Integrating Z coding for social determinants of health and its impact on rural areas

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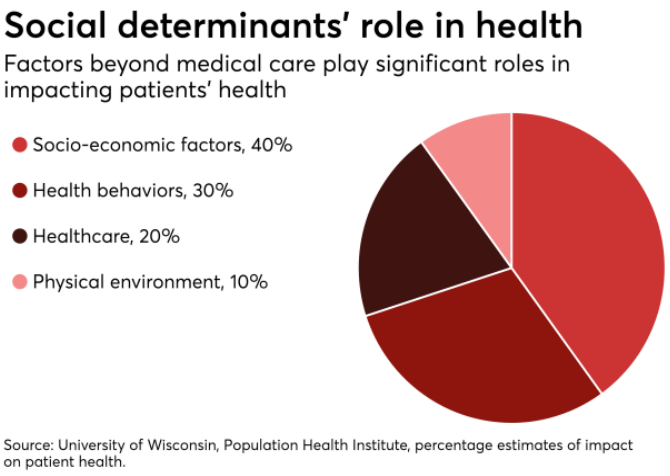
Introduction

It has long been recognized that social determinants of health (SDoH) are the non-clinical "conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."[i] Communities can influence these conditions through action and policy.

SDoH affect an individual's health outcomes and health status and contribute to persistent health inequities observed between populations. They are often risk predictors for the development of chronic diseases. The University of Wisconsin Population Health Institute concludes that social and economic factors drive 40 percent of health outcomes, with closely linked factors such as physical environment and health behaviors accounting for another 10 percent and 30 percent, respectively. Clinical care accounts for the remaining 20 percent.[ii]



Source: University of Wisconsin, Population Health Institute, percentage estimates of impact on patient health.

Detrimental SDoHs are frequently observed in rural communities, including challenges with transportation, poverty, social isolation, and food deserts. These factors put rural populations at higher risk for adverse health outcomes, as these communities are historically underresourced, underrepresented, poorer, and sicker.[iii] Rural providers often lack the time and resources necessary to care for patients experiencing negative SDoH.

The ICD-10-CM diagnosis codes adopted by the US in 2015 introduced "Z codes." Z codes are used as reason codes to capture "factors that influence health status and contact with health services." They can be used in all health care settings (including inpatient and outpatient) as a principal or secondary diagnosis code and are accompanied by any performed procedure codes.[iv,v] These codes permit clinical personnel to record important SDoH in a standardized way to quantify and characterize the proportion of patients who are impacted by these factors.[vi] The U.S. Department of Health and Human Services (HHS) has positioned addressing SDoH as one of the five overarching goals of its Healthy People 2030 campaign, grouping social determinants into five separate domains (economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context). They have also established measurable objectives and working groups targeted at specific issues within each domain.[vii] On Oct. 1, 2021, the Centers for Disease Control and Prevention's National Center for

Health Statistics added an additional 11 categories of Z codes, which provide more information on social determinants such as housing, food insecurity, and transportation. Many efforts to integrate the documentation of SDoH into medical records have occurred at the state level, specifically in state Medicaid programs, and at the federal level in Medicare programs.

Analysis

Collecting Z codes could strengthen quality improvement activities, identify factors that influence health outcomes, and more conclusively determine and characterize health disparities. Regular and consistent reporting of Z codes could enhance care coordination within hospitals and health systems. Specifically, Z codes can make discharge planning and transitional care more extensive. However, Z codes are voluntarily reported when and if they are supported in the patient's health record. There is no financial incentive to collect Z code-related information, and there are technological challenges with the vast array of patient charting systems. As a result, fewer than two percent of health care facilities utilize Z codes, and it is hypothesized that this rate is even lower for rural facilities.[viii] Little to no literature exists quantifying or qualifying the use of Z codes by rural providers and facilities.

Research has identified numerous barriers to the use of Z codes. First, Z code claims are not generally used for payment purposes, so there is no financial incentive to implement their use. Second, the limited number of Z codes makes capturing some social, economic, and environmental determinants impossible. Third, while some providers may have had training on these topics or otherwise recognize the social, economic, and environmental challenges their patients face, they may be limited in what they can do; further, they may require guidance on how to best assist their patients in addressing their non-medical needs.[5] Fourth, consistent protocols may not be in place for documenting and reporting Z codes. Fifth, many of the circumstances captured in Z codes depend on the willingness of patients to disclose their personal, social, economic, or environmental conditions. Sixth, there is a concern that recording Z codes can exacerbate existing screening biases within the health care system. Lastly, not all providers or systems have professionals with skills in identifying and assessing SDoH such as social workers, and providers may be reluctant to screen for SDoH[ix]

NRHA is concerned with the barriers and resources needed for identifying and reporting Z codes. These barriers are especially pronounced in rural, underserved communities and health care settings. For rural providers, workflow and workforce capacity are already low due to shortages and heavy caseloads. Screening and recognition of some SDoH on top of these existing workloads may require engaging a social worker, care coordinator, or other individuals with specialized training. Rural patients may experience greater mistrust in their providers and feel uncomfortable discussing SDoH-related issues with nurse aids or other professionals, as these are not their usual source of care. Furthermore, rural patients may be reluctant to have SDoH-related information memorialized in their medical chart. [xi]

NRHA has also addressed that there are infrastructure barriers limiting the uptake of Z coding that the Centers for Medicare and Medicaid Services (CMS) must address before requiring widespread reporting. Some identified barriers include a lack of standardized electronic health record screening tools, knowledge among providers, staff to acquire the information, and trained coders. These barriers were identified by CMS in a Z code study evaluating utilization among Medicare beneficiaries. NRHA members have raised concerns that their existing infrastructure may not

support Z code utilization and would likely require additional administrative resources to transition information between notes, charts, and coding of services.

Current policies and proposals
CMS has included Z code recommendations in their fiscal year 2023 Hospital Inpatient Prospective Payment System final rule. Prior to this final rule, CMS initially sought feedback on the collection and extraction of Z codes. Commenters suggested that HHS should first focus on ensuring that Z codes accurately reflect SDoH before pursuing other policies. Specifically, responses indicated that using Z codes in the HHS-operated risk adjustment program without a measured approach could potentially widen existing gaps in coding standards and practices and that HHS should promote more regular and consistent use of Z codes first. Other commenters explained that requiring providers to use Z codes would create an additional administrative burden and therefore, providers should not be penalized for not using Z codes. In the final rule, CMS solicited comments on whether HHS should pursue policies to encourage consistent use of Z codes to support collection and use of data for the risk adjustment program. Considering the issuance of Executive Order 13985 and Executive Order 14009, HHS is interested in analyzing Z code data to learn about the relationship between risk and SDoH.

Washington state has passed a statute providing incentives for funding Z code collection within the Maternity Care Access Program. The statute states that "to improve health outcomes and address health inequities, the authority shall evaluate incentive approaches and recommend funding options to increase the collection of Z codes on individual Medicaid claims, in accordance with standard billing guidance and regulations."[xii] However, this policy only required the evaluation of incentive approaches rather than the actual implementation and lacked the fiscal support and resources needed for implementation.

Policy recommendations

NRHA encourages CMS to provide support and act upon potential barriers to coding to build in methods to increase the use and effectiveness of Z codes by addressing the added resources required, especially among rural, under resourced health providers, including:

- *Develop a rural pilot to test the use of Z codes to measure rural SDoH:* Rather than a wide shift in institutional policy, a controlled pilot structure might provide meaningful feedback on potential methods to increase the use and effectiveness of Z codes. The pilot could provide resources, including personnel and infrastructure funding and technical assistance, for a select group of diverse health care providers, specifically rural facilities and providers, to examine the burden and utility of Z code usage. Demonstration of the impact of Z coding, even in smaller populations, could provide a more persuadable foundation for larger systemic changes and the foundation for measuring changes in SDoH across rural and underserved populations.
- *Clarify guidance and provide standards for collecting SDoH information:* By expanding use of the Dual Eligible Special Needs Plans Model of Care Health Risk Assessment and adding consistent SDoH data elements to regular patient visits like Medicare wellness visits, CMS can increase data collection of beneficiaries' social needs. Providing comprehensive and standardized methods of data collection would enhance data sharing and evaluation across populations and settings.

- *Facilitate information sharing across payers:* HHS and state Medicaid agencies should facilitate information sharing to support beneficiary enrollment in support programs like Medicare Advantage, Medicaid Managed Care, and Traditional Fee-For-Service Medicare. CMS should support health plan and provider efforts to standardize SDoH data elements and data exchange protocols.

- *Facilitate information sharing across beneficiary programs:* HHS and the Department of Agriculture should facilitate information sharing between agencies to improve beneficiary enrollment in Supplemental Nutrition Assistance Programs and other human services programs that address SDoH, including Temporary Assistance for Needy Families and Women Infants and Children.

- *CMS should promote and support identifying SDoH resource needs of health providers by encouraging and incentivizing the use of Z codes:* Provider uptake could be increased with additional training, guidance on follow-up referrals, and possible financial incentives. A pilot program to identify determinants of use and gaps in understanding and training could enhance the uptake of Z code usage, particularly in rural, underserved health care settings that lack workforce and other resources.

- Incorporate language to provide a safe harbor to protect providers when they identify and document Z codes but are unable to provide services to address those conditions/concerns.

Recommended actions

- Work with FORHP to develop a pilot proposal for rural providers and facilities to implement and investigate barriers and opportunities for Z code implementation.
- Offer a technical assistance grant program to address the SDoH using state affiliate councils.

Conclusion

Support is needed to address potential barriers to increase the use and effectiveness of Z codes by rural providers. HHS should facilitate and address the uptake of Z coding in rural, underserved communities; bolstering essential resources for Z code uptake would require additional personnel, infrastructure, and technical assistance. It is important to support the utilization of Z codes to demonstrate, and ultimately reduce, rural disparities in health status and outcomes.

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[xii] Wash. Rev. Code Ann. § 74.09.880 (Westlaw Edge through 2022)