

POLICY BRIEF

MARCH 2022

The Role of State Policy in Use of Z Codes to Document Social Need in Medicaid Data

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Table of Contents

Executive Summary.....	1
Introduction.....	5
The State Medicaid Policy Landscape.....	6
State Snapshots.....	9
Challenges to Documentation.....	15
Policy Implications	19
State Policy.....	19
Federal Policy.....	23
Conclusion	25
Methods and Limitations	27
References	28

The Role of State Policy in Documentation of Social Needs in Medicaid Data

MARCH 2022



States varied in the level of social needs documented in Medicaid data. Documentation of social needs was higher for Medicaid managed care enrollees than fee-for-service and in states with Medicaid accountable care organizations than those without.

States implement policies and strategies that mitigate challenges that inhibit documentation and take additional steps to **enhance the quality, accuracy, and comprehensiveness** of social needs documentation in Medicaid data.

INTRODUCTION

NORC sought to understand the extent to which social needs are documented in 2018 Medicaid claims and encounter data and **how the state Medicaid policy environment could play a role in promoting documentation of social needs.**

Medicaid covered over 76 million people in July 2021, uniquely positioning Medicaid programs to meet complex and interrelated clinical, behavioral health, and social needs.

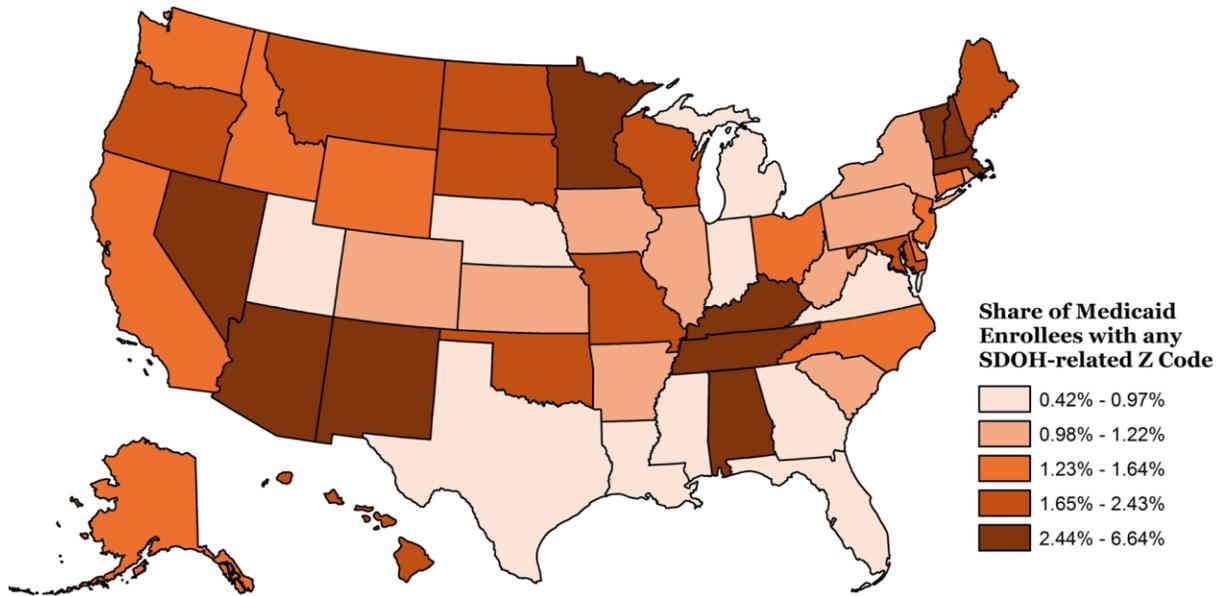
METHODOLOGY

- Analysis of 2018 Transformed Medicaid Statistical Information System (T-MSIS) claims and encounter data. Includes individuals enrolled in Medicaid at any time in 2018 with at least one claim or encounter record containing at least one of 9 ICD-10-CM Z Codes (Z55 to Z65)
- We reviewed the literature to understand state strategies for promoting social determinants of health (SDOH) interventions and challenges to documentation. States were selected to represent a range of policy environments.

Limitations: Data quality and completeness vary by variable and submitting state. Data quality and completeness concerns around location data and race and ethnicity data.

States **varied in the level of social needs documented** in 2018 Medicaid data.

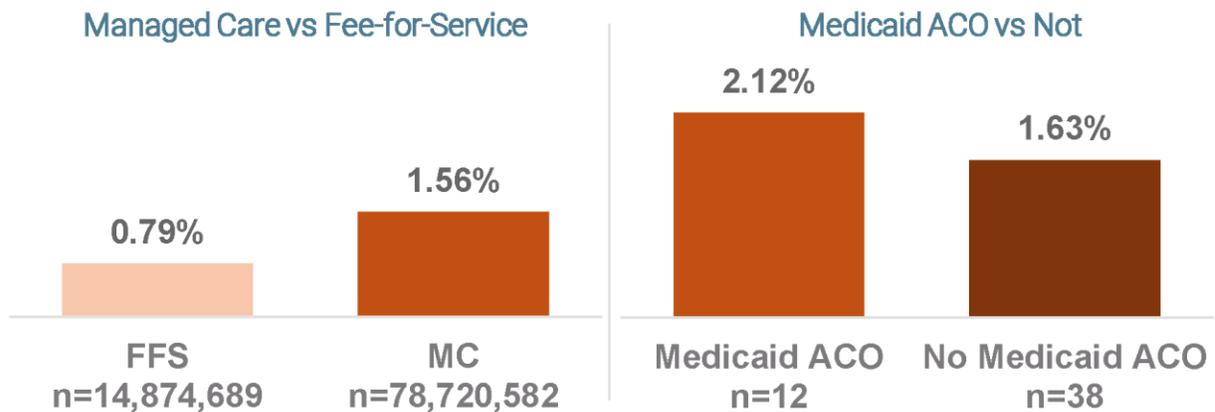
Documentation of Social Needs Z Codes in 2018 Medicaid Claims and Encounter Data, by State



Notes: National state-level map of percentage of Medicaid enrollees with at least one of any Z55-Z65 Code. Broken into quintiles, the highest group, dark brown, represents the top 20 percent of states (10 states with the highest levels of Z Code use per Medicaid enrollee population). State of the Medicaid enrollee is determined as submitting state.
Source: NORC analysis of Centers for Medicare & Medicaid Services (CMS) Medicaid 2018 T-MSIS Analytic Files.

Documentation was higher for enrollees with **managed care** than for those with fee-for-service and for states with **active Medicaid accountable care organizations** vs those without.

Documentation of Social Needs Z Codes in 2018 Medicaid Claims and Encounter Data, by State

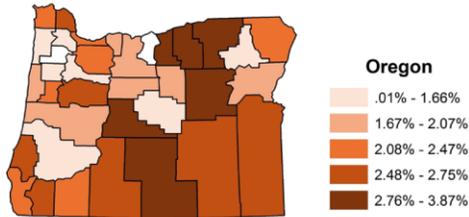


Notes: This analysis assessed Medicaid enrollees with at least one of any Z55-Z65 Code. FFS: fee-for-service. MC: Managed care. ACO: Accountable Care Organization. Only states with active ACOs were included; states in the planning process were not included.
Source: NORC analysis of Centers for Medicare & Medicaid Services (CMS) Medicaid 2018 T-MSIS Analytic Files.

In states with higher shares of documentation in 2018, early adoption of **accountable care organizations, all-payer alignment, value-based payment, care delivery transformation, and policies that encourage identifying and addressing social needs of Medicaid beneficiaries** were in place.

OREGON

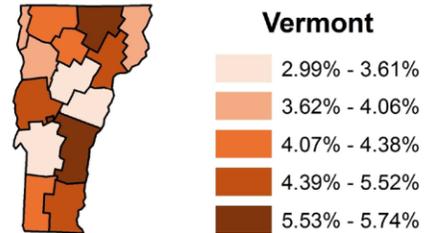
Early adoption of statewide accountable care with global budgets



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 Code. Values are broken into quintiles. Oregon is missing county-level location data for 8.06% of enrollees

VERMONT

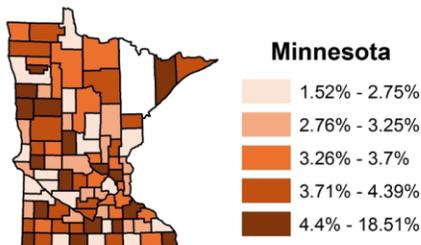
All-payer alignment and investment in community health initiatives



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 Code. Values are broken into quintiles. Vermont is missing county-level location data for 46.86% of enrollees

MINNESOTA

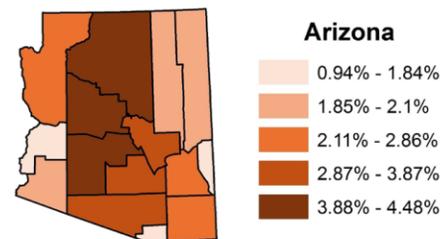
Population-based payment with adjustments for social risk factors



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 Code. Values are broken into quintiles. Minnesota is missing county-level location data for 2.86% of enrollees

ARIZONA

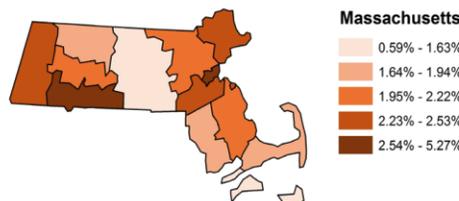
Statewide managed care with community reinvestment requirements



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 Code. Values are broken into quintiles. Oregon is missing county-level location data for 1.54% of enrollees

MASSACHUSETTS

Care delivery transformation with requirements for community partnerships



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 Code. Values are broken into quintiles. Massachusetts is missing county-level location data for 0.56% of enrollees

CHALLENGES

Challenges to use of Z Codes and collection of social needs data limit their use in informing Medicaid policy and operations, guiding quality improvement efforts, and evaluating reach and efficiency of interventions.

- There is low provider awareness of the availability and use of Z Codes.
- Providers lack financial incentives to use Z Codes.
- Tools for social risk assessments are heterogenous and lack alignment, causing social needs data to be fragmented and siloed.
- Use of social needs screening tools does not always translate back to Z Codes.
- There is significant variation in measures for documenting social needs.
- Lack of standardized measures lead to limited sharing of social needs data.

POLICY IMPLICATIONS

State Medicaid agencies can take the following steps to enhance the **quality, accuracy, and comprehensiveness of their Medicaid data**:

-  work with providers, provider associations, and other partners to give providers needed guidance, education, training, and technical assistance on Z Code use and its importance.
-  develop an SDOH measurement approach with associated Z Code reporting requirements based on standard measures.
-  leverage their existing authorities to promote policy environments that support SDOH identification, screening, and documentation, and use of Z Codes.
-  incorporate social risk factors into payment and provider reimbursements and tie Z Codes back to quality measures and payment
-  work with MCOs, state health information exchange programs, and other entities to understand enrollee needs until states build more robust processes for reporting of Z codes

The Role of Federal Policy

- Support and incentivize multi-sectoral partnerships to break down silos and reduce fragmentation of social needs data, avoid duplication of efforts, and better align efforts.
- Clarify guidance around privacy and trust that increase barriers to data sharing and exchange.
- Provide states with incentives and funding to improve data infrastructure that can help states sustain SDOH measurement.
- Expand federal interest in value-based care and health care quality efforts that promote SDOH documentation and interventions to promote health equity.

Introduction

Addressing the social determinants of health (SDOH), “the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life,” is key to advancing health equity.¹ SDOH drive nearly 70 percent of a person’s health, affecting health outcomes, quality of care, and costs.^{2,3} COVID-19’s disproportionate effect on low-income and racial/ethnic minoritized populations further highlight the link between SDOH and health.³

Many Medicaid enrollees who are often, by definition, low income, experience social risk factors—adverse social conditions associated with poor health (e.g., food insecurity, housing instability, violence)¹—that contribute to poor health outcomes. State Medicaid programs, which covered over 77 million people in September 2021,⁴ are uniquely positioned to meet the complex and interrelated clinical, behavioral health, and social needs—immediate nonmedical yet health-related needs as identified and prioritized by individuals themselves—of enrollees.⁵ Addressing these social risk factors and social needs is a primary lever for states to improve health outcomes, advance health equity, and reduce costs.

NORC at the University of Chicago used 2018 Transformed Medicaid Statistical Information System (T-MSISⁱ) claims and encounter data to assess the extent to which social needs are documented using ICD-10-CM Z codes. We included deduplicated counts of individuals enrolled in Medicaid at any time in 2018. An enrollee had a social need if at least one T-MSIS record in 2018 contained at least one of nine Z codes (referred to as Z55 to Z65).⁶ All analyses were performed from September to December 2021. In addition, we conducted an environmental scan to examine the state policy landscape and understand how the state Medicaid environment could contribute to documentation of social needs in Medicaid data using Z codes. Additional details on methods and limitations are included at the end of this report.

Definitions¹

Social Determinants of Health (SDOH): the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life, including economic policies and systems, development agendas, social norms, social policies, and political systems.

Social Risk Factors: adverse social conditions associated with poor health

Social Needs: immediate nonmedical yet health-related needs of individuals, as identified and prioritized by the individuals.

CMS ICD-10-CM Z Codes⁶

- Z55** problems related to education and literacy
- Z56** problems related to employment and unemployment
- Z57** occupational exposure to risk factors
- Z59** problems related to housing and economic circumstances
- Z60** problems related to social environment
- Z62** problems related to upbringing
- Z63** other problems related to primary support group, including family circumstances
- Z64** problems related to certain psychosocial circumstances
- Z65** problems related to other psychosocial circumstances

ⁱ NORC analysis of Transformed Medicaid Statistical Information System (T-MSIS) data under NORC’s CMS Research DUA.

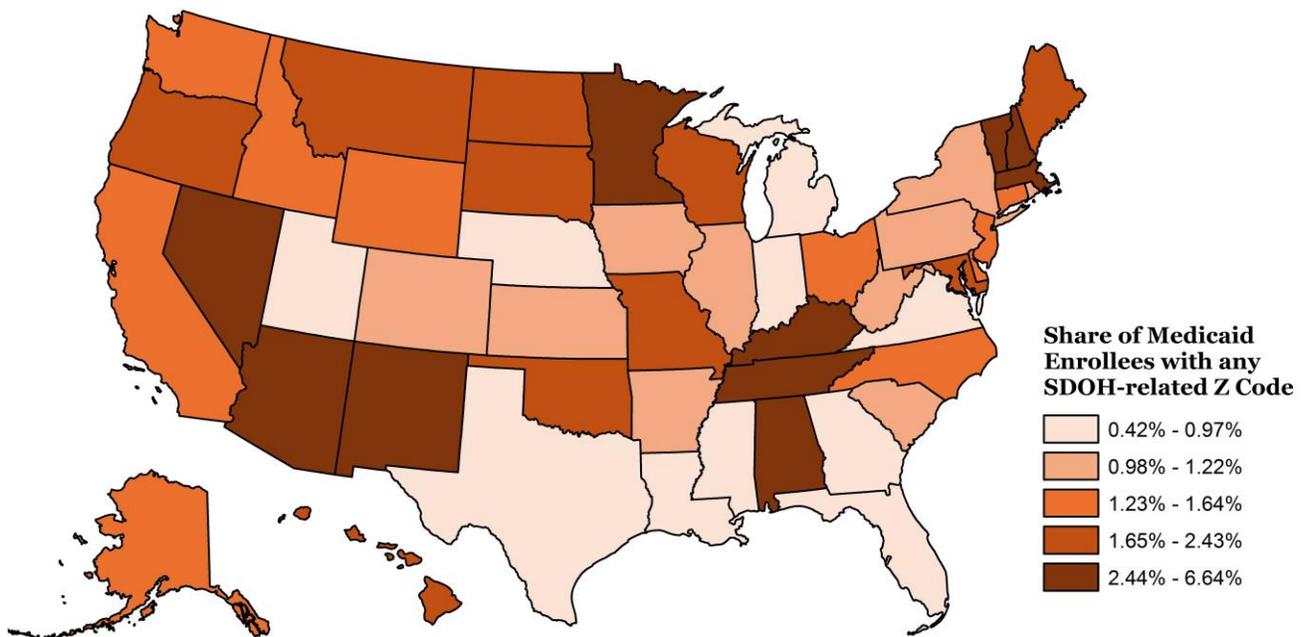
The State Medicaid Policy Landscape

NORC compared social needs documentation of managed care versus fee-for-service (FFS) enrollees, and states with Medicaid accountable care organizations (ACOs) and Accountable Health Communities (AHC) to those without. While such efforts do not require documentation of social need using Z codes and ACOs and AHCs do not always operate statewide, they may reflect a policy environment supportive of documentation. For example, AHCs connect Medicaid beneficiaries to community resources; ACOs and managed care organizations (MCOs) increasingly provide holistic care, including addressing social risk factors impacting health.^{7,8} Thus, documentation of social needs using Z codes can shed light on the scope of social needs among their populations to inform programs.

States varied in the level of social needs reported in Medicaid data.

Overall, documentation of social need in Medicaid data was low; 1.42 percent of Medicaid enrollees had at least one social need (Z55 to Z65) documented in 2018. Alabama, Arizona, Kentucky, Massachusetts, Minnesota, Nevada, New Hampshire, New Mexico, Tennessee, and Vermont were in the top quintile (2.44% to 6.64%) on documentation of social need in 2018 (Figure 9). Florida, Georgia, Illinois, Louisiana, Michigan, Mississippi, Nebraska, Texas, Utah, and Virginia were in the lowest quintile (0.42% to 0.97%).

Figure 9: Documentation of Social Needs Z Codes in 2018 Medicaid Data, by State



Notes: National state-level map of percentage of Medicaid enrollees with at least one of any Z55-Z65 code. Broken into quintiles, the highest group, dark brown, represents the top 20 percent of states (10 states with the highest levels of Z code use per Medicaid enrollee population). State of the Medicaid enrollee is determined as submitting state.

Source: NORC analysis of Centers for Medicare & Medicaid Services (CMS) Medicaid 2018 T-MSIS Analytic Files.

Documentation was higher for Medicaid managed care enrollees than FFS enrollees.

Documentation for Medicaid managed care enrollees was 1.56 percent compared to 0.79 percent for FFS enrollees, though documentation was low overall in 2018 (Figure 10).

Figure 10: Share of Medicaid Enrollees with Documented Social Needs Using Z Codes, Managed Care vs. Fee-for-Service



Notes: This analysis assessed Medicaid enrollees with at least one of any Z55-Z65 code. FFS: fee-for-service. MC: Managed care.

Source: NORC analysis of Centers for Medicare & Medicaid Services (CMS) Transformational Medicaid Statistical Information System (T-MSIS) data from 2018.

The Centers for Medicare & Medicaid Services (CMS) updated its Medicaid managed care regulations in 2016, including incentives for MCOs to cover nonmedical services that address social needs (e.g., linkages to social service programs, housing supports, peer supports, and employment supports) by allowing those services to be included when estimating capitated rates.⁹ Nearly 40 states were using managed care contracts or other mechanisms such as Section 1115 demonstrations to incorporate SDOH-related activities that address enrollees' employment, education, food, housing, transportation, violence, or other related concepts such as expanded use of community health workers.¹⁰ By Fiscal Year 2018, over a third of states reported they collected social needs data or expressed the intent to use screening, assessments, other state program data, claims or encounter data, and beneficiary surveys to collect data around social needs.¹¹

In response to a 2017 Kaiser Family Foundation Survey, 91 percent of managed care plans reported having activities to address social needs, particularly housing and food insecurity; however, less than half of states required MCOs to screen enrollees for social needs.¹² In addition, many managed care contracts featured restatements of federal authority around MCOs' ability to provide additional services, but most did not provide additional state-specific detail or insight on ways these additional services can be fully reimbursed by Medicaid and used as social needs interventions.¹³

States with active Medicaid ACOs in 2018 had a higher proportion of documentation of social need than states without active Medicaid ACOs.

Documentation of social needs in states with active Medicaid ACOs in 2018 was 2.12 percent compared to 1.63 percent in states without (Figure 11). Twelve states had active Medicaid ACOs in 2018: Colorado, Connecticut, Iowa, Maine, Massachusetts, Minnesota, New Jersey, New York, Oregon, Rhode Island, Utah, and Vermont, and 10 more states were planning Medicaid ACOs.¹⁴ Most states with Medicaid ACO programs (9 of 12) are engaged in activities related to addressing SDOH. The 12 states covered roughly 4 million enrollees as of January 2020.

Figure 11: Share of Medicaid Enrollees with Documented Social Need Using Z Codes, by Presence of Active Medicaid ACO in the State



Notes: This analysis assesses Medicaid enrollees with at least one of any Z55-Z65 code. ACO: Accountable Care Organization. Only states with active ACOs were included; states in the planning process were not included.

Source: NORC analysis of Centers for Medicare & Medicaid Services (CMS) Transformational Medicaid Statistical Information System (T-MSIS) data from 2018.

States began developing Medicaid ACOs as early as 2011 to promote delivery system reform. ACO models vary considerably. Approaches to target health-related social needs via ACOs generally fall within three categories: (1) requirements that providers screen for social risks; (2) requirements or incentives to partner with social service organizations; and (3) requirements or incentives for SDOH-associated quality metrics.⁹ As of December 2021, 40 percent of states required MCOs to screen for social needs yet a national representative sample of physician practices and hospitals found that only “about 24 percent of hospitals and 16 percent of physician practices screened for at least five social needs, and 8 percent of hospitals and 33 percent of practices reported no screening.”⁸ In this sample, practices participating in Medicaid ACOs reported higher rates of screening than those that did not.

Social needs documentation was similar for states with and without Accountable Health Communities in 2018, likely reflecting the early stage of implementation of the model.

In 2018, documentation for both states with ACHs and those without was 1.75 percent. In 2018, 21 states had active ACHs: Arizona, Colorado, Connecticut, Hawaii, Illinois, Indiana, Kentucky, Maryland, Michigan, Minnesota, New Jersey, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Tennessee, Texas, Virginia, and West Virginia.

The Centers for Medicare & Medicaid Innovation (CMS Innovation Center) launched the AHC model in 2017 as a pilot to incentivize health systems to integrate systematic ways of addressing social needs within their systems. Key AHC elements included the development of a screening tool and requirements to demonstrate partnerships between clinics and communities.⁹ The model tests whether systematically identifying and addressing enrollees’ social needs affects costs and utilization. Some states use an Assistance Track AHC, providing high-risk enrollees with community navigation, which encourages partner alignment to ensure community-based services are available and responsive.¹⁵ A 2020 preliminary evaluation of the Assistance Track model found that among navigation-eligible enrollees, nearly 74 percent were covered by Medicaid and 10 percent were dually eligible for both Medicare and Medicaid.¹⁶

State Snapshots

This section presents state Medicaid program strategies for promoting an environment supportive of identifying and addressing social needs. Though none of the state policies in 2018 include direct requirements for documentation of social need using Z codes and reporting of that data back to state agencies, the policy landscape may influence provider documentation. Our analysis sought to understand level of Z code use for SDOH for a given state within the context of the quality of state reported Medicaid data as measured by the CMS Medicaid Data Quality Atlas (MDQA)ⁱⁱ as well as other state policies that influence SDOH.

Selection Methodology for State Snapshots

T-MSIS Data on Enrollees

We examined the relative proportion of enrollees within a state who had a Z code on any claim or encounter filed in 2018. Data were analyzed for states that represented the range of values for documentation using Z codes to understand whether there is a connection between a higher incidence of coding for social needs and social needs in the state, as reflected in the data quality as measured by the MDQA, and the state policy landscape in 2018.

Medicaid Data Quality Atlas (MDQA)

The MDQA provides a rating for the quality of each state's Medicaid data, as captured in T-MSIS files. The MDQA assigns ratings based on the availability and quality of Medicaid data. The rating ranges from low concern (no major problems that affect usability for a given topic), medium concern (some problems identified that affect usability), and high concern (major problems in the completeness or reliability), to unusable (extreme problems in the completeness or reliability that prevent a topic from being analyzed) and unclassified (the topic is not available for a state or there are not enough benchmark data for a reliable analysis or a methodological issue prevented classification).ⁱⁱⁱ We used the MDQA to examine state reporting of income from the Enrollee Information files as a proxy for a state's ability to track socioeconomic factors for an individual enrollee. The ratings for selected states ranged from low concern to unusable.

State Medicaid Policy Landscape

We used literature to examine aspects of a state's Medicaid policy landscape in 2018 that could contribute to documentation of social needs. Aspects considered included expanding coverage, establishing ACOs, investigating value-based payment (VBP) models, and innovating services through Section 1115 demonstrations and waivers. States were selected to represent a range of policy environments.

ⁱⁱ The Medicaid Data Quality Atlas (MDQA) is a tool that includes information about the relative utility and completeness of Medicaid 2018 T-MSIS Analytic Files data by state. See <https://www.medicaid.gov/dq-atlas/welcome>

ⁱⁱⁱ See <https://www.medicaid.gov/dq-atlas/landing/resources/about>

Early Adoption in Oregon

Oregon is an early adopter of statewide accountable care in 2012, forming Coordinated Care Organizations (CCOs) using a Section 1115 demonstration.³¹ These regional entities provide Medicaid enrollees with coordinated physical, behavioral, and dental health care, and include providers, community members, health systems, and the Oregon Health Plan.³³ Community advisory councils comprised of Medicaid enrollees and representatives from community-based organizations (CBOs) provide input on decision-making.³⁴ Each CCO has a single global budget, with flexibility to pay for health-related services such as individual and community interventions not covered by the state plan.³⁵ As part of its pay-for performance program, the Oregon Health Authority requires CCOs to report a number of incentive measures, including two focused on tobacco and substance and alcohol misuse.⁵ CCOs can optionally select food insecurity and the state plans to develop a housing-related measure. CCOs are required to address social needs through community investments in economic stability, education, neighborhood and built environment, and social and community health.³⁶

CCOs established systems and infrastructure to track how well they are meeting the social needs of their enrollees. While Oregon does not require providers to code claims and encounter data for social needs using Z codes, the state has demonstrated an ability to streamline and integrate social needs data into its Medicaid program as seen by the state's high data quality in the T-MSIS system. Oregon also had fast track enrollment before 2014, in coordination with the Supplemental Nutrition Assistance Program (SNAP) and the Healthy Kids Oregon Health Plan, with proactive engagement in linking data across systems to better meet enrollee needs.³⁷



What to Watch: Oregon participated in CMS' Medicaid Innovation Accelerator Program (IAP) from 2017-2019; the state modeled options for addressing social needs in VBP arrangements. In addition, the second iteration of the CCO model started in 2020 and explicitly includes requirements for directing spending toward addressing SDOH and health equity.³⁸

Oregon Health Plan Characteristics



Location: Pacific Northwest



Total Medicaid and CHIP enrollment December 2018: 979,447¹⁷



Medicaid Policy: Coordinated Care Organizations (CCOs)



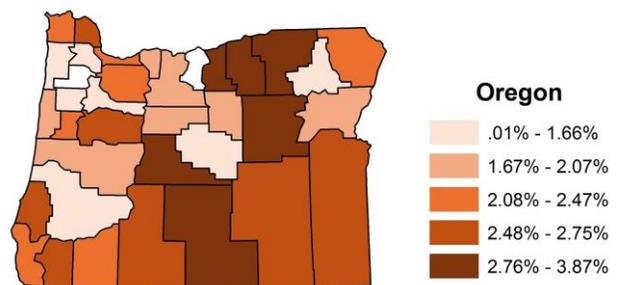
Share of Enrollees with Documented Social Needs: 2.4%



Funding Authority: Medicaid Section 1115 Waiver launched in 2012



MDQA Score: Low Concern (1.8% missing values for family income)¹⁸



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 code. Values are broken into quintiles. Oregon is missing county-level location data for 8.06% of enrollees

All-Payer Alignment in Vermont

Vermont launched its All-Payer ACO Model in 2018, establishing financial targets and aligning public and commercial payers across the state to improve quality and lower cost of care.³⁹ The model reformed the state’s health care payment and delivery systems via a Section 1115 waiver, a multi-payer shared savings system developed under CMS’ State Innovation Models testing grant, and a Next Generation ACO Model for the state’s Medicaid program.⁴⁰

In 2017 and 2018, OneCare was the only ACO in the model to coordinate care for high-risk Medicaid enrollees, including those with high levels of health-related social needs.⁴¹ OneCare made investments in population and community health initiatives, enhancing care coordination through the Advanced Community Care Coordination model, Patient-Centered Medical Homes, and expanded use of primary prevention initiatives.⁴⁰ Hospitals also invested in expanding care coordination and mental health services and improving health IT infrastructure. Blueprint Community Health Teams provide linkages to community services, including social services, mental health, and specialty care.⁴² These services were covered and paid for by all payers through the model.³²

These efforts created a fruitful environment for collaboration across payers and sectors to address health-related social needs. The robust reporting required to participate in the NGACO model may help explain why social needs were tracked to a greater extent among this state’s enrollee population compared with other states.

 **What to Watch:** Blue Cross Blue Shield of Vermont championed the opportunity to increase tracking of social needs through Z codes in October of 2021.⁴³

Green Mountain Care Characteristics



Location: New England



Total Medicaid and CHIP enrollment December 2018: 160,114¹⁷



Medicaid Policy: Accountable Care Organizations (ACOs)



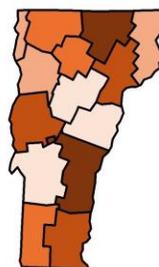
Percent of Enrollees with Documented Social Needs Z Codes: 6.7%



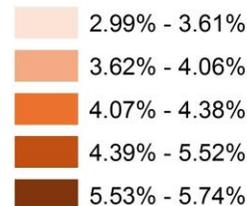
Funding Authority: CMS Next Generation ACO Model



MDQA Score: Medium Concern^{iv} (20.7% missing values for family income)¹⁸



Vermont



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 code. Values are broken into quintiles. Vermont is missing county-level location data for 46.86% of enrollees

^{iv} Vermont showed the highest proportion of enrollees with Z codes in the 2018 T-MSIS data. However, the MDQA notes that 20 percent of the family income data is missing for Vermont, and county-level location was missing for nearly half of enrollees in the state, suggesting potential data quality concerns.

Value-Based Payment in Minnesota

Minnesota is an early adopter of VBP to address Medicaid enrollees' social needs. Minnesota developed an ACO in 2010, the Integrated Health Partnerships program (IHP).³² Addressing SDOH is a cornerstone of Minnesota's ACO model. IHPs must propose an intervention to address social needs among their attributed populations and are held accountable for measures related to the proposed intervention. One IHP, Hennepin Health, partnered with the state health department and a federally qualified health center to identify and coordinate housing needs across sectors.³³

IHPs receive population-based payment adjustments based on performance and achievement of health equity objectives.²⁰ The payment can be adjusted for social risk factors, including homelessness, substance use disorders and other mental health conditions, and incarceration.³⁴ Minnesota developed its quality metrics by examining the impact of different social risk factors on health using Medicaid claims and encounter data and non-Medicaid sources.³⁵ Under Medicaid IAP, the state assessed other states' efforts to address SDOH and financial modeled its data to consider how to account for social risk factors in total cost of care.

Tying payment to social risk factors and health equity performance measures can incentivize collection and reporting of enrollee health-related social needs. Minnesota state requires IHPs to establish goals and track metrics based on their selected approach to address social needs.



What to Watch: Under IHP 2.0, organizations are required to establish and sustain formal partnerships with community-based organizations to support social needs.³⁶ These enhanced financial accountability measures may help improve SDOH data collection.

Integrated Health Partnerships Characteristics



Location: Mid-West



Total Medicaid and CHIP enrollment December 2018: 1,053,309¹⁷



Medicaid Policy: Value-based payment through accountable care organizations



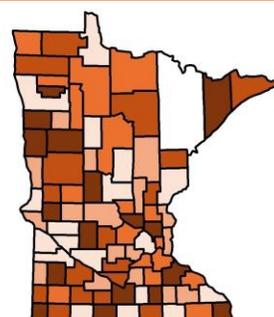
Percent of Enrollees with Documented Social Needs Z Codes: 3.4%



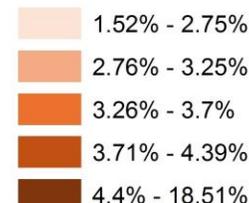
Funding Authority: N/A



MDQA Score: Unusable^v (100% missing values for family income)¹⁸



Minnesota



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 code. Values are broken into quintiles. Minnesota is missing county-level location data for 2.86% of enrollees

^v Unusable means that the data was not submitted to T-MSIS. Data may be collected and available to the state but, depending on data structure, data systems, or DUA issues, was not submitted to T-MSIS. Hence, unusable is unusable within the T-MSIS data for analysis.

Statewide Innovation in Arizona

In 1982, the Arizona Health Care Cost Containment System (AHCCCS) became the first state to require that all Medicaid enrollees be covered by MCOs. Arizona has since made strides in integrating behavioral and physical health, and adopting approaches to enhance quality of care and reduce costs.³⁷ This 40-year history strengthened the relationship between the state and MCOs, allowing for statewide adoption of social need measures and contract requirements.

Arizona has a community reinvestment requirement where each MCO must reinvest a portion of their annual profits into “community reinvestment activities.”^{38,39} These activities must be informed by the needs of the local community and can include shared savings arrangements with CBOs. Therefore, MCOs have a financial interest and obligation to maintain strong ties to communities and CBOs addressing the most acute health-related social needs. In addition, Arizona requires its MCOs to make at least 50 percent of provider reimbursement payments through VBP.² As of April 1, 2018, AHCCCS requires providers to use Z codes on applicable claims to track member outcomes.⁴¹



What to Watch: In 2019, as part of the state’s Whole Person Care Initiative,⁴² the state

expanded the Medicaid Non-Emergency Medical Transportation (NEMT) benefit to include rideshare providers, such as Uber and Lyft, for enrollees without mobility or personal assistance needs.²⁰ In early 2021, Arizona launched the Whole Person Care Initiative and established a statewide platform for closed loop referrals to address social needs. This will connect health care and community services providers in one single technology platform, enabling better tracking of SDOH referrals and services and, ultimately, improved outcomes for enrollees’ health-related social needs.⁴³

Arizona Health Care Cost Containment System Characteristics



Location: Southwest



Total Medicaid and CHIP enrollment December 2018: 1,700,470¹⁷



Medicaid Policy: Managed Care Organizations (MCOs)



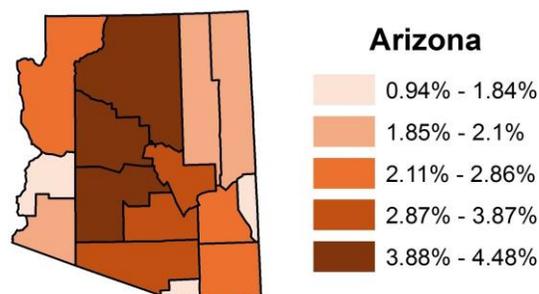
Percent of Enrollees with Documented Social Needs Z Codes: 3.9%



Funding Authority: N/A



MDQA Score: Unusable^{vi} (100% missing values for family income values)¹⁸



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 code. Values are broken into quintiles. Oregon is missing county-level location data for 1.54% of enrollees

^{vi} Unusable means that the data was not submitted to T-MSIS. Data may be collected and available to the state but, depending on data structure, data systems, or DUA issues, was not submitted to T-MSIS. Hence, unusable is unusable within the T-MSIS data for analysis.

Care Delivery Transformation in Massachusetts

MassHealth, the Massachusetts Medicaid program, launched an innovative ACO program in 2018 using funds from a Section 1115 waiver.⁴⁴ The program aims to provide cost-effective and high-quality care for Medicaid enrollees by incentivizing providers to address social needs via shared savings and capitated payment models. ACOs can choose from three models; all are required to work with community partners that help provide behavioral health care, long-term services and supports, care coordination, and non-medical social services. MassHealth funds are provided to community partners and adjusted based on quality and performance.⁴⁵

The MassHealth program also provides funding for “flexible services,” which can include non-medical social services delivered to address five areas of need: community transitions; home and community-based services; living environment; physical activity; and nutrition, violence, and other services.⁴⁶ The state committed additional delivery system reform incentive payment (DSRIP) funds to improve health and lower costs statewide, including helping community providers, supporting participation in alternative payment models, and expanding access to behavioral health care and for people with disabilities. MassHealth incorporates social risk variables into risk adjustment models, including homelessness, substance use disorder, and a composite neighborhood stress score to determine payments to MCOs and ACOs using data from administrative files and claims and encounter data submitted by MCOs.⁵ The “neighborhood stress” measure is based on beneficiaries’ home address and includes economic stress, income, employment, education, and transportation.



What to Watch: MassHealth has taken a flexible and multi-faceted approach that includes

addressing the social needs of their enrollees, incorporating best practices in VBP, supporting cross-sector partnerships, and enhancing integrated and coordinated care. It will be critical to observe how these efforts impact health and social needs outcomes and documentation of social needs among enrollees over the next few years.

MassHealth



Location: New England



Total Medicaid and CHIP enrollment December 2018: 1,598,878¹⁷



Medicaid Policy: Managed Care Organizations (MCOs)



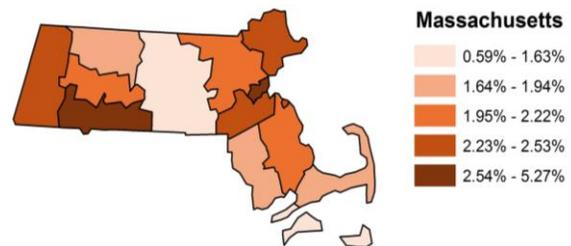
Percent of Enrollees with Documented Social Needs Z Codes: 2.7%



Funding Authority: Medicaid Section 1115 waiver launched in 2016 as a demonstration; full program launched in 2018 with waiver renewal



MDQA Score: Low Concern (0.0% missing values for family income)¹⁸



Note: County-level map of percentage of Medicaid enrollees with any Z55-Z65 code. Values are broken into quintiles. Massachusetts is missing county-level location data for 0.56% of enrollees

Challenges to Documentation

States, MCOs, and health systems are implementing strategies to identify and address the social needs of Medicaid enrollees. Such strategies can improve the collection and precision of social needs data. However, these entities often face challenges to adequate collection, sharing, and use of data on social needs, which limit the states' ability to use data to inform Medicaid policy and operations, guide quality improvement efforts, and evaluate the quality, reach, and efficiency of interventions. This section describes existing challenges to documentation of social needs using Z codes.

There is low provider awareness of the availability and use of Z codes.

Low documentation of social needs in 2018 Medicaid data may result from lack of provider awareness about the availability of Z codes or lack of adequate training on when and how to use them. According to the American Hospital Association (AHA) in November 2019:

"...hospitals have not widely adopted the use of Z codes. Adoption has been limited due to a lack of clarity on who can document a patient's social needs, absence of operational processes for documenting and coding social needs, and unfamiliarity with Z codes. In addition, coders may need encouragement and support from hospital leaders to collect these codes that were once perceived as a lower priority."⁴⁷

Initial ICD-10-CM Official Guidelines for Coding and Reporting noted that "coding professionals could only report codes that were supported by physician documentation," resulting in providers not reporting social needs that were documented by non-physician providers like case managers, nurses, and discharge planners.⁴⁷ This guidance was clarified in early 2018 and, in 2019, the AHA Coding Clinic provided additional guidance around the definition of clinician. However, those initial restrictions to who can document Z codes and low use of Z codes highlight the need for additional guidance and training of providers, staff, and coding professionals to clarify who can use Z codes, when and how to use them, and the importance of their use.⁵

Providers lack financial incentives to use Z codes.

Use of ICD-10-CM codes in electronic health records (EHRs) is often driven by billing needs; providers do not submit additional data in claims and encounter data unless they are incentivized to do so. Most states do not use Z codes for payment purposes, nor do they encourage or incentivize FFS providers to screen and report health-related social needs in Medicaid claims data.^{48,49} For MCOs, SDOH assessments are paid using the administrative portion of the capitation payment, and the Medical Loss ratio limits the portion of the dollars spent on administration, marketing, and profits.⁵ Providers and payers may need additional incentives to boost documentation of Z codes in Medicaid claims and encounter data.

There is inconsistent use of and significant variation in existing measures for documenting social needs, resulting in limited sharing of social needs data.

SDOH encompass a broad range of topics, which makes standardizing definitions and measures difficult.⁵³ Absent a commonly accepted definition and standardized measures of SDOH, health systems, providers, health plans, EHRs, and referral platforms use different methodologies for

collecting social needs data—resulting in significant variation in how states define, collect, use, and report social needs.⁵ The lack of standardized and validated measures of social needs are a major barrier to data collection and measurement, making comparison among populations and changes over time difficult and limits how data can be aggregated and used for state and federal policy, health services research, and program implementation.^{2,57}

The National Committee of Quality Assurance (NCQA) has made strides towards developing quality measures on the collection of social needs. NCQA recently proposed six HEDIS^{vii} measures related to screening and interventions for food insecurity, housing, and transportation.⁶⁰ While these measures are still in the public comment period as of March 2022, if approved, they would be introduced for health plans participating in Medicaid, Medicare, and commercial insurance for calendar year 2023. Nevertheless, health plans could face significant challenges in utilizing these measures and being accountable for the collection of social needs.



Standardization of Social Needs Data and Measures Remains a Challenge

For the Patient-Centered Outcomes Research Institute (PCORI), NORC conducted an assessment of the current state of data collection of social needs data within PCORNet®, finding that though nearly all health systems collect and use individual-level data, significant variation exists on what domains are collected and the use of standard terminology in EHRs.⁶⁹

Lack of standardized measures of social needs data limits the ability to share data across providers, health systems, payers, state agencies, etc.

Social needs data is difficult to extract from EHRs and share with payers, states, or other health systems due to various technical and other challenges.^{5,53} For example, even within the same health systems, providers may use different tools and sometimes collect the same or different data but not communicate information across teams.^{51,52} Thus, social needs data may be dispersed throughout the EHR to accommodate varying provider workflows or collected in a variety of ways (e.g., free text fields, in EHR-specific datasets).^{53,54}

Lack of interoperability is one major challenge. According to the Centers for Health Care Strategies, “When SDOH-related data are ‘owned’ by and housed in different entities, states face the challenges of determining what information is available and how to access it, and figuring out how make data from different sources available.”⁵ Furthermore, there are concerns around privacy and what can be shared, with whom, and for what purposes, especially related to Health Insurance Portability and Accountability Act (HIPAA) and Family Educational Rights and Privacy Act (FERPA), which create barriers to data sharing.⁵ For example, 42 CFR Part 2 restricts the ability of health plans and health systems to provide a coordinated response to the opioid use epidemic due to limitations in what behavioral health and

^{vii} HEDIS, Healthcare Effectiveness Data and Information Set (HEDIS) is a comprehensive set of standardized performance measures designed to provide purchasers and consumers with the information they need for reliable comparison of health plan performance. See: <https://www.ncqa.org/hedis/>

substance use disorder data can be shared.⁶⁶ In addition, community social services organizations may have limited technical capacity to collect and share back large amounts of data with health systems.

The National Academy of Medicine issued strong recommendations in 2014 around the need for standardized collection of social risk factors and social needs data within EHRs.⁶⁶ Some existing efforts have focused on developing standardized, interoperable, EHR-based codes. For example, launched by the Social Interventions Research and Evaluation Network (SIREN) at the University of California San Francisco in 2018 with funding from the Robert Wood Johnson Foundation, The Gravity Project is a national collaborative to reduce barriers to the documentation of social risk factors.⁶⁷ Gravity has undertaken a consensus-based development process to create a set of code recommendations for SDOH domains to facilitate consistent coding and interoperable electronic exchange and aggregation. This includes proposing changes to Z codes and expanding existing Z codes to improve applicability, as well as addressing existing gaps in available Z codes. As of October 2021, the ICD-10 Coordination and Maintenance Committee for inclusion and implementation in ICD-10-CM, a federal interdepartmental committee responsible for approving coding changes, approved new and refined Z codes for education, housing, and food insecurity. The Gravity Project has since submitted additional domains for inclusion in ICD-10-CM, as well as the Office of the National Coordinator's (ONC's) United States Core Data for Interoperability (USCDI).^{63,64}

The Gravity Project also includes pilot testing of all codes and the creation of HL7® Fast Health Interoperability Resource (FHIR®) Implementation Guides. FHIR is “an interoperability standard intended to facilitate the exchange of healthcare information between health care providers, patients, caregivers, payers, researchers, and anyone else involved in the health care ecosystem.”⁶⁸ Previously, health information would be shared via fax, document, or PDF. In contrast, “FHIR is based on internet standards widely used by industries outside of healthcare”

and uses standardized application programming interfaces (APIs) to share information from EHRs more seamlessly with other providers or health plans.⁶⁶ Hence, the integration of social needs data standards into FHIR can improve the way health care providers, patients, community social service organizations, and other stakeholders support and coordinate care and share data.



Lack of Standards Results in Challenges with Data Sharing

NORC conducted a qualitative study of [EHR vendor perspectives on incorporating social needs data](#) for the Office of the Assistant Secretary for Planning and Evaluation (ASPE). The study found that, absent policy standards around social needs data, product specific decisions are de facto though vendors appear ready to discuss policy solutions like standards or guidelines.

Existing social needs assessment and screening tools are heterogenous and lack alignment behind a gold standard or approach, causing data to be fragmented and siloed.

Lack of consistent guidance from CMS, state Medicaid agencies, or other payers on how providers should screen and code for social needs has resulted in health systems and providers often deciding on their own when and how to screen and report social needs to payers. Tracking occurs through health system- and provider-specific EHRs, referral platforms (e.g., NowPow, Unite Us, Find Help [previously Aunt Bertha], Healthify), or community information exchanges (e.g., San Diego 2-1-1).⁵⁸ Only some of these tools are validated. In addition, some providers may feel uncomfortable asking and

responding to patient concerns about social needs despite having screening tools, particularly if there are insufficient structures in place to help providers refer patients to needed services.

Despite lack of standardized measures for SDOH, recent efforts have established standardized tools for collection of social needs data, e.g., the AHC Health-Related Social Needs Screening Tool⁵⁵ and the Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE)⁵⁶ tool developed by the National Association of Community Health Centers (NACHC) and used by federally qualified health centers. However, some of these tools are tailored for use within specific populations or have not been broadly deployed.

Screening tools also vary in terms of the number of domains, questions, and which social risk factors are emphasized.



Collection and Sharing of Social Needs Data Remains Siloed

In NORC's [discussion groups with Medicaid MCOs](#) in 2020, MCOs described the siloed collection of social needs data across multiple systems and data sources and challenges with data sharing across organizations.

Documentation of social needs using screening tools does not always translate back to Z codes, and Z codes capture some but not all domains of SDOH.

While states have sought out strategies to hold health plans and providers accountable to addressing patients' social needs, these strategies have largely focused on tracking and referring patients to services provided by CBOs. Efforts to develop validated screening tools and standardized measures set the foundation and data infrastructure to screen for social needs and make referrals to services outside the health systems; however, in general, they do not translate information about an enrollee's social needs into Medicaid claims and encounter data or reporting of that data back to state Medicaid agencies. For example, one study found that while 16 percent of providers were documenting patient social needs in clinical codes, only 0.4 percent were translating those notes into Z codes.⁴⁸

Some of this is due to challenges linking front-end social needs data collected from screening questions to back-end Z codes. Providers can translate the data collected by patient self-report tools to identify social needs using Z codes as of October 1, 2019, as long as the information has been incorporated into the EHR by a clinician.⁵⁵ However, providers may encounter a lack of an equivalent ICD-10-CM code; e.g., transportation in screening tools map to multiple Z codes, or meaning of the need can be lost in the conversion to existing Z code choices.^{57,58} Thus, there is limited reporting of data from screening tools back to MCOs and state Medicaid programs, which limits state Medicaid programs' ability to get an accurate picture of needs among Medicaid enrollees and use that data to inform policy.

Policy Implications

Z codes offer a way for states, payers, and providers to report, aggregate, analyze, and use social needs data to improve care coordination, patient satisfaction, and health outcomes. Z codes have the potential to help health systems, payers, and states identify and respond to their patients' non-medical needs; aggregate data across patients to identify trends; layer social needs with other claims data to have a fuller picture of patient needs; and develop, implement, measure, and adjust strategies to address SDOH.⁶⁷ Using Z codes to standardize the process of collection of social need data would allow states to expand on existing ICD-10-CM infrastructure and systems for collection of health-related data and ensuring this information becomes part of an enrollees' medical record and claims history. Thus, states should consider effective strategies to mitigate challenges with use of Z codes and promote their use to inform development of policies, practices, and programs that provide whole person care to reduce preventable or avoidable hospitalizations. While states have sought out strategies to hold providers accountable for addressing patients' social needs, these strategies have largely focused on tracking and referring patients to services provided by CBOs. State Medicaid agencies should take additional steps to enhance the quality, accuracy, and comprehensiveness of Z codes in Medicaid data. This section describes potential state and federal strategies to promote the quality, accuracy, and comprehensiveness of Medicaid social needs data.

State Policy



State Medicaid agencies can work with providers, provider associations, and other partners to give providers needed guidance, education, training, and technical assistance on Z code use and its importance.

These efforts should be geared towards physicians, specialty providers, and non-physician staff, including patient navigators, nurses, community health workers, and coding staff. Efforts should focus on the importance of and processes for documenting social needs using Z codes. Working with providers on the importance of screening for and documenting social needs using Z codes can help reduce lack of provider awareness and improve use of Z codes.



State Medicaid agencies can develop an SDOH measurement approach with associated Z code reporting requirements based on standard measures.

As noted, the lack of consistent guidance around standardized measures for SDOH has a fragmented and siloed approach to collection of social needs. State Medicaid agencies can play a critical role in developing reporting requirements and promoting standardization in the measurement process.⁵

State Highlights

Oregon established a committee that established SDOH-related measures for its coordinated care organizations.⁷⁶

State Medicaid agencies can work with stakeholders to develop an SDOH measurement approach that guides the collection and strategic use of social needs data in their states, including creating standard policies and procedures to screen for social needs and capture those needs using Z codes.^{5,58,68} States can leverage existing quality measurement infrastructure (e.g., quality improvement and measurement workgroups, technical advisory boards, etc.) to identify state SDOH priorities and measures, outline measure specifications, create a data collection mechanism, and encourage or require health plans and providers to collect this information to support care management, quality improvement, and total cost of care management. This approach can leverage existing assessment tools to ensure consistency in measurement and incorporate a structured approach for monitoring and evaluation.⁵ For example, states can adopt the six NCQA SDOH measures, once they are approved, as part of health plan reporting into their VBP arrangements for 2023 or assess adopting social needs measures utilized by other states.⁶⁰ This work should be done in coordination with members, advocates, CBOs, health systems, and health plans to provide their feedback on the populations, conditions of focus, and measures.

Framework for Advancing Health Equity in State Medicaid Programs

NORC's [Framework for Advancing Health Equity in State Medicaid Programs](#) highlights how state Medicaid agencies can conduct data assessment to determine the quality of their data and develop a health disparities and measurement strategy to identify and target areas of improvement as part of states' health equity strategy.



States can leverage their existing authorities to promote policy environments that support SDOH identification, screening, and documentation, including requiring MCOs to report screening data back to state Medicaid agencies using Z codes.

States have various authorities they can leverage to address enrollees' social needs. States can:

- use **1905(a) State Plan Authority** to provide optional, nonmedical services to Medicaid benefit packages like peer, housing, or employment supports and case management, historically incorporated as part of home and community-based services.⁶⁹ States can also establish health home state plan benefit option (Section 1945) to establish health homes for people with chronic conditions, including care management, care coordination, and referrals to community and social support services.
- leverage **Section 1115 demonstration waivers** to pilot and test delivery system and payment reforms outside of standard federal Medicaid requirements. Such reforms may support payment for nonmedical services by means of alternative payment models or by using federal matching funds to test models related to providing social needs services and supports.⁹ States can build into these arrangements quality measures and reporting requirements that include collection reporting of social needs data using Z codes.

State Highlights

North Carolina developed the Healthy Opportunities Pilots in 2018 as part of its 1115 waiver to cover non-medical services that address housing instability, transportation insecurity, food insecurity, interpersonal violence, and toxic stress.⁶⁹

- leverage **managed care contracts** to require MCOs to detail how they will analyze data to address SDOH, develop interventions around SDOH, and report data back to state Medicaid agencies using Z codes. Managed care contracts allow for flexibility within managed care programs to provide in-lieu-of services or value-added services that address social needs, or can include contract requirements or procurement strategies to provide flexibility to address social needs.^{5,69}

State Highlights

As of state fiscal year 2021, seven states (Arizona, Arkansas, Hawaii, Michigan, Pennsylvania, Tennessee, and Texas) encourage or require providers to capture member SDOH data using ICD-10 Z codes.⁷⁷

- **establish delivery system reform models, like integrated care models, patient center medical homes, Medicaid, health homes, and ACOs** that that emphasize person-centered and whole person care, including addressing social needs.⁵ Through these models, states can encourage health systems and providers to provide comprehensive and person-centered care and innovate ways to improve health outcomes for Medicaid enrollees by addressing nonmedical health factors including screening for social needs; using these data to address social needs; establishing partnerships and closed-loop referral systems with CBOs; using interdisciplinary care teams; conducting care coordination; and other services. Studies find that hospitals that are furthest along in their value-based care journey, such as hospitals participating in ACOs and receiving bundled or capitated payment programs, report the largest investments and activities related to addressing social needs.⁵¹ In addition, such payment models could boost tracking of social needs and reporting of that data to state Medicaid programs to meet quality improvement requirements.

State Highlights

California's Whole Person Care pilot program, established in 2016 under Section 1115, coordinates physical, behavioral, and social services for individuals with high risk and who have high utilization of the health care system, including individuals experiencing or at risk of homelessness, with multiple chronic conditions, with severe mental illness or substance use disorders, and involved with justice systems.⁶⁹



States can incorporate social risk factors into payment and provider reimbursements and tie Z codes back to quality measures and payment.

Many states incorporate performance-based payments within contracts with MCOs or provider payments; however, states often do not include social risk factors in Medicaid FFS or other advanced payment models. In managed care, states set capitation rates and total cost of care targets for MCOs and ACOs that risk-adjust only for certain diagnoses.⁷⁰ Without considering the impact of social risk factors on health, states do not have a comprehensive and accurate picture of needs that can inform program and policy making.

States should integrate social risk factors in payment and provider reimbursements tied to delivery system reform models. In addition, states may penalize MCOs inadvertently for caring for people with significant social challenges and inhibit innovations in meeting

State Highlights

Massachusetts includes two social risk factors in their risk adjustment payment formula for MCOs: housing indicators and neighborhood stress scores.^{78,79}

Minnesota's Integrated Health Partnerships receive population-based payment adjustments based on social risk factors including homelessness, substance use disorders and other mental health conditions, and incarceration.^{78,79}

the needs of these high-risk individuals. Incorporating social risk factors in payment and other care delivery models and tying these data to reporting back to states using Z codes can allow states to make more accurate comparisons across plans or ACOs and develop a better understanding of variations in quality of care across Medicaid populations, which in turn can spark new initiatives to address gaps in quality.



In the interim, until states build more robust processes for provider reporting of social needs using Z codes, states can consider a more holistic approach to collecting and sharing social needs data by working with MCOs, health systems, state health information exchange (HIE) programs, and other entities.

There is still much left to be figured out for states to rely on provider reporting of social needs through Z codes. In the interim, states can explore how to access information across their different departments and programs to create a profile of the social needs of their beneficiaries. States can build partnerships with other state programs and entities to share social needs data to inform the state's comprehensive SDOH and health equity strategy and consider other ways to acquire that data, including how social needs could be collected during the eligibility determination and redetermination periods to fill gaps in data collection.⁵

States can take the following steps to develop this approach:

- 1) examine whether they are fully utilizing data from the Medicaid eligibility application to identify enrollees' social needs (e.g., information about job or housing stability).
- 2) supplement their Medicaid data with other existing state data sources, e.g., the Supplemental Nutrition Assistance Program (SNAP), the Special Nutrition Program for Women, Infants, and Children (WIC) applications, or housing, unemployment or workforce development applications. States have an extensive amount of information at their disposal; however, this data can exist in silos. With their beneficiaries' consent, states could fully utilize these existing data sources at their disposal to assess the social needs of their beneficiaries by integrating information across their different systems. States can also work with state public health departments' vital records unit to link Medicaid data with race and ethnicity information directly from birth records.⁶⁸
- 3) partner with health plans and health systems to collect social needs data through existing validated screening instruments, integrate that data into EHRs, and share that data from health systems to health plans to states. Health plans can become key partners in the collection of social needs of Medicaid beneficiaries particularly during welcome calls or when conducting comprehensive risk or health risk assessments of new enrollees.

State Highlights

Indiana and Washington are aggregating data across different state agencies to identify social needs. They collect social needs data across multiple program applications and that information is shared among state agencies rather than individuals needing to report the same information multiple times through different applications.⁸⁰

- 4) leverage state HIEs, who are instrumental partners in sharing data with other providers, health plans, or payers. EHR vendor agnostic HIEs can provide additional data on enrollee social needs and other data elements across providers or health systems using different EHR systems and even with health plans that have traditionally lacked access to EHRs. Additionally, states should consider partnering with health plans, health systems, and CBOs to either utilize an existing closed-referral platform (e.g., Healthify, UniteUs, NowPow, Find Help) that can integrate into existing EHRs and HIEs or to develop their own platform (e.g., San Diego 2-1-1, North Carolina's NCCARE360). Having consensus on utilizing the same closed-loop referral platform will make it easier for health plans, providers, and CBOs to work together to provide interventions that address Medicaid beneficiaries' SDOH needs.

Federal Policy

While states have various levers at their disposal to establish policy environments that better promote identifying, addressing, and documenting social needs using Z codes, it is important to also acknowledge the role of federal policy. Prior federal efforts have taken steps towards improving adoption of EHRs, interoperability, and quality improvement initiatives that promote tracking of social needs.⁵³ The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 and the Patient Protection and Affordable Care Act of 2010 increased adoption of EHRs, required collection of basic demographic data, and included standards for capturing patient behavior and psychological history data for data sharing. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) and Merit-based Incentive System's (MIPS) promoted rewarding providers for quality and performance measures including screening for SDOH. CMS' AHC model and 2016 Medicaid managed care rule encourage states or participating ACOs to incorporate community-based and non-medical services that address SDOH in state strategies.

In addition, more recent federal efforts continue to highlight the need to address health equity and SDOH. In January 2021, CMS issued [guidance to state health officials](#) to encourage adoption of state- and health-system level strategies that address social needs.⁷¹ The goal of these strategies is to "improve enrollee health outcomes, reduce health disparities, and lower overall costs in Medicaid and CHIP."⁷¹ The guidance describes how state Medicaid programs can leverage delivery system reforms like VBP, covered benefits, and reimbursement strategies to improve outcomes for Medicaid enrollees, by providing "housing-related services and supports, non-medical emergency transportation, home-delivered meals, educational services, and employment supports."⁷¹ The guidance clarifies how states can use Medicaid authorities to support coverage of nonmedical services.

The American Rescue Plan Act of 2021 included \$1.9 trillion to address the health and economic effects of the pandemic, including efforts to address food and housing insecurity, employment loss.⁷² The CMS Innovation Center's 2021 Strategy Refresh includes a focus on models that address health equity, including developing a standard approach to measuring and collecting outcomes related to health equity, requiring participant to collect and report demographic data and, where appropriate, data on social needs and SDOH, and enhancing addressing SDOH in models.⁷³ The Innovation Center is also focused on integration whole person care approaches that integrate individuals' clinical needs across providers and settings while also addressing social needs.

Nevertheless, additional federal guidance, funding, and technical assistance is needed to help states develop the data infrastructure needed to collect and share social needs data with health plans and providers. Additional opportunities exist for the federal government to improve identification, response, and documentation of social needs:

- **Support and incentivize multi-sectoral coalitions and partnerships to break down silos and consolidate resources to reduce fragmentation of social needs data, avoid duplication of efforts, and better align efforts.** CMS can continue to work closely with states, payers, health systems, providers, MCOs, CBOs, vendors, community members, and others to leverage existing efforts to standardize and expand measures for social needs and approve use of more standardized, payer-agnostic, and interoperable ICD-10-CM Z codes for social needs.⁶⁶
- **Clarify guidance around privacy and trust that increase barriers to data sharing and exchange.** This includes clarifying how health systems and providers can work with social service community organizations to exchange social needs data.⁶⁶
- **Provide states with incentives and funding to improve their data infrastructure that can help states sustain SDOH measurement.** Identifying sources of financial support to develop and sustain SDOH measurement efforts is a challenge for states.⁵ In some cases, states have leveraged State Innovation Model and other funds for the initial support of establishing data infrastructure that supports SDOH measurement, data collection, and use. For example, some states have linked their modular Medicaid Enterprise Systems (MES) with HIEs to share social needs data of Medicaid beneficiaries with health plans and treating providers. HITECH funding, which ended in 2021, provided a mechanism for states to fund and develop projects with their state HIEs; CMS has encouraged states to utilize MMIS funding after HITECH funding ends to develop new work with their HIEs. States need additional sources of funding and resources to support investment in state and local data infrastructure to improve timeliness, collection, quality, and use of data, including SDOH data.⁶⁶
- **Expand federal interest on value-based care and health care quality to increase opportunities for states to expand their efforts to promote SDOH documentation and interventions to promote health equity.** This includes testing, implementing, evaluating, and expanding models of care that document and address social needs. Similar to how CMS incorporated the promoting interoperability program requirements into MIPS, CMS could encourage states to utilize value-based payment arrangements, 1115 waiver authority, or their managed care contracts to hold health plans and providers accountable for the collection and sharing of health-related social needs data and for conducting interventions to address SDOH needs.

Conclusion

States varied in the level of social need reported in Medicaid claims and encounter data using Z codes.

State documentation of social need using Z codes ranged from 2.44 percent to 6.64 percent (states in the highest quintile) to 0.42 percent to 0.97 percent (states in the lowest quintile). Managed care enrollees had higher levels of documented social needs compared with FFS enrollees, though there is low documentation across both care models. States with active Medicaid ACOs in 2018 had a higher proportion of documentation than did those without an active Medicaid ACO. In states with higher shares of documentation in 2018, early adoption of ACOs, all-payer alignment, value-based payment, care delivery transformation, and policies that encourage identifying and addressing social needs of Medicaid enrollees were in place.

Provider coding of social needs using Z codes is not yet advanced enough for state Medicaid agencies or health plans to rely on claims and encounter data to assess the social needs of their enrollees.

Z codes have the potential to be a valuable source of data on enrollee social needs as it can offer providers and payers a uniform and consistent way to record SDOH.⁶⁷ However, their use currently remains low; only 1.42 percent of Medicaid enrollees had social needs documented in their claims or encounter data in 2018. However, it is also unclear whether the low documentation reflects the lack of provider documenting and reporting of enrollee need or whether providers are not screening for social needs during the encounters; the data do not distinguish between these two scenarios.

Having a complete data source that includes enrollee-level information on key demographic attributes and social needs is critical to a state's ability to identify areas of high need. Such identification is essential to addressing disparities in health outcomes by implementing policies, programs, and interventions that improve health outcomes for Medicaid enrollees. However, Medicaid claims and encounter data do not provide sufficient information to determine which of their members have social needs and the level of need.^{74,79} Absent utilization of Z codes, states should consider other mechanisms to understand the needs of their enrollees, including partnerships with other entities to share social needs data to inform the state's comprehensive SDOH and health equity strategy.

State Medicaid policy can create supportive environments for documenting social needs, encouraging their use, and mitigating challenges that inhibit documentation of social needs using Z codes.

States can work with providers and other associations to provide guidance and broaden education and training efforts for physicians, specialty providers, and non-provider staff, including patient navigators, on the importance of and processes for documenting social needs using Z codes. This would help increase provider awareness of the availability of Z codes and clarify uncertainty around who can use them. States can also work with various stakeholders to develop an SDOH measurement approach and

reporting requirements based on standard SDOH-related measures. This will encourage consistent use of a standardized set of measures across providers, health systems, and payers within the state.

In addition, states can leverage their existing authorities to promote policy environments that support SDOH identification, screening, and documentation, including requiring MCOs to report back social needs screening data to Medicaid agencies using Z codes. They can also incorporate social risk factors into payment and provider reimbursement and tie payment based on Z codes used to report quality and performance measures.

Methods and Limitations

This analysis used 2018 Transformed Medicaid Statistical Information System (T-MSIS) claims and encounter data. All Medicaid enrollees in the T-MSIS enrollment file with at least one day of Medicaid eligibility in 2018 were included in the analysis—a total of 93.4 million enrollees. Enrollees with CHIP-only eligibility were excluded from this analysis given the focus of the analysis is on Medicaid enrollees. Enrollees were noted as having Z codes when at least one claim had an ICD-10-CM Z code at any point in 2018. All Z55, Z56, Z57, Z59, Z60, Z62, Z63, Z64, and Z65 codes were included in the analysis.

All statistical analyses were conducted in SAS Studio between September and December of 2021. Mapping was conducted in ArcGIS 10.8.1. Quintile categories were used for state and individual state-level county maps. We used submitting state in lieu of enrollee state /higher/lower, due to missing and incomplete enrollee county-level location data for roughly 4.5 percent of enrollees for state-level analyses. For county-level analyses, we used enrollee state and county codes, derived from home or mailing addresses.

A primary limitation of this analysis is that T-MSIS data quality and completeness varies widely depending on both the variable and the submitting state. In particular, there are data quality and completeness concerns around data on location. ZIP code-level analyses were not possible due to the high level of missing and suppressed data. For county-level data, about 4.2 million Medicaid enrollees (4.5%) have incomplete county code data. Due to incomplete county-level data, submitter state was used for national state-level analyses; such an approach generates enrollee counts that are double among multiple states.

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