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POSTER ABSTRACT

SDoH Z-Codes Documentation in Administrative Data of Medicaid Public Health Insurance Program for Low-Income Americans—A State Example

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Background: Although the U.S. Department of Health and Human Services (HHS) mandated the adoption of ICD-10 codes in electronic health records, documentation of ICD-10 Social Determinants of Health (SDoH) Z-codes remains low in healthcare administrative data (1, 2). National efforts have aimed to improve the documentation (1). It is suggested that beneficiaries of Medicaid, a public health insurance program for low-income Americans, are more likely to receive SDoH Z-codes. In July 2021, Hawaii joined a few other states and started requiring Z-Codes documentation through multiple contractual mechanisms such as value-based healthcare (VHC) payment arrangement and SDOH transformation work plans.

This study aimed to describe the documentation of SDoH Z-Codes and examine whether beneficiaries' attribution to a value-based healthcare (VHC) provider is related to increased SDoH Z-Codes documentation among the Medicaid public health insurance program beneficiaries in the State of Hawaii.

Approach: This cross-sectional study analyzed de-identified secondary data for Hawaii Medicaid enrollees, including Hawaii Medicaid administrative claims and encounter data, eligibility and enrollment data, and Health Plan VHC Reports from the managed care organizations. Data from 2015 to 2023 were analyzed to assess overall trends of SDoH Z-codes documentation and distribution of different domains of SDoH Z-Codes, using descriptive statistics. To examine the association between VHC attribution and the likelihood of SDoH Z-code documentation, 2022 data were analyzed using binary logistic regression, adjusting for relevant covariates.

Results: A total of 324,110 claims and encounters associated with SDoH Z-Codes were found from 2015 to 2023. Documentation rates increased steadily over this period, from 4,524 (0.11% of the total number of claims and encounters) in 2015 to 46,090 (0.79%) in 2023. Notable increases occurred between 2015 and 2016 (0.11% to 0.43%) and again from 2019 to 2020 (0.61% to 0.76%).

However, a slight decline in documentation was observed from 2020 to 2022. The most frequently documented code was "Z59 Problems related to housing and economic circumstances",

accounting for 45% (n=146,171) of all SDoH Z-code-related clams and encounters. Multivariable logistic regression revealed that Medicaid beneficiaries attributed to a VHC provider had significantly higher odds of having at least one SDoH Z-codes documented (Odds Ratio = 1.31 [95% CI 1.21-1.43]), controlling covariates including age, sex, race, islands, and English as a second language.

Implications: Despite incremental increases over time, the overall rates of SDoH Z-codes documentation remains low, particularly considering the heightened social risk burden in Medicaid populations. The initial surge in documentation post 2015 may reflect early responses to national policy recommendations such as those from NAM. Interestingly, documentation decreased slightly during the COVID-19 pandemic despite evidence of increasing social need—potentially due to increased delayed healthcare during the pandemic, given SDoH Z-codes were only collected at healthcare settings. The findings suggest that VHC models may facilitate better recognition and documentation of social needs. Future research should explore how SDoH Z-codes documentation can be better incorporated in VHC models.