Financing Strategies to Address the Social Determinants of Health in Medicaid

The social determinants of health (SDOH) are the conditions in the places where people live, learn, work, and play that affect health and quality of life (CDC 2021). They include economic stability, education, housing, and physical and social environment, and are among the most influential factors affecting the health of individuals (NQF 2017, UWPHI and RWJF 2014). Strategies to address SDOH, combined with timely access to health care and long-term services and supports (LTSS), can reduce unnecessary use of the most expensive medical care (Lipson 2017). For example, one study found that for those experiencing chronic homelessness, providing supportive housing—a combination of affordable housing with wrap-around services and supports—led to decreased emergency department use (Moore and Rosenheck 2017).

Medicaid beneficiaries, by virtue of their low incomes, often experience food insecurity, lack stable housing, and live in areas with substandard environmental conditions. For example, in 2020, the rate of food insecurity for low-income households was more than double the national average (28.6 percent and 10.5 percent respectively) (ERS 2021). Systematic racism and discrimination make these challenges more acute for many Medicaid beneficiaries, including people of color and other marginalized groups (Alliance 2020). For example, in 2019, Black and Hispanic beneficiaries were more likely than their white counterparts to pay unaffordable rent (more than 30 percent of income) and receive Supplemental Nutrition Assistance Program (SNAP) benefits to purchase food.

In response to mounting evidence of the relationship between SDOH, health outcomes, and health care costs, state Medicaid programs are increasingly looking to address these factors, often in partnership with other government agencies and community-based organizations (Taylor 2018, Lipson 2017, Bachrach et al. 2016). Medicaid covers a small number of medical and enabling services that can help address SDOH, but is limited in its ability to pay for food, housing assistance, and other services to address social needs (Witgert 2017). States can apply a variety of authorities and flexibilities to provide additional services that target SDOH, within statutory and regulatory limits. In 2021, the Centers for Medicare & Medicaid Services (CMS) released a letter to state health officials outlining how states can use existing authorities to pay for services and supports in seven categories: housing-related services and supports, non-medical transportation, home-delivered meals, educational services, supported employment, community integration and social supports, and case management (Appendix B, Table B-1) (CMS 2021a).[1]

This issue brief begins by describing the extent to which Medicaid beneficiaries experience certain social risk factors that affect health. It then discusses the three primary mechanisms—state plan benefits, contracts with managed care plans, and time-limited grants and waivers—that state Medicaid programs can use to deliver and finance SDOH interventions, as well as the statutory and regulatory limits on these

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uses of funds. We also discuss programmatic impediments that make it difficult to expand or sustain these approaches.[2]

Background

Housing, education, employment, and other factors outside the health care system have a substantial effect on health, accounting for an estimated 80 percent of modifiable contributors to health outcomes (i.e., those apart from genetics and biological determinants) (Hood et al. 2016). For example, poor housing conditions can worsen health outcomes related to infectious and chronic disease, injury, and mental health, and may also affect childhood development through exposure to harmful toxins such as lead (MACPAC 2021a). Similarly, poor access to nutritious foods can increase the risk of developing chronic diseases, such as hypertension and diabetes, and exacerbate existing illnesses (Gregory and Coleman-Jensen 2017). Failure to graduate from high school is also associated with increased risk of experiencing chronic conditions, as well as poor overall health and premature death (HHS 2022a). Moreover, research shows that unemployment can negatively affect one's mental health and increase the likelihood of stress-related illnesses such as high blood pressure, stroke, and heart disease (HHS 2022b).

MACPAC analyzed data from the 2019 American Community Survey to understand the extent to which Medicaid beneficiaries experience social risk factors—adverse social conditions, such as housing instability and food insecurity, that are associated with poor health (Appendix A, Table A-1).[3] In 2019, a majority of Medicaid beneficiaries (58.8 percent) reported paying rent that is unaffordable and 15 percent lived in crowded housing (more than two people per bedroom).[4] Nearly one in four (24 percent) Medicaid beneficiaries did not graduate from high school or get a General Educational Development (GED) certificate and 14.7 percent were unemployed. Food insecurity was common, with 41.1 percent of Medicaid beneficiaries reporting receipt of SNAP benefits, compared to 12.8 percent of the total population.[5]

With some exceptions, people of color enrolled in Medicaid (e.g., Black, Hispanic, Asian American, and American Indian beneficiaries) are more likely to experience social risk factors when compared to white beneficiaries (Appendix A, Table A-2).[6] In 2019, non-white Medicaid beneficiaries reported living in crowded housing at higher rates than their white counterparts. With the exception of American Indians, they were also more likely to pay rent that is unaffordable. Black, Hispanic, Asian American, and American Indian beneficiaries were more likely than white beneficiaries to report that they had not graduated from high school or received a GED. Similarly, Black and American Indian beneficiaries were more likely than white beneficiaries to report being in the labor force and unemployed.

Medicaid Authorities and Flexibilities to Address the Social Determinants of Health

This section describes the three primary mechanisms through which state Medicaid programs can provide services to address SDOH. These include state plan benefits, contracts with managed care plans, and time-limited grants and waivers.

State plan benefits

State plan benefits, which are specified in Title XIX of the Social Security Act (the Act, P.L. 89-97), include routine health services such as physician visits, hospital stays, and prescription drugs as well as some LTSS. Some Medicaid benefits address social needs directly or by mitigating access barriers or connecting beneficiaries to services provided by other programs. These include:

- **Non-emergency medical transportation (NEMT).** NEMT is a mandatory benefit designed to provide transportation to and from medical appointments for beneficiaries who have no other means of transportation (42 CFR 431.53).[7] Without NEMT, many beneficiaries would be unable to obtain regular medical care (MACPAC 2021b, Cheung et al. 2012). Though the structure of the benefit varies by state, it typically covers a broad range of transportation services including taxis, buses, vans, and personal vehicles.
- **Case management services and health homes.** States can provide the optional case management benefit, which provides case managers to connect beneficiaries to medical, social, educational, and other services through assessment, development of a specific care plan, referral to services, and monitoring activities (42 CFR 440.169). For example, Colorado provides targeted case management services for individuals transitioning from institutional settings to the community. The benefit includes a comprehensive assessment of individual health and social needs, which are documented in a beneficiary's service plan, and referrals to needed services (CO HCPF 2019).

  States can also offer the optional health home benefit, in which eligible providers or health care teams provide comprehensive care management and care coordination (including referral to a wide range of community and social support services) to Medicaid beneficiaries with certain chronic conditions (§ 1945 of the Act). Maine, for example, has a health home for beneficiaries with opioid use disorder, who are screened for housing needs and referred to services to address identified social needs (OMS 2017).
- **Rehabilitative services benefit.** The rehabilitative services benefit is an optional state plan benefit authorized under section 1905(a)(13) of the Act. It may include services that help individuals with the skills necessary to address SDOH, such as those that facilitate successful social interactions with landlords, neighbors, or co-workers (42 CFR 440.130(d)). States can also use this benefit to provide peer supports, which are commonly used to help beneficiaries with substance use disorders (SUD) or serious mental illness connect to community resources that assist with needs such as housing and employment.
- **Home- and community-based services (HCBS).** Section 1915(i) is an optional state plan benefit that allows states to provide a range of HCBS, including home-delivered meals and services to help beneficiaries remain in or transition to a residential setting appropriate to their needs.[8] Housing-related services may include home accessibility modifications, one-time community transition costs, and housing and tenancy supports (CMS 2021a). Connecticut, for example, recently received approval for a limited new initiative, Connecticut Housing Engagement and Support Services (CHESS), which will provide pre-tenancy and tenancy supports, as well as rehabilitative, life skills, and care coordination services to individuals with chronic conditions who are experiencing homelessness and are eligible for state plan HCBS (CT 2021, CT DSS 2021).

Federal benefit rules constrain the extent to which states can use state plan benefits to address SDOH. For example, while NEMT can mitigate transportation barriers to care, federal rules typically only allow rides for the beneficiary to and from a provider when needed to obtain a health service or supply (42 CFR 431.53). This means that in many states, children cannot accompany parents on an NEMT trip to the parent's medical appointment, so lack of child care may remain a barrier to access. The case management and targeted case management benefits can support the social needs of Medicaid beneficiaries by providing connections to SDOH-related services, but Medicaid does not often pay for such services directly.

Some have raised concerns that if more social services spending is shifted to Medicaid, an open-ended entitlement program, it will be difficult to constrain spending growth and may eventually crowd out other public spending (Bachrach et al. 2018). However, states can limit certain benefits, including several of those that address SDOH, to specific groups of Medicaid beneficiaries (§ 1902(a)(10)(B), 1902(a)(23), 1902(a)(1) of the Act). For example, targeted case management and health homes can be offered only within certain areas of a state, and participation in health homes can be limited to Medicaid beneficiaries with specific conditions (e.g., two or more chronic conditions, serious and persistent mental health conditions). States can target Section 1915(i) HCBS to Medicaid beneficiaries for whom such services are considered reasonable and necessary, as determined through an individual assessment, when services cannot be obtained elsewhere.

Managed care

States contracting with managed care organizations (MCOs) have a number of additional mechanisms to pay for SDOH interventions. MCOs contract with states to provide Medicaid services and are paid actuarially sound capitation rates, meaning that their payments should be adequate to deliver covered services (42 CFR 438.6(c)). MCOs can choose to provide services in addition to those covered under the state plan (value-added services) or to provide alternative services or settings in lieu of covered Medicaid services or settings (in-lieu-of services). However, they do so within the amount of total capitation they are paid.

Federal rate-setting rules can also create disincentives for MCOs to invest in interventions that address SDOH. Capitation rates must be set so that plans can reasonably expect to achieve a medical loss ratio (MLR) of at least 85 percent, meaning that 85 percent of the capitation must be used for medical services or expenses related to quality and the care of beneficiaries (42 CFR 438.8). It is not clear whether approaches to address SDOH that do not clearly meet the regulatory definition of activities that improve health care quality (45 CFR 158.150) can be included in the medical component of the MLR calculation. For example, an MCO may provide funding to community-based organizations to improve their capacity to share information with MCO care managers and address SDOH, but this type of investment does not meet the definition of an activity to improve health care quality. Despite questions from MCOs and states, CMS has not provided additional guidance on this issue (CMS 2021a). If these expenditures cannot be counted as activities that improve health care quality, then investments that a plan makes would be counted as administrative expenditures, potentially lowering the MLR and triggering required repayments or penalties.[9]

Value-added services. Value-added services are generally non-medical and can include wellness incentives such as gift cards or car seats for completing prenatal classes, as well as additional services designed to address SDOH (42 CFR 438.3(e)(1)). For example, MCOs can provide enabling services such as case management or transportation services not covered under the state plan, post-discharge meals, and education services (MACPAC 2018). Other value-added services that MCOs can provide to address SDOH include post-hospitalization care, lodging for individuals experiencing homelessness, and transitional housing.

Value-added services generally are paid for out of an MCO's administrative budget and the cost of providing these services is not specifically factored into capitation rate-setting. However, the costs of value-added services can be counted in the numerator of the MLR, along with medical costs, if they are activities that improve health care quality (42 CFR 438.8(e)(2)(i)(A)). This removes a potential disincentive for plans to cover them. MCO investments in value-added services may also help the plan achieve quality-related financial incentives or bonuses if offered by the state.

One review of managed care contracts found that four states (Colorado, Kansas, New York, and Rhode Island) require MCOs to provide value-added services (Newman et al. 2020). Additional states, such as Iowa and Massachusetts, encourage but do not require plans to provide these services. Massachusetts, for example, encourages its Senior Care Options plans (plans that serve beneficiaries dually eligible for Medicaid and Medicare) to provide housing-related services such as assisting with finding housing, home modifications, and transition costs (CHCS 2021).

In-lieu-of services. MCOs can also offer in-lieu-of services that are cost-effective substitutes for state plan services included in the managed care contract.[10] As such, these are usually medical services, unlike value-added services. For example, an MCO can offer in-home provider visits as an alternative to traditional clinical office visits, or a mobile crisis assessment as an alternative to the traditional emergency behavioral health service. In-lieu-of services that address SDOH can include in-home therapy services in place of transportation to a provider office, or medically-tailored meals that meet the unique dietary needs of an enrollee to prevent hospitalization or a nursing facility placement. California's Section 1115 demonstration, known as CalAIM, uses in-lieu-of services to provide housing supports. MCOs are encouraged to offer housing transition navigation services, housing deposits, housing tenancy and sustaining services, short-term post-hospitalization housing, medical respite, respite services, day habilitation programs, transition services, personal care and homemaker services, home modifications, medically tailored meals, sobering centers, and asthma remediation (CMS 2021b, CA DHCS 2021).

Federal rules regarding actuarial soundness allow states to use the cost of these services in calculating capitation rates and in the numerator of the MLR calculation (42 CFR 438.3(e)(2)). For these services to be factored into capitation rate-setting, in-lieu-of services must be authorized in the managed care contract and MCOs must collect and report payment and utilization data.

Through MCO contracts, states can also establish performance requirements, design incentives, or adjust capitation rates to more accurately reflect the social needs of a given population. Nearly all (38 of 39) states that contract with one or more MCO to provide comprehensive Medicaid services have at least one contractual requirement related to SDOH (Newman et al. 2020). In general, these mechanisms do not

provide additional funding to address the SDOH. Rather, they allow states to adjust capitation payments to better account for beneficiaries with social needs or to incentivize MCOs to make investments in activities that address the social needs of beneficiaries.

Care coordination activities. Federal rules require MCOs to conduct an initial screen of each enrollee's needs within 90 days of the effective date of enrollment and provide care coordination for members, including coordinating services provided through the MCO and services received from community and social support providers (42 CFR 438.208). States can impose additional requirements on MCOs regarding enrollee screening, needs assessment, and care coordination, including requirements specific to SDOH. These activities are not direct health care services and are considered plan administrative expenditures.

States require MCOs to conduct a variety of care coordination activities. Some states require that plans screen for SDOH with the use of an approved screening tool. North Carolina requires MCOs to use a standardized set of screening questions on food, housing and utilities, transportation, and intrapersonal safety (CHCS 2021). States such as Arizona are also starting to require that MCOs ensure closed loop referrals to social services supports; plans must use an online tool to refer beneficiaries to community-based organizations (Together for Better Medicaid 2021). Michigan requires MCOs to maintain at least one community health worker or peer specialist per 20,000 beneficiaries. This staff person is responsible for arranging social support services (Bachrach et al. 2016).

Value-based purchasing (VBP) arrangements and incentives. States can use a small number of mechanisms to provide additional financing to support SDOH through managed care. For example, they can offer incentive payments (which are not included in the MLR calculation) up to 5 percent of a plan's total capitation revenue. These incentives must be tied to performance measures that align with the state's managed care quality strategy, including quality metrics related to SDOH (42 CFR 438.6). For example, MCOs in Rhode Island can earn incentive payments for achieving certain benchmarks in lead screening for children (CMS 2020). To help reach these benchmarks, MCOs can offer additional services such as educational home visits, temporary lead hazard control measures, and comprehensive environmental lead inspections.

States can also require MCOs to adopt VBP arrangements for provider payment and to direct these payments towards investments in social supports (42 CFR 438.6(c)(1)(i)).[11] Arizona used Section 1115 waiver authority to include a directed payment in its capitation rates to MCOs, which MCOs can use to make incentive payments to primary care providers, behavioral health providers, and providers serving individuals who have physical and behavioral health needs and are transitioning from the justice system. These are intended to help providers deliver services in an integrated setting within or in close proximity to a parole office (AHCCCS 2018).

Capitation rate adjustments. States can account for social factors when setting capitation rates so they more accurately reflect the relative resource needs of individuals likely to require greater medical care because of social factors (e.g., housing insecurity, neighborhood stress). For example, Massachusetts expanded its risk model for setting capitation rates to account for neighborhood stress scores based on ZIP code data and an ICD code for homelessness (Ash and Mick 2016). The rate setting methodology also separately recognizes serious mental illness and SUD and stratifies the disabled population. Minnesota

adjusts its quarterly population-based payments to accountable care organizations to account for social risk factors including homelessness, mental illness, SUD, past incarceration, and child protection involvement (CHCS 2018, MDHS 2017).

States also face other challenges when encouraging or requiring MCOs to invest in addressing SDOH. For example, because beneficiaries can change MCOs as often as every month, a plan may not ultimately benefit from the reduced spending that results from improved population health. This may reduce the incentive for an MCO to address SDOH or other long-term factors affecting enrollee health. Some MCOs have also raised the concern that if social interventions that reduce medical expenditures succeed in bringing future medical costs down, capitation rates will be reduced to reflect actual (lower) medical costs, thus lowering MCO revenue (sometimes referred to as premium slide) (Bachrach et al. 2018).

Grants and waivers

To date, many of the Medicaid approaches to addressing SDOH have relied on temporary sources of funding through grants or demonstration waivers. For example, the Money Follows the Person (MFP) demonstration, first authorized by the Deficit Reduction Act of 2005 (P.L. 109-171), provided $4 billion in grant funding to states to help transition individuals from institutional settings to community-based settings. Grant funding has supported over 100,000 Medicaid beneficiary transitions, and can be used to cover supportive services such as home-delivered meals and home modifications (MACPAC 2022). MFP is currently funded through 2023. Moreover, the size of the grant award limits the number of beneficiaries who can be served.

A number of states have used Section 1115 demonstration authority to help finance additional services, as this authority can allow states to cover services not otherwise matchable by Medicaid as long as the overall waiver expenditures remain budget neutral to the federal government (CMS 2018).[12] As described above, a number of states have used Section 1115 demonstrations to provide supportive housing services to certain groups of beneficiaries. However, Section 1115 waivers are time-limited (although they can be renewed) and subject to budget neutrality requirements, so while they offer states greater flexibility, they do not provide additional funding to support SDOH.

A 2020 study found that 16 states are using Section 1115 demonstrations to finance and test new SDOH models via pilot programs (8 states), as part of delivery system reform efforts (7 states), or with enhanced Medicaid benefit packages (2 states). Most of these demonstrations are focused on housing, employment, and interpersonal violence (Newman et al. 2020). North Carolina’s Section 1115 demonstration focuses on housing, food security, transportation, and interpersonal safety. It includes Healthy Opportunities Pilots, which will test and evaluate interventions targeting these four determinants in three regions of the state. A lead pilot entity in each area will be responsible for contracting with managed care plans and creating a network of community-based organizations and social service agencies to which beneficiaries will be referred. The demonstration provides $650 million in Medicaid funding to support these pilots, which began providing services in March 2022 (CMS 2022, NCDHHS n.d.).

Section 1915(c) is the primary waiver authority used by states to cover HCBS, including many services to address SDOH. These waivers are typically renewed every five years, and have a cost neutrality

requirement.[13] States have the flexibility to limit the number of beneficiaries receiving services, target specific populations, or limit availability to certain parts of the state. States can provide a wide range of services under this authority, including home modifications, one-time community transition costs, housing and tenancy supports, supported employment services, home-delivered meals, and nonmedical transportation.

Most states (46) operate at least one Section 1915(c) waiver to deliver housing-related services (MACPAC 2020). For example, the Louisiana Department of Health, in partnership with the state's housing authority, operates a permanent supportive housing program financed through multiple federal and state funding streams, including Medicaid. An analysis of 2011–2012 data found a 24 percent reduction in Medicaid acute care costs after a person was housed as part of Louisiana's program (Paradise and Cohen Ross 2017).

Endnotes

[1] The 2021 state health official letter on SDOH supersedes the CMS informational bulletin on housing-related services issued in 2015 (CMS 2021a).

[2] For more information specific to housing, see MACPAC's issue brief *Medicaid's Role in Housing*.

[3] Social risk factors and social determinants of health (SDOH) are distinct yet related terms. SDOH (e.g., income, housing, education) affect everyone and shape health for better or worse. For example, an individual's housing situation may promote health, while another individual's housing (if unsafe or unstable) may contribute to worse health. In contrast, the term social risk factor describes any attribute or exposure that increases one's likelihood of poor health, such as housing instability, food insecurity, or low educational attainment (Alderwick and Gottlieb 2019).

[4] Administered by the U.S. Census Bureau, the American Community Survey (ACS) is a nationwide survey that collects information on social, economic, housing, and demographic characteristics of the U.S. population on an annual basis. Every year, the Census Bureau mails questionnaires to approximately 295,000 households across the country based on a random sample of addresses. A sample of non-responsive households receive an in-person visit from field representatives from the Census Bureau. A sample of people living in group quarters, such as college dormitories and nursing homes, are also interviewed in person.

[5] The ACS does not ask respondents about social risk factors related to food; therefore we used receipt of Supplemental Nutrition Assistance Program benefits as a proxy (U.S. Census Bureau 2017).

[6] The systemic oppression of certain racial and ethnic minority groups in the United States has contributed to poor health, social, and economic outcomes for many of these communities. Examples include slavery, segregation, and discriminatory housing policies that discouraged economic investment in communities of color (Alliance 2020).

[7] States are also required to provide assistance with transportation to children and their families as part of the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit (42 CFR 441.62).

[8] Medicaid cannot pay for room and board, except in certain medical institutions (CMS 2021a).

[9] For more information on the medical loss ratio, see MACPAC's issue brief *Medical Loss Ratios in Medicaid Managed Care*.

[10] A specific exemption is made in regulation for services provided in an institution for mental disease (IMD) to adults age 21 to 64, which would otherwise be prohibited by statute. An MCO can cover a specified number of days per month in an IMD for an adult and the costs for these services are counted in the rate-setting and MLR calculations (42 CFR 438.3(e)(2)(i) through (iii)).

[11] Value-based purchasing arrangements are payment arrangements that are not connected to a specific medical service, but are instead tied to meeting certain measures in access, quality, or health outcomes.

[12] For more information on budget neutrality, see MACPAC's issue brief on *Section 1115 Demonstration Budget Neutrality.*

[13] Section 1915(c) waivers have a cost neutrality requirement, meaning that states must provide assurances that the average per capita expenditures for covered HCBS services will not exceed 100 percent of the average per capita expenditures that would have been made for the level of care provided in an institution. If states' aggregate spending

exceeds their projections, however, the Secretary cannot limit federal Medicaid payments or deny a waiver renewal, so long as the waiver is still cost neutral on a per capita basis (§ 1915(c)(6)).

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Appendix A: Social Risk Factors by Health Insurance Coverage and Race and Ethnicity

TABLE A-1. Social Risk Factors by Health Insurance Coverage, 2019

Measure	Total	Medicaid	Private	Uninsured
Total	**100.0%**	**20.1%**	**55.9%**	**9.4%**
Housing				
Pays rent that is unaffordable	**43.0**	58.8	29.5*	46.7*
Lives in crowded housing	**6.9**	15.1	4.3*	12.4*
Education				
Did not graduate from high school or get GED	**11.1**	24.0	5.0*	24.6*
Employment				
In labor force, unemployed	**4.5**	14.7	2.4*	10.2*
Transportation				
No car or vehicle in household	**6.1**	13.3	2.9*	8.7*
Food				
Receives SNAP benefits	**12.8**	41.1	4.0*	15.8*
Information technology				
No smartphone/mobile with data plan	**2.6**	2.6	0.9*	1.6*
No laptop, desktop, or notebook	**18.4**	32.2	9.6*	31.9
No tablet or other wireless computer	**31.3**	41.4	22.0*	44.9*
No high-speed broadband internet	**17.0**	23.8	12.9*	25.6*

Notes: Respondents are asked about their health insurance coverage at the time of the interview and may select multiple types of coverage. Medicaid includes all respondents who reported Medicaid enrollment, including individuals with Medicaid and other forms of coverage (e.g., Medicare or private insurance). For the purposes of this analysis, the experience of individuals who selected Medicaid and another form of coverage is only reflected in the Medicaid column.

Rent that is unaffordable is rent that represents more than 30 percent of income. Crowded housing is more than two people per bedroom. GED is General Educational Development. SNAP is Supplemental Nutrition Assistance Program.

* Difference from Medicaid is statistically significant at the 0.05 level.

Source: MACPAC and SHADAC analysis of the 2019 American Community Survey, 2021.

TABLE A-2. Social Risk Factors Among Medicaid Beneficiaries by Race and Ethnicity, 2019

Measure	Total Medicaid	White, non-Hispanic	Black, non-Hispanic	Hispanic	Asian American, non-Hispanic	American Indian, non-Hispanic	Other single and multiple races, non-Hispanic
Total	100.0%	43.0%	19.7%*	27.6%*	4.5%*	1.1%*	4.0%*
Housing							
Pays rent that is unaffordable	**58.8**	54.3	63.3*	60.6*	57.5*	45.1*	59.9*
Lives in crowded housing	**15.1**	8.9	12.2*	25.3*	20.8*	20.9*	15.1*
Education							
Did not graduate from high school or get GED	**24.0**	17.6	23.1*	38.6*	31.5*	26.1*	18.4
Employment							
In labor force, unemployed	**14.7**	14.0	19.9*	12.7*	9.0*	21.9*	18.4*
Transportation							
No car or vehicle in household	**13.3**	9.7	23.7*	11.5*	15.0*	17.8*	11.4*
Food							
Receives SNAP benefits	**41.1**	36.4	53.7*	40.5*	26.2*	52.5*	48.5*
Information technology							
No laptop, desktop, or notebook	**32.2**	27.7	41.0*	35.2*	18.5*	47.8*	27.2
No smartphone/mobile with data plan	**2.6**	4.0	2.2*	1.2*	1.8*	2.4*	1.6*
No tablet or other wireless computer	**41.4**	39.1	47.0*	43.1*	33.7*	51.7*	32.6*
No high-speed broadband internet	**23.8**	22.8	27.2*	24.4*	16.7*	35.8*	21.4*

Notes: Respondents are asked about their health insurance coverage at the time of the interview and may select multiple types of coverage. Medicaid includes all respondents who reported Medicaid enrollment, including individuals with Medicaid and other forms of coverage (e.g., Medicare or private insurance). For the purposes of this analysis, the experience of individuals who selected Medicaid and another form of coverage is only reflected in the Medicaid column.

Rent that is unaffordable is rent that represents more than 30 percent of income. Crowded housing is more than two people per bedroom. GED is General Educational Development. SNAP is Supplemental Nutrition Assistance Program.

* Difference from white, non-Hispanic is statistically significant at the 0.05 level.

Source: MACPAC and SHADAC analysis of the 2019 American Community Survey, 2021.

Appendix B: Federal Guidance on the Use of Medicaid Funds to Address the Social Determinants of Health

TABLE B-1. Overview of Services and Supports to Address Social Determinants of Health

Service and support	Definition	Examples
Housing-related services and supports	Home accessibility modifications: Temporary or permanent changes to a home's interior or exterior to help beneficiaries remain in their homes. One-time community transition costs: Payment of expenses to establish basic living arrangements when beneficiaries transition from institutional or other congregate settings (e.g., a homeless shelter) to a private residence. Housing and tenancy supports: Pre-tenancy services to help beneficiaries transition to housing, and tenancy sustaining supports once beneficiaries are housed.	• Installing a wheelchair ramp outside the home; adding grab bars in the shower • Paying security deposits and utility activation fees; purchasing essential household furnishings • Conducting a tenant screening and housing assessment that identifies the beneficiary's preferences and barriers related to successful tenancy; education and training on the role, rights, and responsibilities of the tenant and landlord
Non-medical transportation	Transportation services that provide access to community activities and resources.	• Transportation to grocery store or place of employment
Home-delivered meals	Supplementary meal assistance to meet nutritional needs identified in person-centered service plan.	• Food delivered to older adults through the state's HCBS waiver program
Educational services	Educational services provided for children with disabilities to help them achieve educational goals that have been described in their individualized education plan or their individualized family service plan.	• Physical or occupational therapy provided in a school setting to children

Service and support	Definition	Examples
Employment supports	Pathways to coverage for individuals not eligible for Medicaid on the basis of a disability through participation in work or other forms of community engagement. Additionally, for individuals with disabilities, services provided to support obtaining or maintaining employment through various routes.	• Job coaching to help reduce impacts of a disability while on the job • Job skills training • Personal care services at place of employment
Community integration and social supports	Opportunities for beneficiaries to receive services at home rather than in institutions. Designed for beneficiaries such as older adults and people with intellectual or developmental disabilities to participate in their community when receiving services at home rather than in institutions.	• Companion services to accompany individual to places in community and assist individuals in developing relationships with the broader community • Instruction on how to use public transportation
Case management	Support for individuals to coordinate various services and agencies in order to gain access to various social, educational, and medical services.	• Individual assessment and services provided for those at risk of homelessness

Notes: HCBS is home- and community-based services. The Centers for Medicare & Medicaid Services guidance notes that while states have flexibility to design an array of services to address SDOH, the services and supports that states can cover often fall within the above-mentioned categories.

Source: CMS 2021a.