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Social Determinants of Health

The Barriers Between Us and Better Health

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Executive Summary

The term social determinants of health (SDoH) is often used to refer to any nonmedical factors influencing health, including health-related knowledge, attitudes, beliefs, or behaviors (e.g., smoking). However, SDoH also include "upstream" factors, such as social disadvantage, risk exposure, and social inequities. These play a fundamental causal role in poor health outcomes, and thus represent important opportunities for improving health and reducing health disparities. SDoH are important because even though the US spends more on healthcare than any other nation in the world, it ranks poorly on nearly every measure of health status.

There are two reasons for this. First, the pathways to better health do not generally depend on better healthcare. Second, even in those instances in which healthcare is important, too many Americans do not receive it, receive it too late, or receive poor-quality care. In fact, looking at premature death as a proxy, medical care plays a relatively minor role (10%), surpassed only by environmental exposure (5%). The three most important factors are personal behaviors, genetic predisposition, and SDoH, which, combined, account for 85% of the cause.

There have been numerous studies that show the relationship between SDoH factors and health outcomes. These studies show causal relationship between SDoH factors and, among others:

1. Hospital readmission rates in the Medicare Advantage (MA) population
2. Obesity in children 2-19 years of age
3. Attention deficit hyperactivity disorders in children 5-17 years of age
4. Depression in people ages 45-64
5. Prevalence of smoking

In this eBook, we present the scientific findings around the characteristics of SDoH and their importance to health outcomes. We also set the stage for Part 2, which explores the regulatory and healthcare policies and programs that are being implemented both at the federal and state levels to address these issues.

> **"When it comes to truly understanding SDoH, it's better to listen. It's not about talking at all. It's about trying to understand people's experiences."**
>
> - Pierre Vigilance, VP of Population Health & Social Impact at Equideum Health, Icario's Podcast Interview

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Introduction

Human beings are social creatures, deeply influenced by how we participate in society and our social and physical surroundings. As such, most definitions of SDoH include the conditions of the environment—social and physical—in which we spend our lives that affect our health, functioning, and quality of life.

Aaron Antonovsky, a Yale-trained sociologist who spent a good part of his career in Israel studying adults who had survived childhood incarceration in concentration camps during World War II, observed that despite shared horrendous experiences, certain individuals adapted much better to life afterward. Those people found a way to comprehend, manage, and find meaning in life despite what had happened around them, and this gave them resilience to persevere.

Antonovsky noted that this sense of coherence was directly tied to a chronic stress response in humans. An enormous volume of literature has cataloged the impact of the social gradient and social and psychological stressors on human health. Nearly all the determinants commonly cited in social determinants models—from job insecurity, to coexisting with violence, to inequality or isolation—have been connected to chronic stress responses and long-term worsened healthcare outcomes. Social determinants matter because they can reset our biology, for the worse or the better. Trying to improve population health with medical interventions without addressing social determinants is like spraying greater and greater quantities of pesticides on crops growing in unsuitable soil—the plants will not thrive. In fact, for the first time in decades we are seeing significant slowing in mortality rate improvement across the US, and most observers believe this is the result of increasing inequality.

Abraham Maslow described human beings as beholden to a hierarchy of needs. The need for physical sustenance like food and sleep comes first, shelter and safety second, love and belonging third, to be esteemed fourth, and, finally, self-actualization. This model is helpful because it is clinically focused. It makes little sense to try to educate a patient about the importance of taking their medication every day if she and her child are sleeping on friends' couches and struggling to find a safe environment. As healthcare professionals, we need to focus on what our members and patients need now and what they care about most. The purpose of this eBook is to create a framework for discussing how we can be more effective in delivering high-quality care that considers the whole of the person who is receiving the care.

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What Are the Social Determinants of Health?

It seems like a foregone conclusion that a person's social circumstances would impact their health, and during the past 30 years, there has been a sizable body of evidence from social epidemiological literature that shows non-health characteristics of individuals contribute significantly to their health. These social circumstances, which collectively are called the social determinants of health (SDoH), are "the structural determinants and conditions in which people are born, grow, live, work, and age." They include factors like socioeconomic status, education, the physical environment, employment, and social support networks, as well as access to healthcare (Figure 1).

Figure 1 Categories of Social Determinants of Health

Researchers have found that healthcare use and outcomes are embedded in the 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 and there is a great deal of data to support that the higher a person's income, the better a person's health. 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.

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 behavior (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. 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 cutoff point between those at the bottom and those at the next level of income. Researchers refer to this relationship as the income gradient, and although the gradient is steeper at lower levels of income, it persists even at the highest income levels. Research suggests that the gradient is weaker for the people over 65 years of age but still significant.

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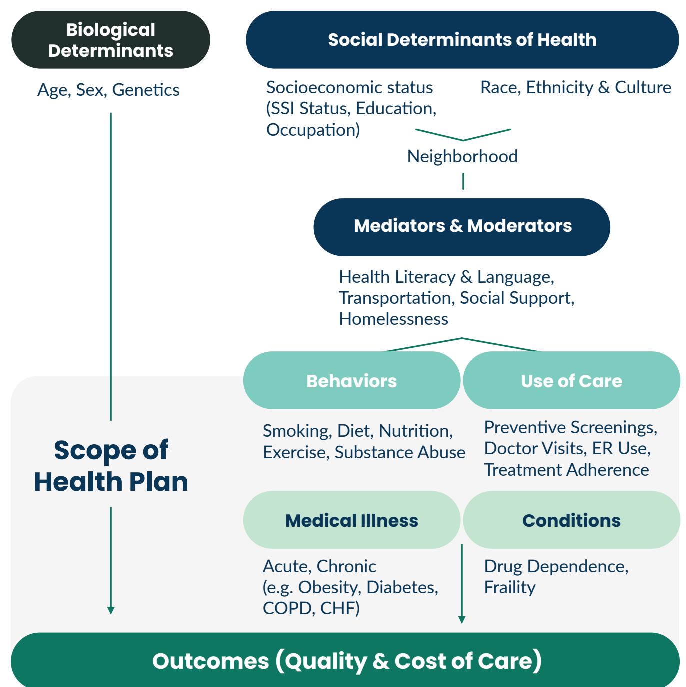
In addition to income, numerous studies have also established a link between a person's broader socioeconomic status (SES) and health. Indicators of SES intend to measure the economic, social, and even political circumstances in which people live, as well as an individual's rank and influence in society. 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 considered.

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 that affect outcomes of care. Figure 2 is a conceptual framework of how social determinants interrelate. Most social factors affecting health, except race and ethnicity, occur downstream from SES. Researchers conceptualize these factors as downstream because they (1) emerge later in life because of lifelong differences in SES, and (2) they are closer to the health system and health outcomes (Figure 2).

Figure 2 Determinants of Healthcare and Outcomes



As Figure 2 shows, some downstream factors act as moderators or mediators of low SES. Moderators affect the direction and strength of the relationship between SES and outcomes of care. For example, the presence of social and family supports can moderate an adolescent's risk of 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 SES can 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 of, and in addition to, the effects of SES. Consequently, interventions that target moderators and mediators are likely to improve health and possibly lower healthcare costs.

Research also shows that certain health behaviors, such as smoking, poor diet, and substance abuse, are associated with low SES and, by extension, some mediators of SES.

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These behaviors exacerbate risk factors for chronic disease and poor health outcomes, including higher mortality. An individual's use of healthcare and the health system is 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 like childcare.

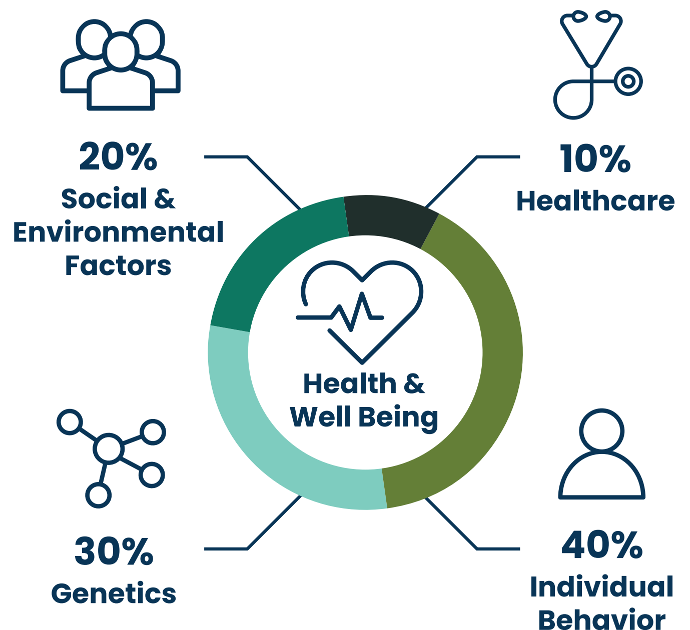
More recently, researchers have explored geographic factors such as neighborhoods, that function as social determinants of health. Neighborhoods with low SES, for example, often provide less access to fresh fruits and vegetables, leading to lower consumption of these foods, which can cause documented declines in muscle strength, walking ability, and mortality. Neighborhoods appear to be a powerful predictor of health as they embody multiple risk factors simultaneously, such as resident income and education, existence of parks for outdoor activities, food availability, and so forth. In short, at some level, an individual's zip code may be a more important determinant of health than their genetic code.

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 as compared to SES. Individuals who present with medical conditions and have poor social conditions that negatively affect their health 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.

Impact of SDoH on Health

Despite annual healthcare expenditures projected to exceed $3 trillion, health outcomes in the US continue to fall behind other developed countries. Recent analysis shows that, although overall spending on social services and healthcare in the US is comparable to other Western countries, the US disproportionately spends less on social services and more on healthcare. Though healthcare is essential to health, research demonstrates that it is a relatively weak health determinant. Health behaviors, such as smoking and diet and exercise, are the most important determinants of premature death (Figure 3). Moreover, there is growing recognition that a broad range of social, economic, and environmental factors shape individuals' opportunities and barriers to engage in healthy behaviors.

Figure 3 Impact of Different Factors on Risk of Premature Death



Figures 4-8 show the relationships between SDoH characteristics (income, employment, insurance access, and education) and their influence on the prevalence of chronic disease. As is obvious from these maps, there is a strong connection between areas that have high SDoH vulnerabilities and the rate of chronic disease among those 65 years or older. The same type of patterns show up when comparing SDoH characteristics and specific chronic conditions (e.g., diabetes and cardiovascular disease) and among other segments of the population (e.g., Medicaid).

The other pattern that emerges is the fact that there is an intimate connection between education level and income, but less of a correlation between employment and income, or employment and insurance. This speaks to the simple fact that full-time employment does not guarantee above-poverty-line living wages, nor does employment always provide health insurance.

Figures 4-7 SDoH Characteristics by Country, 2014 (Employment, Income, Education, Insurance)

Figure 4: Education

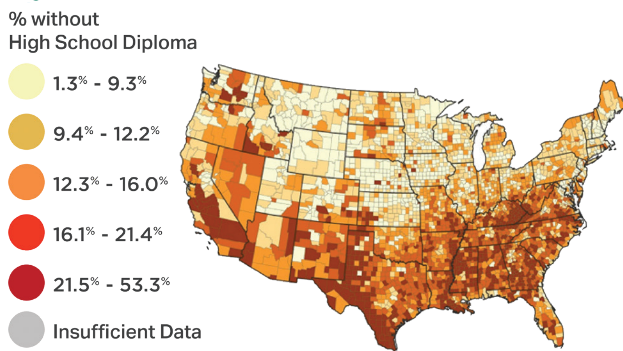


Figure 5: Income

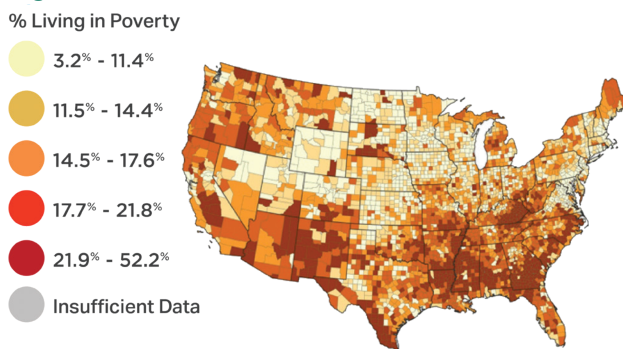


Figure 6: Employment

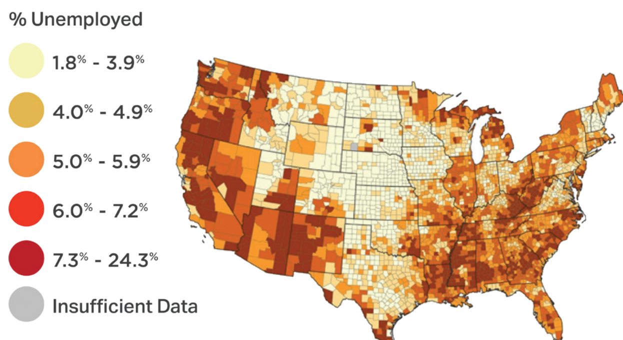


Figure 7: Insurance

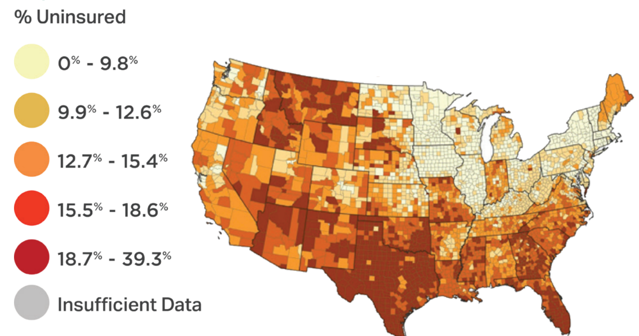
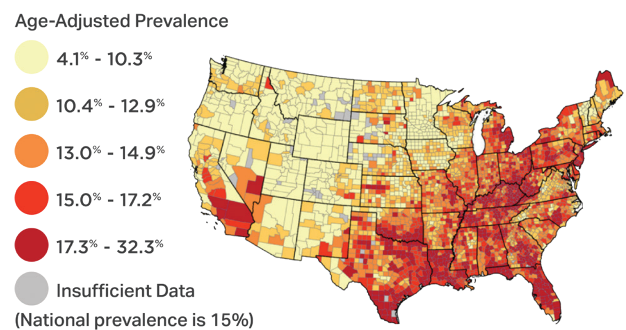


Figure 8 Prevalence of Medicare FFS with 6 or More Chronic Conditions, 2014



(National prevalence is 15%)

Finally, Figure 8 shows the connections between SDoH and chronic disease at the macro level, but there have been a number of studies that show the same patterns at the micro level for different population segments and conditions. For example:

In an observational study of hospital readmissions, researchers found 60% of the variation in hospital 30-day readmission rates for acute myocardial infarction (AMI), heart failure (HF) and pneumonia (PN) was explained by the county of residence of the patient among Medicare members.

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Obesity in children 2-19 years of age decreased with increasing education of the head of household.

Babies of parents who had less than a bachelor's degree were less likely to nurse for at least 3 months.

Children 5-17 years of age living 200% below the poverty line were more likely than those 200% above the poverty line to have been told by a doctor or other health professional that they had attention deficit hyperactivity disorder.

Twenty-five-year-old (self-identified) men without a high school diploma had a life expectancy 9.3 years less than those with a bachelor's degree or higher; (self-identified) women without a high school diploma had a life expectancy 8.6 years less than those with a bachelor's degree or higher.

The prevalence of depression among adults 45-64 years of age was five times as high for those below the poverty line (24%) compared with those at 400% or more above the poverty line (5%). (Self-identified) women 25 years of age and over with less than a bachelor's degree were more likely to be obese (39-43%) than those with a Bachelor's degree or higher education (25%).

31% of adults 25-64 years of age with a high school diploma or less education were current smokers, compared with 24% of adults with some college and 9% of adults with a bachelor's degree or higher.

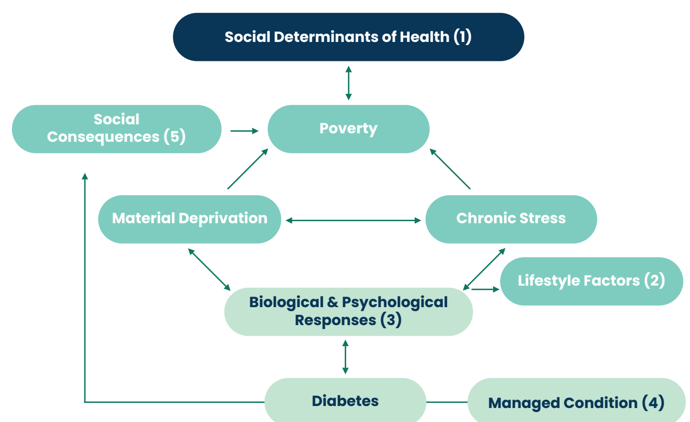
There is ample evidence that connects SDoH with health outcomes, across population segments and in relation to different disease conditions, and related to different SDoH categories, such as education, income, housing, and access to health and insurance coverage.

Now let's look closer at the details of connection between SDoH and one of the most pervasive and growing chronic conditions, Type 2 diabetes.

As illustrated in Figure 9, Type 2 diabetes is part of a cyclical process: It both results from and contributes to adverse outcomes. Poverty and material deprivation, defined as a lack of resources to meet the prerequisites for health, may play a key role.

For individuals socioeconomic barriers, the constant scramble to make ends meet results in high levels of chronic stress, spurring both psychological and biological responses. Chronic stress can lead to increased depression and anxiety, reduced self-esteem, and decreased energy and motivation, which amplify the likelihood of self-destructive behaviors and choices (e.g., tobacco use, excessive alcohol intake, and consumption of unhealthy foods).

Figure 9 Using Diabetes to Learn About Social Determinants of Health



The physical manifestation of chronic stress leads to the negative consequence of allostatic load, which includes increased blood pressure, cortisol, and blood glucose levels, as well as impaired ability to effectively respond to future stressors. Over time, these physiological reactions, coupled with detrimental psychological responses and behavioral practices, increase the likelihood of obesity and Type 2 diabetes.

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Type 2 diabetes can be particularly problematic among less patients facing socioeconomic barriers for several reasons. First, the personal financial burden of increased healthcare costs can further intensify the effects of poverty, particularly because it consumes a greater portion of income (as compared with those who have greater financial resources).

Second, an individual facing socioeconomic barriers may not have sufficient access to the resources necessary to manage the condition, such as adequate housing, nutritious food, and healthcare services. Third, diabetes can decrease an individual's productivity at work or limit educational attainment, particularly if left unmanaged, which can lead to further employment-related problems. These conditions exacerbate the cycle of inequality, as they lead to further poverty, material deprivation, and social exclusion if these individuals are left to fend for themselves.

Conclusion

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships.

The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be. Individual-level factors such as access to healthcare, health behaviors, and genetics have an influence on health, but they do not fully explain patterns of health and illness within communities and across populations.

Across cities, towns, regions, and countries, disadvantaged populations consistently have poorer health than populations advantaged by greater economic and social resources.

Social determinants of health are the conditions in which people are born, live, work, and age that affect their health. Understanding the importance of social determinants of health is central to the history and practice of public health. Addressing the social determinants of health is important because:

- These factors underlie preventable disparities in health status and disease outcomes. Poor health outcomes are often the result of the interaction between individuals and their social and physical environment.
- Policies that result in changes to social and physical environments can affect entire populations over extended periods of time, while simultaneously helping people to change individual-level behavior.
- Improving the conditions in which people are born, live, work, and age will ensure a healthier population, thereby improving national productivity, security, and prosperity through a healthier workforce.

In Part 2 of this eBook, we will explore these national and state level policies and programs in more detail.

> **"Social determinants of health is just a fancy word for poverty."**
>
> – John Gorman, Government Health Programs Expert, Icario Podcast Interview

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Part 2: Policies and Programs

In this section, we will discuss the growing movement to address SDoH in healthcare policy and develop programs that acknowledge the importance of SDoH on delivering effective and efficient care. The Centers for Disease Control and Prevention (CDC) and Centers for Medicare and Medicaid Services (CMS) are leading the way in establishing the frameworks and developing the programs that tackle SDoH needs, among them, CMS' Accountable Health Communities (AHC), accounting for SDoH in Medicare Advantage's Star Program, and Medicaid's state-level programs on SDoH services.

In addition, plans, providers, community organizations, and government agencies also have a significant role to play. To tackle SDoH factors in a holistic and systematic way, these groups must address four areas of improvement:

1. More dedicated time and resources at all levels of support to tackle and integrate SDoH factors into the healthcare delivery system
2. Alignment of incentives up- and downstream at the macro level (government agencies and policy making), at provider and plan levels in terms of reimbursement, and downstream at the member level to motivate and instigate better engagement
3. Development and utilization of accessible, actionable, and integrated data across all relevant channels
4. The establishment of local, regional, and national support networks

SDoH Implications on Healthcare Policy and Programs

Health and health problems result from a complex interplay of a number of forces. An individual's health-related behaviors (particularly diet, exercise, and smoking), surrounding physical environments, and healthcare (both access and quality), all contribute significantly to how long and how well we live. However, none of these factors is as important to the population as are the social and economic environments in which we live, learn, work, and play. These factors collectively are known as the social determinants of health (SDoH).

In Part 1 of this eBook (see: Icario's Social Determinants of Health: Characteristics and Importance) we presented the details on the importance of SDoH on health outcomes and why it is important to consider SDoH when designing healthcare policies and programs. In Part 2 of this eBook, we will present the implications for such policies and provide examples of how SDoH considerations are being incorporated into healthcare programs. The CDC and CMS are at the forefront of these policies and programs. Below is a brief overview of three of these programs: CMS' Accountable Health Communities (AHC), accounting for SDoH in Medicare Advantage's Star Program, and Medicaid's state-level programs on SDoH services.

Accountable Health Communities (AHC):

In 1965, Dr. Jack Geiger founded one of the first two community health centers in the US in a desperately socioeconomically disadvantaged area of the Mississippi Delta. So many of his patients presented with malnutrition that he began writing prescriptions for food—patients could take the prescriptions for milk and meat, fruits, and vegetables to the local supermarket, which would fill the prescriptions and charge the clinic pharmacy.

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When the Office of Economic Opportunity, which was funding Geiger's clinic, found out, they were furious—and sent an official down to Mississippi to inform Geiger that they expected their dollars to be used for medical care. To which Geiger famously replied: "The last time I checked in my textbooks, the specific therapy for malnutrition was food."

Fifty-two years ago, what Dr. Geiger was addressing did not count as healthcare. Fast forward to January 5, 2016: The Centers for Medicare and Medicaid Services Innovation Center (CMMI) announced the AHC model, which recognizes the same social co-morbidities that Dr. Geiger attempted to address decades ago. This is the first Innovation Center pilot to address this gap in the current delivery system by funding interventions that connect patients with the resources they need to be healthy. Through this model, CMS has at last recognized a broader and more realistic view of what counts as healthcare and brought 70% of the modifiable factors that influence health back to the table in a meaningful way (social, economic, physical, behavioral).

The AHC model can also be seen as an extension of the healthcare sector's commitment to patient-centered care and population health to create greater value for the US healthcare system. It is hard to imagine a truly "patient-centered" health system that ignores the reality of patients who are hungry, experiencing violence at home, unable to get to a medical appointment or go to the pharmacy, need behavioral health services, or are experiencing homelessness. Moreover, it's inconceivable to think we can move toward a sustainable value-based payment system that doesn't have a clear strategy to address 70% of the modifiable factors of health.

At the same time, operationalizing the integration of social needs into care delivery will require more than incentives alone. For example, when the CMS chronic care management fee was first introduced in 2015, CMS estimated 35 million Medicare beneficiaries were eligible to receive these billable care-management services, but almost one year into the program the agency had received reimbursement requests for only about 100,000 due to practical implementation challenges on the ground. Developing a reliable and effective social needs screening and action program will require that healthcare institutions view their assets—infrastructure, process, tools, and relationships—through the lens of health, not simply disease, and deploy them accordingly.

The following are the key innovations and strategies of the AHC model:

1. Systematic screening of all Medicare and Medicaid beneficiaries to identify unmet health-related social needs
2. Testing the effectiveness of referrals to increase beneficiary awareness of community services using a rigorous mixed-method evaluative approach
3. Testing the effectiveness of community services navigation to aid beneficiaries in accessing services using a rigorous mixed-method evaluative approach
4. Partner alignment at the community level and implementation of a quality improvement approach to address beneficiary needs
5. AHC accomplished the above strategies through the following intervention approaches (Table 1):

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Improve awareness—Increase beneficiary awareness of available community services through information dissemination and referral.

Provide assistance—Provide community service navigation help to assist high-risk beneficiaries with accessing services.

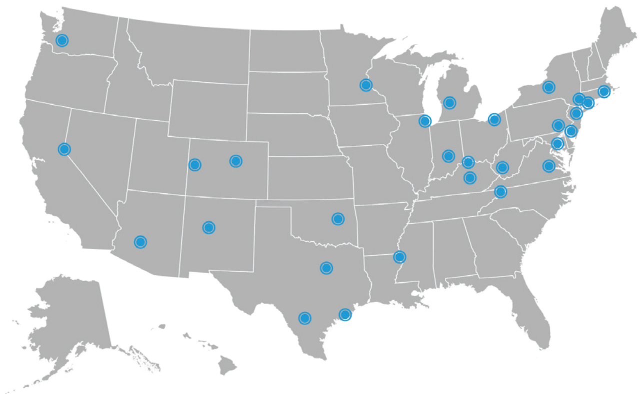
Encourage alignment—Encourage partner alignment to ensure that community services are available and responsive to the needs of beneficiaries.

Table 1 Key Features of the Accountable Health Community 5-Year Model Test

Variable	Track 1: Awareness	Track 2: Assistance	Track 3: Assistance
Intervention	Screening & referral only	Screening & referral, plus community service navigation	Screening, referral, community service navigation, plus partner alignment
Question being tested	Will increased awareness of community service availability through information dissemination and referral reduce total cost of care, ER visits and admissions?	Will providing community service navigation to assist beneficiaries with overcoming barriers to access reduce total cost of care, ER visits, and admissions?	Will a combination of community service navigation (at the individual beneficiary level) and partner alignment at the community level reduce total cost of care, ER visits, and admissions?
Required partners	State Medicaid agency; clinical delivery sites; community service providers	State Medicaid agency; clinical delivery sites; community service providers	State Medicaid agency; clinical delivery sites; community service providers; local government; local payers (MA plans + Medicaid MCOs)
Intervention components	• Inventory of local community services • Universal screening of all Medicare and Medicaid beneficiaries by medical provider • Referral to community services with beneficiary responsible for completing referral	All in Track 1 plus intensive community service navigation (in-depth assessment and follow-up until needs are resolved or unresolvable)	All in Track 2 plus backbone organization focused on community-wide continuous quality-improvement approach, including an advisory board that ensures service provision, adequate capacity to meet needs, and data sharing to inform a gap analysis
Payment	• Startup funds ($250K) • Payments for screening and referral of Medicare and Medicaid beneficiaries at participating clinical delivery sites ($2 PMPY)	• Startup funds ($750K) • Same payments for screening and referral as Track 1 • Payments for each high-risk beneficiary who elects to receive community service navigation service ($86 PMPY)	• Same startup funds, payments for screening, referral, and navigation as Track 2 • Annual lump-sum payments to support back-bone organization ($350K per year)

There are currently 32 organizations participating in the Accountable Health Communities Model (Figure 1).

Figure 1 Locations of Accountable Health Communities Model



Accounting for SDoH in Medicare Advantage's Star Program

In 2012, CMS began to implement the Medicare Advantage (MA) Star Ratings system, which makes quality incentive payments to plans that obtain at least a 4-Star Rating under a 5-Star Ratings system. Higher payments are provided in the form of higher MA benchmarks in each county. A financial penalty comes in the form of lower benchmarks. Currently, plan ratings are based on 47 performance measures derived from Healthcare Effectiveness Data and Information Set (HEDIS), Consumer Assessment of Healthcare Providers and Systems (CAHPS), and Health Outcomes Survey (HOS) instruments, and from CMS administrative data. Although there is general support for pay-for-performance as a tool to improve care for Medicare beneficiaries, there is also concern that the current system ignores the reality (exposed by research) of poverty, low levels of education, and a host of other SDoH factors and their effects on healthcare outcomes.

As we have shown in this eBook, there is a great deal of research that shows that socioeconomic status (SES), for example, independently affects an individual's use of healthcare services and health outcomes.

Additional studies provide new evidence that the socioeconomic status of MA enrollees affects Star measure outcomes and, thus, can adversely impact a health plan's ability to achieve excellence under the Star Ratings system. The effects are significant for Special Needs Plans (SNPs) serving dual-eligible and low-income beneficiaries who live below the poverty line, have disabilties, and experience complex chronic illnesses.

In September 2015, CMS released findings from a RAND study that provide scientific evidence that a beneficiary's dual-eligible status significantly lowered outcomes on 12 of 16 Star Rating measures. It also found that disability status significantly lowered outcomes on 11 of 16 measures. An Inovalon study found similar results. Characteristics of dual-eligible enrollees explained 70% or more of the disparity in outcomes compared to non-dual eligible enrollees on five of eight measures. Significantly, dual-eligible status lowered performance on the "all-cause hospital readmission" measure, the only Star Rating measure that is already adjusted for age, gender, and co-morbidities.

Lastly, even after adjusting for dual status and other factors, living below the poverty line further increased likelihood of readmission. In August 2014, the National Quality Forum (NQF) noted in its report, "Risk Adjustment for Socioeconomic Status or Other Sociodemographic Factors," that "There is a large body of evidence that various sociodemographic factors influence outcomes, and thus influence results on outcome performance measures." Given the results of the above research, there have been policy and regulatory movements to accommodate these findings, including:

Congress Requires Department of Health and Human Services (HHS) to Study Impact of SES in Medicare—In the IMPACT Act of 2014, Congress recognized the potential effects of SES and dual-eligible populations on the MA Star Ratings system by requesting the HHS Assistant Secretary for Planning and Evaluation undertake studies on this population and the Medicare program at large before October 2016.

Congress Urges CMS to Modify Star Ratings to Account for SES—In the 114th Congress, many members of Congress urged CMS to modify the Star Ratings system to better account for the clinical and sociodemographic risk factors that are out of a plan's control, arguing that MA performance measurement should accurately reflect the challenges in caring for people living below the poverty line and experiencing chronic illnesses. The S. 2104 bill would also increase funding for MA plans that are penalized with poor ratings because they enroll a higher percentage of dual-eligible or persons living below the poverty line.

CMS Adopts Categorical Adjustment Index (CAI) Method as Interim Adjustment to Star Ratings—In April 2016, CMS finalized plans to adopt CAI in FY 2017 as an interim adjustment to Star Ratings. The methodology accounts for selected SES factors on 6 of 47 measures, reporting to affect a total of 11 plans nationwide. The SNP Alliance supports this initial step but believes CMS must assume a larger and more expeditious leadership role.

Despite the above policy changes and programs, there is continued concern that they do not adequately account for the impact of SDoH on Star Ratings. The argument for additional policy changes is that the current system continues to penalize plans that specialize in care of dual-eligible populations. As such, Congress could require CMS to:

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1. Include additional Star measures and additional data on SDoH and SES factors in the CAI and subsequent methods to more fully account for the impact on Star Ratings
2. Implement a more meaningful plan to account for the effect of SDoH on Star Ratings to be implemented no later than FY 2018, beginning with adjustment of SDoH/SES factors for plan all-cause hospital readmission
3. Define a standard set of scientifically sound criteria and transparent methods for use by measure developers/stewards in reviewing, evaluating, and adjusting for the presence of SDoH/SES
4. Re-examine the validity and reliability of self-reported survey data for persons who do not speak English, have low health literacy, or experience significant cognitive/memory impairment

Example of State Medicaid Programs that Address SDoH

Given Medicaid's role in serving people with complex clinical, behavioral health, and social needs, state Medicaid agencies are uniquely positioned to identify and help address these diverse social challenges. In recent years, many of these agencies have developed strategies to support providers in addressing patients' SDoH that complement more traditional medical care delivery programs. Some state Medicaid agencies have started to integrate coverage for interventions focused on SDoH into new value-based payment models.

Many Medicaid managed care organizations (MCOs) are also developing interventions that address SDoH by linking clinical and non-clinical service delivery to improve health outcomes and cost efficiencies. As we mentioned earlier, at the federal level, CMMI is planning to test whether AHCs are a cost-effective approach to identifying and addressing select unmet social needs of Medicare and Medicaid beneficiaries across the country.

Various state organizations are in the early stages of standardizing SDoH data collection and measurement protocols for providers to administer at the patient level. The National Association of Community Health Centers, for example, has piloted the PRAPARE assessment tool, which aligns with:

1. National initiatives prioritizing social determinants (e.g., Health People 2020)
2. Measures proposed under the next stage of Meaningful Use
3. Clinical coding under ICD-10
4. HRSA's Uniform Data System for health centers

The Health Leads Screening Toolkit helps providers screen for social needs using various options from federal agencies, including electronic health record (EHR) guidelines from the National Academy of Medicine/Institute of Medicine (IOM) Committee on Social and Behavioral Domains. In 2014, the IOM released recommendations on 12 measures of social and behavioral determinants of health that should be included in every patient's EHR.

Through the Accountable Health Communities program, CMMI will develop a standardized social screening tool to help build the evidence base around effective assessments of SDoH, focusing on housing, food, utilities, interpersonal violence, and transportation (Table 2).

Table 2 Current Data Collection on Common SDoH Domains in Select States

	KS	MA	MI	NY	OR	TN	VT	WA
Housing	✓	✓	✓	✓	✓	✓	✓	✓
Family and Social Support	✓	✓	✓	✓		✓	✓	✓
Education and Literacy	✓	✓	✓		✓		✓	✓
Food Security		✓	✓		✓	✓	✓	✓
Employment	✓	✓	✓	✓	✓	✓	✓	✓
Transportation		✓	✓				✓	✓
Criminal Justice Involvement	✓	✓		✓	✓		✓	✓
Intimate Partner Violence		✓		✓	✓			

Such efforts are relatively nascent, and therefore standardized measures and a consistent approach to measuring SDoH have not yet been adopted. In the absence of a commonly accepted definition and standardized SDoH measures, there is significant variation in how states are collecting, using, and reporting this information (Table 3). This variation is similar to the early movement toward standardized clinical quality measurement.

Some providers, communities, and states are using "homegrown" SDoH measures to obtain the information needed to inform interventions and care delivery. State-based officials have also noted the lack of a common definition of SDoH across all Medicaid providers, plans and community social service organizations.

While there appears to be general agreement about broad SDoH categories that are relevant to health—housing, employment status, and food security—some states also include behavioral health or functional, cognitive, and behavioral risk factors as social determinants. (Note, for the purposes of this eBook, the term "measures" is used broadly, referring to questions used in surveys/assessments, indicators, variables, and other mechanisms for assessing SDoH).

Consequently, there are significant limitations on the degree to which SDoH information can be aggregated across care settings, limiting its usefulness from state policy, health services research, and payer perspectives. The variability also poses challenges and administrative burdens for plans and providers that are often required to track numerous, varied measures under different reporting requirements.

Table 3 Select State Level SDoH Data Collection and Programs for Medicaid Beneficiaries

State	Program/Agency	Purpose for SDoH Data Collection	Collection Mechanism/Tool
KS	KanCare State Quality Strategy and Performance Measures for MCOs & Kansas Medicaid	• Inform provider quality improvement • Identify member needs and support them more broadly, beyone healthcare services delivered	• MCO Health Risk Assessments • Member surveys (CAHPS, mental health) • Provider data systems to track National Outcome Measures (NOMs) • Cross-agency data systems
MA	MassHealth Risk Adjustment Model for SDoH/MassHealth and University of MA	• Provide data for risk adjustment model to capture the impact of SDoH on medical expenses and set reimbursement rates for MCOs and future ACOs	• All analytic variables are derived from existing administrative data or diagnosis codes from claims (or encounter) records)
	MA Department of Public Health	• Inform quality improvement framework for programmatic activity • Assess how SDoH are impacting the health of populations in programs and surveillance sets	• Population surveys • Surveillance of primary care
MI	Medicaid health plan population health management programs/Michigan Medicaid	• Inform MCO-administered: • Population health management program; • Community health worker program; and/or • Other procedures to address SDoH	• MCOs multi-year plan incorporates SDoH into their process for analyzing data to support population health management • Health risk assessments • Provider performance measurement reports
	Michigan Pathways to Better Health/ Michigan Public Health Institute and Michigan Department of Health and Human Services	• Develop care coordination strategies • Inform program evaluation	• Comprehensive checklist on tablets used by community health workers (CHW)
NY	Health Homes/NY State Department of Health	• Inform rate-setting • Evaluate health home performace and inform evidence-based practices	• Medicaid Analytics Performance Portal High-Medium-Low Monthly Billing Assessment Questions • Functional Assessment of Cancer Therapy - General Population • Health Homes Functional Questionnaire
OR	CCO Pay for Performance Program Improvement Projects (PIP)/Oregon Health Authority	• Inform incentive program voluntary performace improvement projects for CCOs to improve quality of care and achieve clinical & population health outcomes	• Claims data, EHR-data, survey data, additional collection efforts • Provider-clinic level EHRs to collect behavioral determinants (e.g., tobacco use) and food insecurity screening data
	Medicaid Behavioral Health Risk Factor Surveillance System (MBRFSS) Survey	• Examine SDoH by CCO	• MBRFSS Survey
TN	TennCare's MLTSS program/ Tennessee Medicaid	• Inform care management and coordination for members • Identify areas where state needs to focus resources to strengthen system overall • Inform program evaluation	• MCO comprehensive needs assessment • Standardized employment data sheet for HCBS members • Housing profile assessment report • National Core Indicators
VT	Support and Services at Home/Vermont Blueprint for Health	• Develp person-centered care plans and care coordination strategies aimed at meeting individuals' goals	• The Support and Services at Home (SASH) Assessment

As greater numbers of providers adopt SDoH-based interventions for low-income populations, there is a growing need for standardized SDoH measurement, which presents a new opportunity for Medicaid agencies, as well as for national organizations focused on measurement standards. To facilitate data collection, Medicaid can play an important role in both developing reporting requirements as well as bringing standardization to the measurement process.

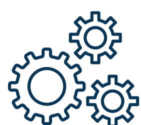
Targets for Change

As we have shown in this section, there is now general recognition that delivering quality healthcare and outcomes requires plans and providers to think about social and behavioral factors that may fall outside of the traditional healthcare delivery models. Education, income, social support, food security, literacy, and access to quality healthcare play a critical role in quality outcomes.

It is also obvious that, at the state and federal government level, there are some innovative projects under way that address SDoH. At the same time, SDoH requires that plans and providers account for a holistic set of member barriers that they have traditionally not considered.

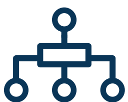
Figure 2 shows an overview of the targets for change for addressing SDoH factors in improving health outcomes.

Figure 2 Targets for Change for Social Determinants of Health



1. Time & Resources
Human & Capital

2. Align Incentives
Individuals & Systems



3. Data
Accessible & Actionable

4. Networks & Support
Private & Public

Time and Resources: One of the most important challenges and opportunities in incorporating SDoH factors in the delivery of care is the need for dedicated time and resources for providers and social workers to perform their work and jump-start projects that address SDoH factors and transform their clinics, agencies, and hospitals. In the short term, healthcare organizations can begin programs for which there is adequate evidence that a holistic approach would reduce preventable hospitalizations, reduce costs, and improve outcomes among patients with significant social needs.

Examples include programs that house people experiencing homelessness or set up medical-legal partnerships to assist adults or children with disabilities. Healthcare administrators can demonstrate leadership by setting aside time for a designated team of social workers, healthcare providers and behavioral specialists to work together to tackle SDoH issues that impact successful health outcomes.

Align Incentives: We need new ways to pay for comprehensive SDoH care delivery approaches to help improve health where we live, work, eat, and play. At the institutional level, new models of coordinated care supported by the Affordable Care Act (ACA) should follow the example of the Vermont Blueprint for Action. This state health reform effort integrates and pays for community health workers to work with patient-centered medical homes.

The Healthcare Innovation Zone (HIZ), as another example, is part of the federal health reform law that allows the government to establish targeted pilots in specific communities where social determinants of health are poor. Scholarship programs, such as the National Health Service Corps, can pilot joint programs with other federal agencies, such as the Department of Housing and Urban Development, to train and place healthcare providers in communities with significant health and social needs.

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At the community level, communities and stakeholders—including philanthropies, healthcare systems, public health departments, and banks—can explore financing mechanisms to support holistic interventions. These mechanisms can include health impact bonds, which leverage funding raised through public-private partnerships to pay for initiatives that improve health outcomes. At regional and local levels, philanthropies can partner with public health agencies and businesses to leverage investments in emerging, scalable strategies and technologies that improve healthcare and social determinants of health.

Finally, at the individual level, government agencies, plans and providers must provide the right type of incentives for their members, patients, and constituents to engage in a more meaningful and holistic manner in their own healthcare and wellbeing. SDoH factors influence individuals' behaviors in insidious and hidden ways that impact engagement and outcomes.

Extrinsic motivators, such as rewards and incentives, can kick start patient engagement and overcome SDoH barriers in the short term, and provide the resources patients need to get the care they require. Over time, these extrinsic motivators can help patients develop intrinsic values and resources that reduce the impact of SDoH factors.

Unleash Actionable Big Data: Without data on health and social factors, it is difficult to build or evaluate holistic approaches. Big data must be unleashed at macro and micro levels.

At the macro level, in March 2012, the Institute of Medicine released a report outlining opportunities to improve the integration of primary care and public health. As the report indicated, widespread adoption of electronic medical records (EMR) in healthcare settings represents a major opportunity to improve social determinants of health. Clinics in communities where substandard housing is endemic, for instance, are well positioned to collect data from their patients on housing conditions and related health problems.

The ICD-10, an updated classification list developed by the World Health Organization, is used by clinicians across the US to code for diseases, signs and symptoms, and social circumstances. This effort will produce an unprecedented amount of data on the social and environmental conditions that shape disease. The federal Office of the National Coordinator for Health Information Technology should convene public health experts and front-line clinicians to develop metrics and methods for sharing EMR data and leveraging ICD-10 standards to allow clinics to better screen and address social determinants of health among patients.

Public hospitals, which are now required to perform community health needs assessments to maintain their tax-exempt status, should demonstrate that they are tailoring their care to community needs by using relevant federally recognized evidence-based measures (for example, to gauge housing or food security needs) in their EMRs.

At the community and micro level, Geographic Information System (GIS) technologies represent one of the most powerful tools for stakeholders to collect and visualize geographic data related to individual and community-level social and environment needs. This so-called geo-medicine has the potential to reveal patterns of social and environmental health risks within neighborhoods.

Armed with that information, relevant stakeholders can mobilize clinical and community actors to act, and they can target proactive and predictive medical care and clinic outreach to areas at risk. For instance, geo-medicine can be used to determine that patients with poorly controlled diabetes lived in more remote, hard-to-reach areas compared with those with well-controlled diabetes. In this case, a clinic could proactively allocate more outreach and support services to patients in remote areas.

Create Networks and Support: From online communities to regional incubators, the need has never been greater to support these holistic approaches.

Communities that seek to train and support social workers and community activists in healthcare may be well served by establishing regional incubators, which typically accelerate the development of new businesses, with a range of support resources and services. By creating clusters of these services to nurture holistic medical systems, these regions can benefit from the increased productivity that typically results when a collection of related businesses are geographically concentrated.

Health professional and public health schools can play vital roles in establishing mentorship, content expertise, and a workforce development pipeline in partnership with these incubators. Regions interested in creating clusters of healthcare innovation can build on current federal funding streams for business development, as well as the Healthcare Innovation Zones for academic-community partnerships proposed under the Affordable Care Act.

They also can learn from the community health planning model, which led to the development of regional councils in the 1960s. Regional councils, still active in many states today, are public organizations created to foster coordination and a regional approach among neighboring counties, whose local governments joined together voluntarily to address common economic and social concerns.

Conclusion

The Affordable Care Act (ACA) provides a key opportunity to help improve access to care and reduce longstanding disparities faced by historically underserved populations through both its coverage expansions and provisions to help bridge healthcare and community health. To date, millions of Americans have gained coverage through the ACA coverage expansions, including many individuals from who experience poverty, are from historically underrepresented groups, or are from other vulnerable and other vulnerable communities who have faced longstanding disparities in coverage. However, research demonstrates that coverage alone is not enough to improve health outcomes and achieve health equity.

There is growing recognition of the importance of not only integrating and coordinating services across providers and settings within the healthcare system, but also connecting and integrating healthcare with social supports and services that address the broad range of social and environmental factors that impact individuals' and communities' health and well-being.

Given the importance of social determinants on health and health equity and the opportunities provided by the ACA, a range of initiatives to address social determinants of health is emerging at the federal, state, local, and provider level. These include initiatives designed to assess and address health impacts in other policy areas as well as efforts to integrate social determinants into the healthcare system.

In particular, many new initiatives within Medicaid include a focus on social determinants, given the program's role serving a diverse population with complex needs. Looking ahead, framing health through a broader context to include factors related to the communities in which people are born, grow, live, work, and age and learning from current initiatives will contribute to increased knowledge of how to achieve broader improvements in health and greater health equity.

It is also important to note that there are a number of initiatives that seek to improve members' ownership of their own health and increase their level of engagement with the healthcare marketplace. Although this does not technically fall within the realm of SDoH programs, their implementation has had a significant impact in making SDoH programs more effective. Member engagement programs that meet the members where they are in their health journey and acknowledge their social and economic barriers help make the entire the healthcare ecosystem more accessible to the members and patients. It is with this realization that solutions such as Icario's member rewards and engagement programs can play a meaningful role in addressing some of the important issues associated with social determinants of health.

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Part 3: Improving Member Engagement and Satisfaction

What's more, because our healthcare system is based on medical loss ratios and fee-for-service billing, it may not seem like there is much financial incentive for plans to address social determinants of health. However, state and federal regulations allow for significant creativity in applying capitated payments for member engagement programs that improve health outcomes, reduce costs, and improve quality performance. For example, in 2014, the Centers for Medicare and Medicaid Services (CMS) changed Medicare Advantage (MA) regulations to allow MA plans to reward members as long the as the reward programs tackle the Triple Aim of reducing healthcare costs, improving quality, and improving members' health. State Medicaid programs allow for similar use of rewards and incentives programs.

In this section, we will explore the strategic imperatives of designing and implementing a holistic member engagement program that addresses social determinants, and we will identify the value proposition for such programs for plans and members.

Introduction

For health plans today, there's no greater challenge than improving the health of their populations, while simultaneously controlling costs. And in recent years more and more plans have acknowledged the power of addressing social determinants of health through their member engagement strategy and capabilities by using the engagement program to connect members with resources that may address their SDoH.

As we know, where a person lives can greatly impact their health outcomes—the Centers for Disease Control and Prevention (CDC) report that SDoH are the number one factor in health inequality.

The question is, how can plans and providers utilize SDoH data and its impact on an individual's health to meet the immediate needs of today, while taking steps to prepare for the future of increasingly personalized healthcare? While some innovative health plans are currently working to uncover SDoH data already present in their systems, a gap still exists that allows plans to apply this data toward cutting-edge outreach and engagement techniques in service of increased consumer satisfaction and loyalty, improved quality, and long-term healthcare costs.

SDoH Factors and Analytics

"Social determinants of health are 'the structural determinants and conditions in which people are born, grow, live, work, and age,'" according to a report from the Kaiser Family Foundation. "They include factors like socioeconomic status, education, the physical environment, employment, and social support networks, as well as access to healthcare."

In other words, the social determinants of health are non-clinical factors that affect health. And since most people do the majority of their living outside of a clinical setting, these factors can have a tremendous impact on member health. Figure 1 illustrates how these factors play into overall health and well-being.

For example, members who live in polluted areas may face increased respiratory issues, while members in rural areas might have more difficulty accessing care, with fewer providers close by. Research has found that negative impacts from SDoH contributed to nearly one-third of patient deaths in 2011.

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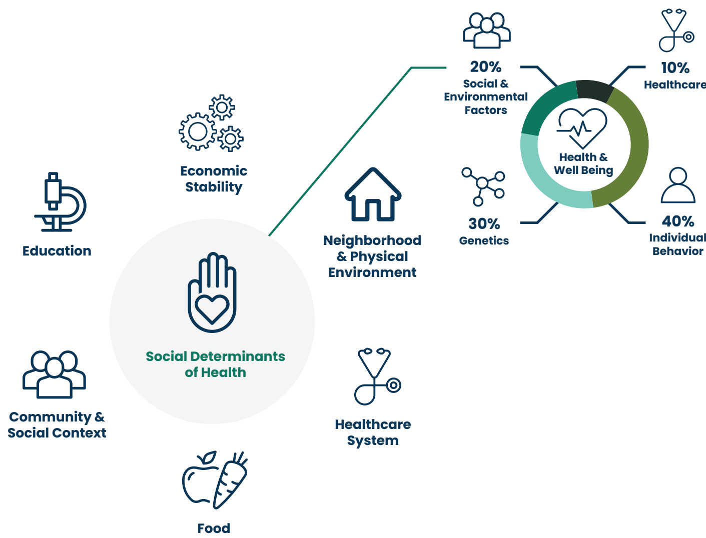
Figure 1 SDoH Factors



Acknowledging this truth, we can use SDoH data to identify both the relationship between these factors and health outcomes, as well as members' level of engagement with their own health, plan programs, and care delivery systems. SDoH also play a role in health equity.

According to the CDC, "Addressing social determinants of health is a primary approach to achieving health equity. Health equity is 'when everyone has the opportunity' to 'attain their full health potential' and no one is 'disadvantaged from achieving this potential because of their social position or other socially determined circumstance.'"

Framework for Incorporating SDoH Data into Engagement and Analytics Capabilities

Data discovery and utilization is key to acknowledging individual determinants and fostering a connection with the member. Ideally, successful member engagement programs make use of SDoH data in tandem with other available data points in order to build out a fuller picture of their populations. Data inputs may include:

- Social determinants of health (income, education, level of community support, environmental data, etc.)
- Healthcare utilization (clinical, pharmacy, hospital, etc.)
- Consumer behavior (consumption, demographic, psychographic, etc.)
- Member interaction (care management, customer service, online engagement, etc.)

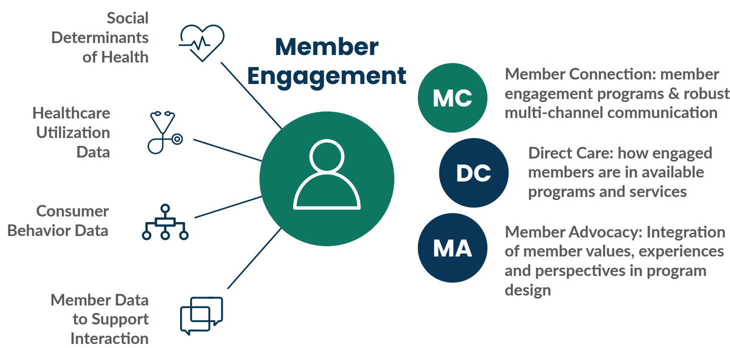
Bearing these data inputs in mind when building out a member engagement program is fundamental to program success. Program success is measured by both the primary goal of improving population health while containing care costs, as well as a number of secondary outcomes when this primary goal is targeted. These "halo effects" of an SDoH infused member engagement program include:

Increased Member Connection—Member connection refers to the depth of engagement and breadth of connection with members. Depth of engagement refers to the extent of member engagement programs and infrastructure that are built into the plan's organizational structure. The breadth of connection refers to the extent to which member communications and touchpoints are coordinated and integrated across the organization.

Appropriate Use of Direct Care—Direct care encompasses the traditional care delivery programs and resources, but it extends beyond that within this context and is comprised of two components. The breadth of direct care refers to the extent of services and programs that are made available to the members by providers and plans and how coordinated they are. Depth of direct care refers to the extent to which members are engaged in and have a role in the design and delivery of their own care.

Increased Member Advocacy—Member advocacy is an often-forgotten component of member engagement within healthcare organizations, and although there are a great number of advocacy programs that are deployed, they are usually uncoordinated and disconnected from other member engagement programs. By member advocacy, we mean the extent to which plans integrate members' values, experiences, and perspectives into their design and governance.

Figure 2 Data inputs and outputs of a SDoH inclusive member engagement program



Targeting the Right Members

Almost any member could benefit from a member engagement program that successfully identifies and addresses their individual SDoH, but certain member populations simply stand to gain more from effective engagement than others.

However, effectively engaging members in cost-saving case and disease management programs has long been a challenge for health plans.

Traditionally, health plans have put significant resources toward enrolling members in relevant programs. They identify members who would benefit, then prioritize outreach based on member risk, condition severity, comorbidities, and utilization. The outreach process itself is manual: Nurses begin at the top of the list and work their way down, contacting each member, while members below the threshold receive a mailed postcard.

Today, predictive analytics and propensity models can help automate this process and help plans better understand their members. How do they like to be communicated with? What motivates them? Ideally, health plans can focus on members most likely to engage.

Figure 3 is an example of how a health plan might use third-party consumer data to identify such members through data points that have been shown to correlate with a high propensity for engagement and change.

This targeted approach is not only cost-effective, but it also allows health plans to better connect with and motivate their members to engage in their health. Social determinants of health data can help plans prioritize their outreach, focusing on the members most in need of services and most likely to engage—improving member health while driving return on investments.

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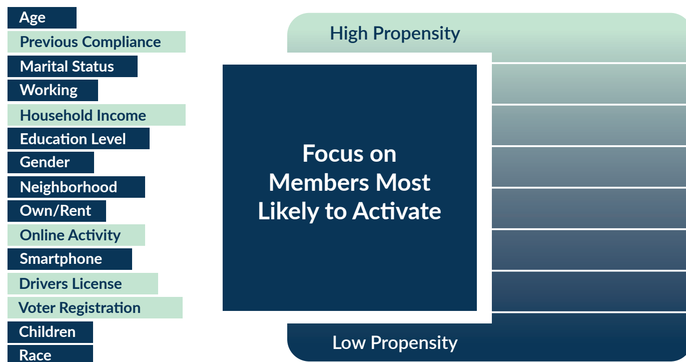
Figure 3



As programs engage inactive members most likely to activate using appropriate and efficient communications and incentives, health plans benefit in many areas that extend beyond the Triple Aim, including member satisfaction and engagement, as well as program and cost effectiveness.

Best of all, activated members are better able to take control of their health and healthcare. Plus, a more efficient use of healthcare dollars allows for those resources to go further in reaching vulnerable, hard-to-reach members.

Understanding SDoH and how to motivate your members to participate in their care is especially important when it comes to unengaged members with high healthcare needs (and high healthcare costs). Partnerships in and outside of the industry are already proving this to be the case: for example, Uber's partnership with health providers to help get more people to their doctor appointments.

Going forward, SDoH will continue to grow in importance, as plans increasingly seek innovative ways to manage costs and improve member health.

Understanding Human Behavior

Regardless of how challenging an individual's SDoH factors may be, there is another fundamental truth that bears acknowledgment in these pages: Making lifestyle change is difficult.

It's commonly known that member-centered care and effectively engaging members in their health is essential to achieving better outcomes, lower costs, and a better patient experience. However, actually achieving member engagement can be a real challenge for health plans.

At first glance, asking a member to engage in their health sounds like a simple proposition. Members can go to the doctor and ask questions about their care. They can adopt healthy lifestyle habits like eating well and exercising, or sign up for a smoking cessation program if they want to quit smoking. They can easily set up reminders for themselves to remember to take their daily medications.

But it's not that simple. Any healthcare provider can confirm that patients struggle to manage chronic conditions, come in for preventive care, or remember to refill their prescriptions.

In addition, if members actively distrust the healthcare system, they are likely used to taking a passive role in their care rather than one of active participation.

This is exactly where the science of member engagement—that is, behavioral economics—can help plans design programs and offer services that reduce the need for willpower and make healthy behavior the easy, obvious choice.

Behavioral economics tells us humans are predictably irrational and don't always make decisions in their own best interest. Often, our desire to avoid pain or loss outweighs the possibility of future gain, which accounts for why it can be so hard to resist an immediate impulse such as junk food at the cash register.

And while there is no magic bullet, leveraging behavioral economics and data-driven member engagement strategies has the power to help plans overcome barriers to better health.

How to Engage Using the Right Channels

Figure 4

A critical step to uniting these truths in service of engagement—regarding both SDoH and basic human nature—is understanding and refining how to engage.

First, it is important for plans to understand that what a member seeks in their relationship to their plan is not fundamentally different from what they seek in any relationship. Figure 4 elaborates on how the basic desire to be respected and communicated to effectively translates to the member-plan relationship.

With this baseline, plans should next consider how offering the right message through the right channels in which a member can connect increases the likelihood of successful enrollment. Some people will respond right away to a text or email, but never answer a phone call, while others prefer to talk over digital communication. A multi-channel approach can help plans reach members when social determinants of health may be impacting one single channel or another.

In addition, analytics can help identify the right channel mix, weighing member preference against cost, effectiveness, and budgetary restrictions. In this way, outreach programs become optimized.

Connecting the Dots

At Icario, this framework is the basis on which we build member engagement programs that connect the areas we have been discussing: SDoH factors, behavioral biases, and member connection. We find that rewards and incentives programs offer the perfect vehicle in which to deliver the needed changes to member populations and, in turn, to health plan performance.

Compliant rewards and incentives programs not only increase awareness for members around the types of resources within a health plan that may address social determinants of health (such as food insecurities), but also incentivize the member to make use of the program, and reward them for their participation with items such as gift cards that are valuable to them. As member connection increases, plans may slowly wean members off of extrinsic rewards as the intrinsic rewards of healthcare engagement are better understood.

Icario's comprehensive member health engagement solution runs on:

- Behavioral economics
- Data-driven propensity modeling and segmentation
- Real-time engagement data and reporting
- Multi-channel, consistent deployment
- Rewards management
- Personalized, culturally relevant consumer engagement strategies and program designs

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Summary of Best Member Connection Practices that Address SDoH

Below is a summary of member engagement best practices that address SDoH factors, which we at Icario consider integral to success:

Improve awareness—Increase beneficiary awareness of available community services through multi-channel communications, information dissemination, and referral.

Provide assistance—Provide navigation services to assist high-risk beneficiaries with accessing services.

Encourage alignment—Encourage partner alignment to ensure that services are available and responsive to the needs of beneficiaries. Optimize plan performance by aligning teams for engagement programs that address SDoH.

Provide time and resources—One of the most important challenges and opportunities in incorporating SDoH factors in the delivery of care is the need for dedicated time and resources. Healthcare administrators can demonstrate leadership by setting aside time for a designated team of social workers, healthcare providers, and behavioral specialists to work together to tackle SDoH issues that impact successful health outcomes through an umbrella member engagement and/or rewards and incentives program that segments populations appropriately.

Align incentives—Plans and providers must provide the right type of incentives for their members and constituents to engage in a more meaningful and holistic manner in their own healthcare and well-being. Extrinsic motivators, such as gift cards or program-specific items (i.e., strollers for prenatal program participation) can kickstart member engagement and overcome SDoH barriers in the short term, and provide the resources members need to get the care they require.

Connect—Incentivize patients to connect with their caregivers, providers, and pharmacists to discuss medication regimens. At Icario, we incentivize "high-value activities"—activities that connect the member with their care in more ways than one, and offer benefits for the member and plan alike.

Financial resources—Help patients obtain the financial resources they require to remain on their medication and care plans. Solutions may include shopping tools, co-pay assistance, and other incentives. These resources may be pointed to through one or more of the methods mentioned above: multi-channel awareness work, member engagement programs, and rewards and incentives initiatives.

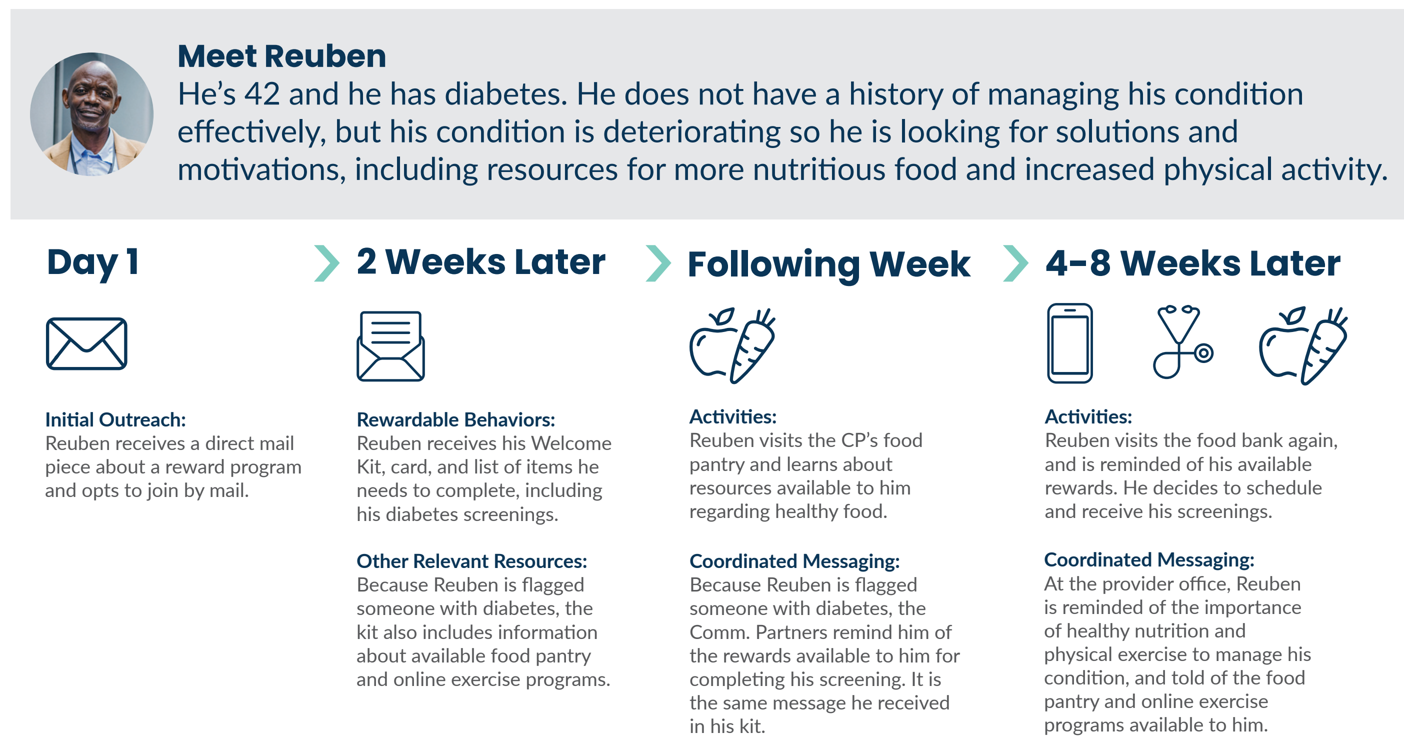
Strategic Implementation Considerations

For too long, the decision-makers and market participants have ignored the impact of SDoH factors on health outcomes, cost, program utilization, and member satisfaction and engagement. And although there has been a significant amount of research into the connection between SDoH factors and health outcomes—and even more research into the best ways that these factors can be addressed—there has been little in the way of concrete progress in the design and delivery of SDoH-related programs.

There are two reasons for this shortcoming. The first is that most of the decision-making and implementations are occurring at the policy-making level, excluding plans from the conversation and implementation discussions. The second is that, like most healthcare policy debates, members and their needs, wants, barriers, and motivations are not being fully considered. This is especially ironic given that SDoH-specific healthcare programs are designed specifically to tackle these non-healthcare-related issues.

We believe that it is important for plans to address SDoH as part of their care delivery models and member engagement programs. As we will show, there is a significant value associated with this approach, one that can deliver meaningful ROI for plans. And as discussed above, identifying the most important SDoH factors and their downstream health impacts can yield surprising insights into how to engage members to deliver the most value.

Figure 5 shows how an integrated approach can connect SDoH factors, behavioral biases, and member connection.



Ongoing Coordinated Interactions

Reuben receives his gift card for completing his screening. Follow-up statements remind him of open activities and relevant resources. The same coordinated messages are delivered via all provider and community partner channels.

Clear business objectives—Member engagement can solve many business problems, so it is important to have well-defined business objectives when designing a program. In the majority of cases, we believe the following four objectives are the most relevant and achievable: (1) improving quality rating, (2) reducing healthcare costs, (3) reducing member churn, and (4) improving member satisfaction and Net Promoter Score (NPS).

Holistic approach and tactical implementation—Implementing a holistic member engagement program can be a daunting task, which could get bogged down in complexity and costs.

Regardless, it is imperative that plans start with a holistic strategic approach with the member at the center of the strategy. Once the strategy is in place, the second step is to prioritize tactical implementation of projects based on the identified business objectives.

Application of learn and refine methods—Successful tactical implementations of member engagement programs can be complicated because of all the non-controllable factors we discussed, including population and member characteristics, as well as market rules and requirements. Given the above complexities, it is imperative that plans conduct test-and-learn implementation whenever possible in order to implement the most practical and successful programs possible.

The implementation of a member-centric engagement program that accounts for SDoH factors can deliver significant value to plans, including:

Improved quality—Engaged members are more likely to be up-to-date on closing their gaps in care and more receptive to accountable care organizations' quality improvement programs.

Improved retention—Improved satisfaction with ACOs and their programs will result in increased loyalty and higher retention rates for ACOs and their providers.

Lower risk exposure—The more engaged the population, the better the ACOs and their providers' understanding of their risk profiles, meaning lower healthcare costs.

Implications, Case Studies, and Summary Conclusion

One real-world example of social determinants is Hennepin County Medical Center's (HCMC) approach to building its ACO specifically around safety net providers to better coordinate clinical and social factors for its 9,000+ Medicaid population. According to an article in Health Affairs, HCMC found its ER utilization decreased by more than 9%, replaced by preventive and primary care visits.

They achieved this by using a patient questionnaire aimed at determining the individual's needs related to social factors, which they used to categorize patients as low, medium, or high risk. Care teams included a psychologist, and clinical and social services staff, who helped coordinate a variety of services, including safe and affordable housing, substance abuse counseling, transportation, and dental care.

Another example is the Henry Ford Health System's Healthcare Equity Campaign, a system-wide initiative to evaluate and address cultural, demographic, and language disparities. Beginning with a thorough investigation of their work as providers, as well as the characteristics and needs of their population, they created and delivered a series of cultural training modules to their staff.

These trainings focused on social determinants of health, addressed cultural biases, and fostered cultural competence. Henry Ford has continued to grow and spread their Healthcare Equity Campaign, developing regional and national collaborations.

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The Colorado Medicaid program has also developed a system of regional care collaboratives. These seven groups work to restructure care delivery, linking care and health services in the area, including clinical care delivery, behavioral health needs, public health needs, and human services. Community-based care teams are tasked with closing gaps in resources and working directly with community members, while financial incentives encourage greater care coordination.

Our last example is the CMMI—Accountable Care Communities Initiative, which will award funding to up to 44 organizations to test how the measurement of social determinants can help link clinical and community resources and improve coordination in delivering these services to members in need. These grants are meant to help communities identify and address SDoH factors such as housing instability, food insecurity, utility needs, interpersonal violence, and transportation needs.

What the above examples show is that SDoH have started to play a more significant role in healthcare. As the industry becomes increasingly member-centered, plans must consider the influences on member health that exist outside of a provider's four walls.

Better understanding social determinants will help plans target their outreach and engagement efforts to identify members who need additional community support and overcome the barriers that prevent members from receiving appropriate care. Leveraging such a holistic, member-centered approach can help plans work more efficiently toward the Triple Aim.

Yet, this entire approach hinges on the need for data, which may come from various sources. Innovative plans know that to be effective, they need to gather information, not just from the members' interactions with providers and pharmacists, but also from retailers, from databanks, and even, if permitted, from a patient's family and community.

But that's only the first step. From there, plans must use deep analytics to truly understand the member and learn the best ways to interact with them and their support systems. This 360-degree view of the member, not limited to their physical health, is essential for crafting an effective, personalized communication strategy.

SDoH also play a significant role in health equity. Social factors—such as poverty, unequal access to healthcare, lack of education, stigma, and racism—affect access to care and a member's ability to engage with their health. Reducing SDoH barriers will undoubtedly improve care for all members.

As healthcare increasingly adopts value-based and member-centric care, we'll only continue to learn more about social determinants of health and how to address them to improve member health. Enabled by robust social data and the right technology, innovative providers and plans alike will take in the full view of a member's life, effectively targeting outreach and closing gaps in care.

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