think also we're a third party. When a plan comes to a community partner it's one, a very different power dynamic," said Manik Bhat, CEO of Healthify. Whether in contract payment or structural terms, it appears that health plans are still figuring out the best way to engage CBOs, with approaches varying across plans and intervention portfolios.

POLICY RECOMMENDATION: The Centers for Medicare and Medicaid Innovation (CMMI) should continue to develop innovation models that provide Medicare Advantage plans, providers, and CBOs additional flexibility and encourage partnerships between medical and social programs to better address SDOH for beneficiaries.

Responding to COVID

The COVID-19 pandemic coincided with the first full year of implementation for SSBCI, the first year of widespread availability of VBID, and early efforts to implement referral platforms and other new benefit programs. **The pandemic and resulting economic fallout provided a crucible for health plans and their partners to test new programs and relationships built to address SDOH. Social needs such as food and social isolation rose to the highest levels in recent memory. In the face of such challenges, many organizations reported that they were able to rapidly scale efforts, modify programs to meet new needs, and provide for existing needs in a safe manner under the new conditions.** UnitedHealthcare made several multimillion dollar donations to food banks that it had ongoing relationships with, part of a broader trend within the industry.[xxvii] The philanthropic arm of Humana, The Humana Foundation, made its largest commitment in the Foundation's history to organizations supporting essential workers, food security, behavioral health, and CBOs.[xxviii] SummaCare launched its social isolation supplemental benefit with Papa just before the pandemic, and was able to work with the vendor to provide benefits to its beneficiaries virtually. Oak Street Health was able to repurpose the fleet of vehicles it has acquired to support its MA-driven primary care clinical model to deliver food to underserved beneficiaries.

Evaluating Interventions

Just as health plans are still in the process of figuring out how to contract for services to address SDOH, they are also in the early stages of figuring out how to evaluate new programs and interventions. "We did an extensive literature review looking at what ROI examples are out there. We really found in that experience that there's not a ton of really strong literature on ROI," said Corinne Lewis, Program Officer for Delivery System Reform at The Commonwealth Fund. "There are studies of programs that are fairly small, and they're often pre-post analyses."

Plans report that the ultimate goals of their SDOH programs are to produce both improved health outcomes, or "return on health," and return on investment (ROI) through lower beneficiary health costs. Successfully addressing a social need or connecting beneficiaries to services often serve as surrogate endpoints for studying effectiveness, at least in the early years of interventions. Larger plans report robust capabilities to conduct analyses in-house and tend to demand greater amounts of data from vendors and CBOs when executing contracts. "We require lots of data from [CBOs and SDOH service vendors]," said Humana's Renda. "We insist on doing the outcomes evaluation ourselves, as opposed to outsourcing that to the vendor, just because we have ways of doing things, and we'll do it in a rigorous way. But yes, we want lots of data from them... We'll take whatever data we can get and then we'll match that up with our claims data and do the analysis ourselves."

"We provide our own transportation. When the pandemic hit and there were closures, our top priorities were keeping our patients safe, which meant keeping them at home. We didn't want them to go out, but also they had food needs. We were not providing in-center care, so our vans were at standstill. We partnered with food banks in every state, every community we were in, and really created a triad [in which] we were the screener, we identified a food insecurity. That same day, linked to the food bank, did a route with our drivers, so every day they were picking up food from the food banks or from the shelf-stable meal provider and would deliver it directly to the home in a contact-less delivery. We were doing about 1,000 deliveries a week in leveraging our transportation in a way to connect food banks to people when either those individuals did not want to leave the home, or we didn't have as much information as we have now about how to safely leave the home."

- Katherine Suberlak, Vice President of Clinical Programs at Oak Street Health

While smaller health plans may not have the same staff resources, some report that they are able to analyze their programs through creative partnerships with academic researchers. SCAN Health Plan worked with a UCLA School of Medicine researcher to determine that its intensive care management program for beneficiaries with complex medical and social needs effectively reduced hospitalizations and emergency department use and published results in the *Journal of the American Geriatrics Society*.[xxix] Likely reflecting an eagerness among the research community to see early data on such initiatives, CBOs report similar success in forging such partnerships. Partners in Care Foundation worked with a leading aging researcher at Texas A&M to determine that the Chronic Disease Self-Management programs developed by the Self-Management Resource Center and delivered by Partners' staff had the additional beneficial effect of reducing loneliness among participants. Further research supports the efficacy of in-home support programs and their ability to improve health outcomes, such as medication management.[xxx] Partners in Care Foundation also worked with researchers at UCLA School of Medicine to find that in-home medication education and support, post discharge, may prevent subsequent inpatient utilization.[xxxi]

Perhaps as a way of proving the effectiveness of their programs, many vendors have helped their health plan clients evaluate the effectiveness of their services. Towsley described SummaCare's close relationship with Papa in evaluating their social isolation pilot partnership with the vendor: "Papa surveyed members at the start and the end of the pilot [using] the UCLA loneliness and the CDC Healthy Days assessments, and then they used a net promoter score question, and we were able to reduce loneliness by 53 percent, improve their physical and mental health days by two days, and [increase] our net promoter score." With the ability to track services and confirm delivery, referral platforms are also beginning to provide evaluation services for their contracted health plans.

Early analyses may be limited by available data or simply reflect the priority placed on certain initiatives. "The easiest thing to track is utilization because that is just a little bit more real time," said Aetna's Mollitor. "But again, particularly with COVID, it doesn't really speak to the success of the benefit… We are starting to crunch data trying to look at medical costs. We also look at things like retention. Do the benefits seem to be resonating with the members? Which is kind of tied to utilization, of course." While it has not published intervention-specific data, Humana produces regular reports on promising results seen in the "Bold Goal" communities, where it has concentrated the most SDOH investment and resources using the CDC's Healthy Days measures. UHC has published a significant amount of data on its housing interventions aimed at the Medicaid and dual-eligible populations. According to company representatives, the focus on analysis reflects the heavy investment in those programs: "It's a factor of where we really placed our bet in the beginning, knowing that housing was a critical need, particularly within our Medicaid business, and our executive team invested heavily in that space," said Cyrus Batheja, Vice President of Clinical Policy and Solutions at UHC. "So we were able to start to quantify more rapidly, we do almost $500 million a year in affordable housing funding… But we're quickly moving into similar types of measurement, and I'll just say backed by similar type of energy in the other social determinants of health."

Even for health plans with the best analytic capacity, evaluations are necessarily limited to interventions sponsored by the plan within its own beneficiary population. A better understanding of the effectiveness of interventions more broadly (including specific programs such as new supplemental benefit flexibilities) may require CMS to conduct or sponsor research across the entire Medicare population. "If we really want to know what works, we've got to have government financing the evaluation work," said Newsom. Jacobson agreed, and expanded on the concept: "It would be enormously valuable to both the MA plans and the Medicare program at large to create a learning lab, and to have a place that collects data on experiments that plans have tried, collects data on use of supplemental benefits, and basically helps plans to innovate, and also helps to collect what has been learned over time."

POLICY RECOMMENDATION: CMS should consider ways to encourage the sharing of best practices by health plans, providers, and social support services to address SDOH within Medicare in order to enhance learning and scaling effective interventions. CMS should make aggregate data available to health plans, researchers, and, when possible, the public.

All health plans, providers, vendors, and CBOs interviewed for this report, believed the interventions they are implementing would prove effective at accomplishing the goals of improving beneficiary health and producing a positive ROI. However, it may take years to truly understand the results of these new programs. "We are looking at [SDOH intervention results] over time—What are the trends that we would like to see? Then what is the duration that an intervention is required?" noted Suberlak of Oak Street Health. "I think substance use research has shown a lot of [similarities] that we could look to. Examples of that include how many times does it take for someone to quit smoking? What is it like for an individual that has used heroin that then is seeking that treatment or Suboxone treatment? A net cost decrease as a result of substance use treatment is multi factorial and requires many months. It's not identical, but I think when you look at a problem that intersects biopsychosocial, spiritual, behavioral, it has similarities that I think you can't expect that okay, I've linked you to a food pantry. Your health costs are going to be less next month." As with nearly every other area of health care, plans report that the COVID pandemic almost completely disrupted efforts to track the results of SDOH interventions. While the supplemental benefit and SDOH data exchange environments move toward maturity, CMS should work with stakeholders to develop appropriate quality measures to ensure that it is able to monitor the success of SDOH programs at the appropriate time. Credible efforts to develop such measures are already underway.[xxxii]

POLICY RECOMMENDATION: CMS should work with the health care community to identify potential quality measures related to addressing SDOH within Medicare Advantage and the broader Medicare program.

More complete and robust SDOH needs data could be utilized to more accurately predict beneficiary costs, not only by health plans but also by CMS. Many health plans expressed support for the concept of risk adjusting Medicare Advantage base payments or adjusting Stars and CAHPS scores based on beneficiary social needs. "You have to think about the money upfront to do some of those [SDOH interventions]," said Angela Hagan, PhD, Associate Director of Population Health Strategy at Humana. "It's challenging, right? Without those payment mechanisms that are out there and risk adjustment to help provide additional funding for that, or the right kind of funding, it just makes it very challenging to get going." Deborah Paone, DrPH, Performance Evaluation Lead and Policy Consultant for the SNP Alliance, offered measured praise for CMS' efforts to address social risk in Medicare Advantage quality measurement:

"CMS created an interim strategy called the Categorical Adjustment Index, which applies a weighting factor on different Star Measures. They started with six, then nine, then added more measures for adjustment. Unfortunately, it hasn't had a substantial impact. It was supposed to help special needs plans and other plans that have high SDOH populations—it was a temporary solution—but it is time to address this more substantially in MA quality measurement." The perhaps unexpected support for risk adjustment and adjusting quality scores may be driven by the recognition that health plans with more socially at-risk beneficiaries are penalized under quality programs,[xxxiii] or the recognition that health plans are increasingly serving a more socially at-risk population relative to Traditional FFS Medicare,[xxxiv] a trend which may be accelerated by newly available supplemental benefits addressing social needs. Even in the absence of beneficiary-level data, researchers have demonstrated that, in the case of performance data, geographic-level social risk indexes can add to the predictive power of dual-eligible and disability status factors currently used in risk adjustment.[xxxv]

"I find it crazy that people would say, 'Wait, we haven't changed the entire world already?' Medicare did one thing since the 1960s when it came on board, and we think we're going to change that entire space in less than two years and know exactly how we did it, what worked and what didn't," reflected Newsom. "That's insane… These are truly innovations, true game-changers, true paradigm shifts and a completely different way of thinking and doing things than I've seen in my 20-plus year career, and the idea that we're going to change everything in a day is absurd. I think it's great what we're seeing already. We're going to see more of it, and over time people will shift as they learn more and get that data and experience."

-Mark Newsom, Principal, Health Evaluations LLC

POLICY RECOMMENDATION: CMS should explore adjusting Medicare Advantage payment in annual risk adjustment to include the assessment of social risk factors of plan beneficiaries.

POLICY RECOMMENDATION: CMS should explore modifying Medicare Advantage Stars quality performance measures to account for social risk factors of plan beneficiaries.

Interviewees from health plans, providers, and CBOs, as well as policy experts, all urged patience in evaluating the effectiveness of interventions.

Conclusion

Health plans have made significant strides in recent years in developing programs and partnerships to address the social needs of their beneficiaries. Work has focused on three broad areas of development: 1) identifying reliable sources for data on beneficiary social needs and incorporating the information into clinical programs; 2) delivering services or connecting beneficiaries to services that address social needs; and 3) tracking health outcomes and ROI associated with interventions. This research demonstrates the enthusiasm for this work from health plans, providers, community partners, and technology entrepreneurs. It also highlights many best practices that have emerged in the early years of new policy flexibility that allows health plans and providers to address SDOH needs in their beneficiaries and patients. Further, it demonstrates how the rapidly evolving data and technology environment has emerged to identify needs, share data, and offer appropriate referrals.

Health plans have responded by making substantial investments in their operations to identify social needs and monitor program effectiveness. They have also deepened longstanding partnerships with CBOs and formed new partnerships with an emerging class of vendors to facilitate and perform SDOH services. The research identifies several policy recommendations that would enhance the growth and sustainability of health plans and partner organizations to meet the social needs of their beneficiaries.

These recommendations offer policymakers and regulators an agenda to support health plans in transforming the relationship between medical and social needs in health care delivery, potentially improving health outcomes and well-being for millions of Medicare beneficiaries. Lessons learned from these innovations will help policymakers expand on the progress already made in just a few years and enhance the potential impact of these changes for future beneficiaries.

References

[i] Kornfield, T., Kazan, M., Frieder, M. & Duddy-Tenbrunsel, R. "Increasing the Availability of New Supplemental Benefits in Medicare Advantage." To the Point (blog), Commonwealth Fund, Feb. 2021.

[ii] Olson, A., Harker, M., Saunders, R. & Taylor, D. "Innovations in Medicare Advantage To Improve Care for Seriously Ill Patients." Margolis Center for Health Policy, Duke University, July 2018.

[iii] United States Department of Health and Human Services, Office of Disease Control and Prevention. "Healthy People 2030: Social Determinants of Health," 2021.

[iv] Artiga, S. & Hinton, E. "Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity." Kaiser Family Foundation, May 2018.

[v] United States Department of Health and Human Services, Office of Disease Control and Prevention. "Healthy People 2030: Social Determinants of Health." 2021.

[vi] Artiga, S. & Hinton, E. "Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity." Kaiser Family Foundation, May 2018.

[vii] Horwitz, L., Chang, C., Arcilla, H. & Knickman, J. "Quantifying Health Systems' Investment in Social Determinants of Health, By Sector, 2017-19." Health Affairs, Feb. 2020.

[viii] RTI International. "Accountable Health Communities (AHC) Model First Evaluation Report." CMS, Dec. 2020.

[ix] Murphy-Barron, C., Pyenson, B., Ferro, C. & Emery, M. "Comparing the Demographics of Enrollees in Medicare Advantage and Fee-For-Service Medicare." Milliman Report, Oct. 2020.

[x] Sorbero, M., et al. "Addressing Social Determinants of Health Needs of Dually Eligible Medicare Advantage Enrollees." RAND Corporation Research Report, Oct. 2018.

[xi] Lee, J., Majerol, M. & Burke, J. "Addressing the social determinants of health for Medicare and Medicaid enrollees: Leading strategies for health plans." Deloitte Insights, Feb. 2019.

[xii] University of Wisconsin Population Health Institute. "County Health Rankings Model." County Health Rankings & Roadmaps, 2014.

[xiii] World Health Organization. "Social determinants of health." 2021.

[xiv] University of Wisconsin Population Health Institute. "What Works for Health." County Health Rankings & Roadmaps, 2021.

[xv] Jarrín, O., et al. "Validity of Race and Ethnicity Codes in Medicare Administrative Data Compared With Gold-standard Self-reported Race Collected During Routine Home Health Care Visits." Medical Care, Jan. 2020.

[xvi] Lee, J., Majerol, M. & Burke, J. "Addressing the social determinants of health for Medicare and Medicaid enrollees: Leading strategies for health plans." Deloitte Insights, Feb. 2019.

[xvii] Schilling, B. "Health Risk Assessments: What You Don't Know Can Cost You." Commonwealth Fund, 2011.

[xviii] Shekelle, P., et al. "Health Risk Appraisals and Medicare." RAND Corporation report for the U.S. Department of Health and Human Services, Health Care Financing Administration (HCFA), 2003.

[xix] Mathew, J., Hodge, C. & Khau, M. "Z Codes Utilization among Medicare Fee-for-Service (FFS) Beneficiaries in 2017." CMS OMH Data Highlight, 2020.

[xx] Humana. "Humana Launches Innovative Value-Based Program to Address Social Determinants of Health." Humana Press Release, 2020.

[xxi] MA plans submit bids to offer Part A and Part B coverage to beneficiaries in a selected county or region, inclusive of services, administrative cost, and profit for a "standard" enrollee (payments for actual enrollees are risk-adjusted). The bid is compared to the benchmark, which is determined using adjusted FFS spending levels. If the bid is below the benchmark, the plan is paid the benchmark and is required to use the rebate dollars on supplemental benefits and/or lower premiums (including premiums for Part D drug benefits). If the bid is above the benchmark, the enrollee must pay the difference as an additional premium.

[xxii] CMS. "Implementing Supplemental Benefits for Chronically Ill Enrollees." Letter to Medicare Advantage Organizations, April 2019.

[xxiii] Ipakchi, N., Blum, J., Hammelman, E. & Hsieh, M. "Medicare Advantage Supplemental Benefit Flexibilities: Adoption of and Access to Newly Expanded Supplemental Benefits in 2020." Health Management Associates Issue Brief, 2020.

[xxiv] ATI Advisory. "Data Insight: Special Supplemental Benefits for the Chronically Ill in Plan Year 2021." ATI Advisory, 2021.

[xxv] ATI Advisory. "Data Insight: Special Supplemental Benefits for the Chronically Ill in Plan Year 2021." ATI Advisory, 2021.

[xxvi] Hovey, L. et al. "Social Determinants of Health Data Sharing at the Community Level." Contractor Report for the HHS Assistant Secretary for Planning and Evaluation, 2021.

[xxvii] AHIP. "Health Insurance Providers Respond to Coronavirus (COVID-19)." AHIP Blog, April 2021.

[xxviii] Humana Foundation. "Humana Foundation Commits $50M to Coronavirus Relief and Recovery Efforts." April 2020.

[xxix] Moreno, G. et al. "Connecting Provider to home: A home-based social intervention program for older adults." Journal of the American Geriatrics Society, March 2021.

[xxx] Strickland, C., et al. "Impact of a Combined Coleman Care Transitions Interventions and Bridge Model Intervention on Readmissions and Medicare Spending." CMS Community-based Care Transitions Program Intervention/Driver Performance Progress Report, 2018.; Woosley, R. et al. "Linking Technology to Address the Social and Medical Determinants of Health for Safe Medicines Use." Journal of Patient Safety, June 2021.

[xxxi] Sorenson, A. et al. "A Collaboration Among Primary Care-Based Clinical Pharmacists and Community-Based Health Coaches." Journal of the American Geriatrics Society, Jan. 2021.

[xxxii] National Quality Forum. "A NATIONAL CALL TO ACTION: Quality and Payment Innovation in Social Determinants of Health." NQF Report, 2019.

[xxxiii] Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. "Second Report to Congress on Social Risk Factors and Performance in Medicare's Value-Based Purchasing Program." 2020.

[xxxiv] ATI Advisory for the Better Medicare Alliance. "Social Risk Factors Are High Among Low-Income Medicare Beneficiaries Enrolled in Medicare Advantage." Better Medicare Alliance, 2020.

[xxxv] Kilgore, K. & Teigland, C. "How to Account for the Full Impact of Social Determinants of Health in Medicare Advantage Plans," Presented at the 2019 Annual Research Meeting, June 2019.