

BACKGROUND

Z codes are a set of ICD-10-CM codes used to report social, economic, and environmental determinants (SDoH) known to affect health outcomes and quality of life.¹ SDoH are the conditions in the environments where people are born, live, learn, work, play, worship and age.²

Z codes can be used in any health care setting and by any provider and can improve the quality, coordination, and experience of care. Unfortunately, their use has not been widely adopted by the medical community³ and little is known about their use with the pediatric population.

Z codes Z55-Z73 are organized using the following SDoH domains:

- Education and literacy
- Employment and unemployment
- Occupational exposure to risk factors
- Physical environment
- Housing and economic circumstances
- Social environment
- Lifestyle
- Life management
- Upbringing
- Primary support group, including family circumstances
- Certain psychosocial circumstances
- Other psychosocial circumstances
- Counseling

OBJECTIVES

- Document use of Z codes (Z55-Z73) using a hospital-based, service level, all-payer, administrative database among pediatric patients with a hospital discharge between Jan 1, 2016 and Dec 31, 2021.
- Document most commonly used Z codes within and across SDoH domains.

METHODS

- Descriptive analysis, retrospective
- Pediatric patients (<18 years) discharged from 1,023 U.S. hospitals with an inpatient or outpatient visit between January 2016 and December 2021
- Data source: HIPAA compliant, statistically de-identified PINC AITM Healthcare Database (PHD)

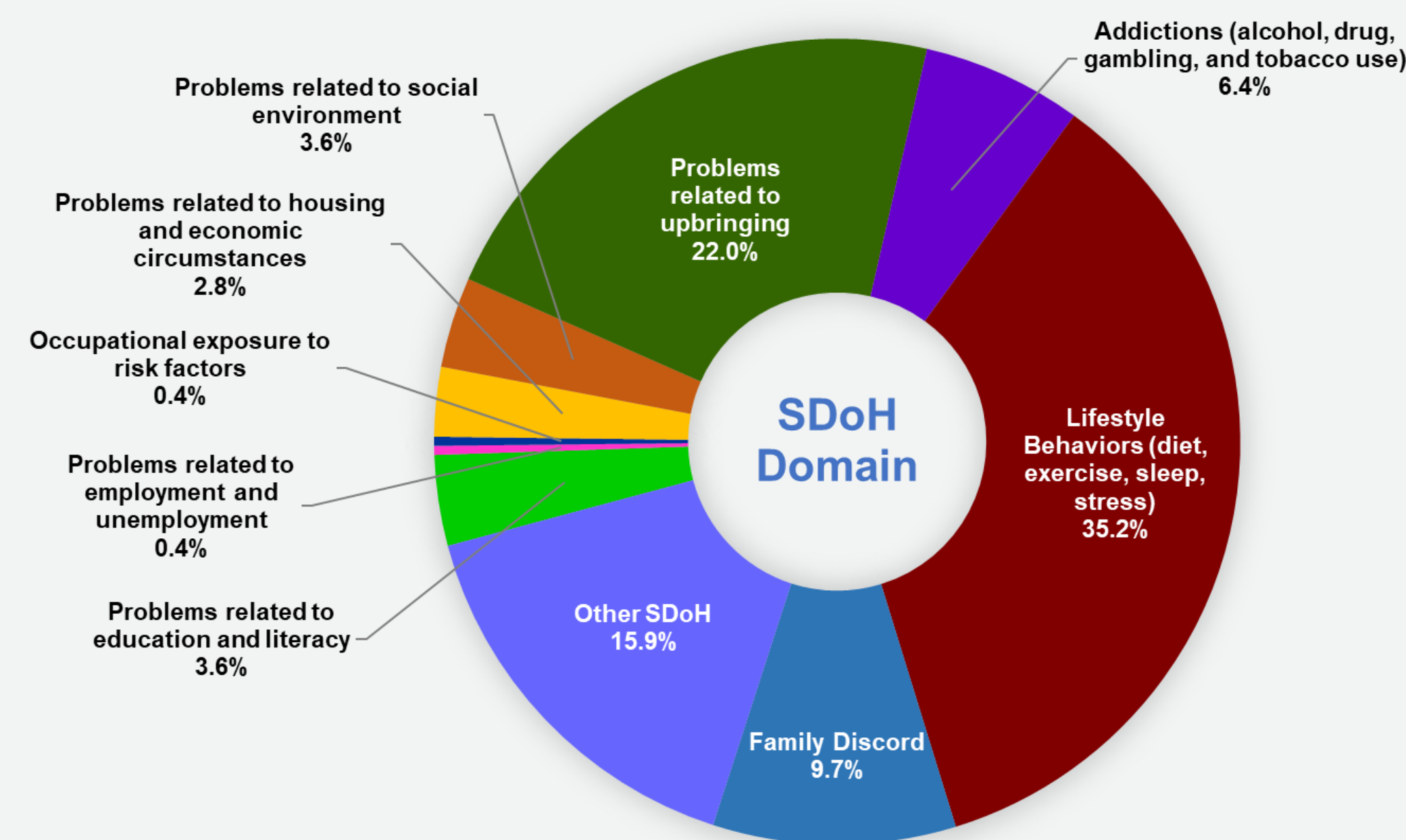
RESULTS



Where you live matters!

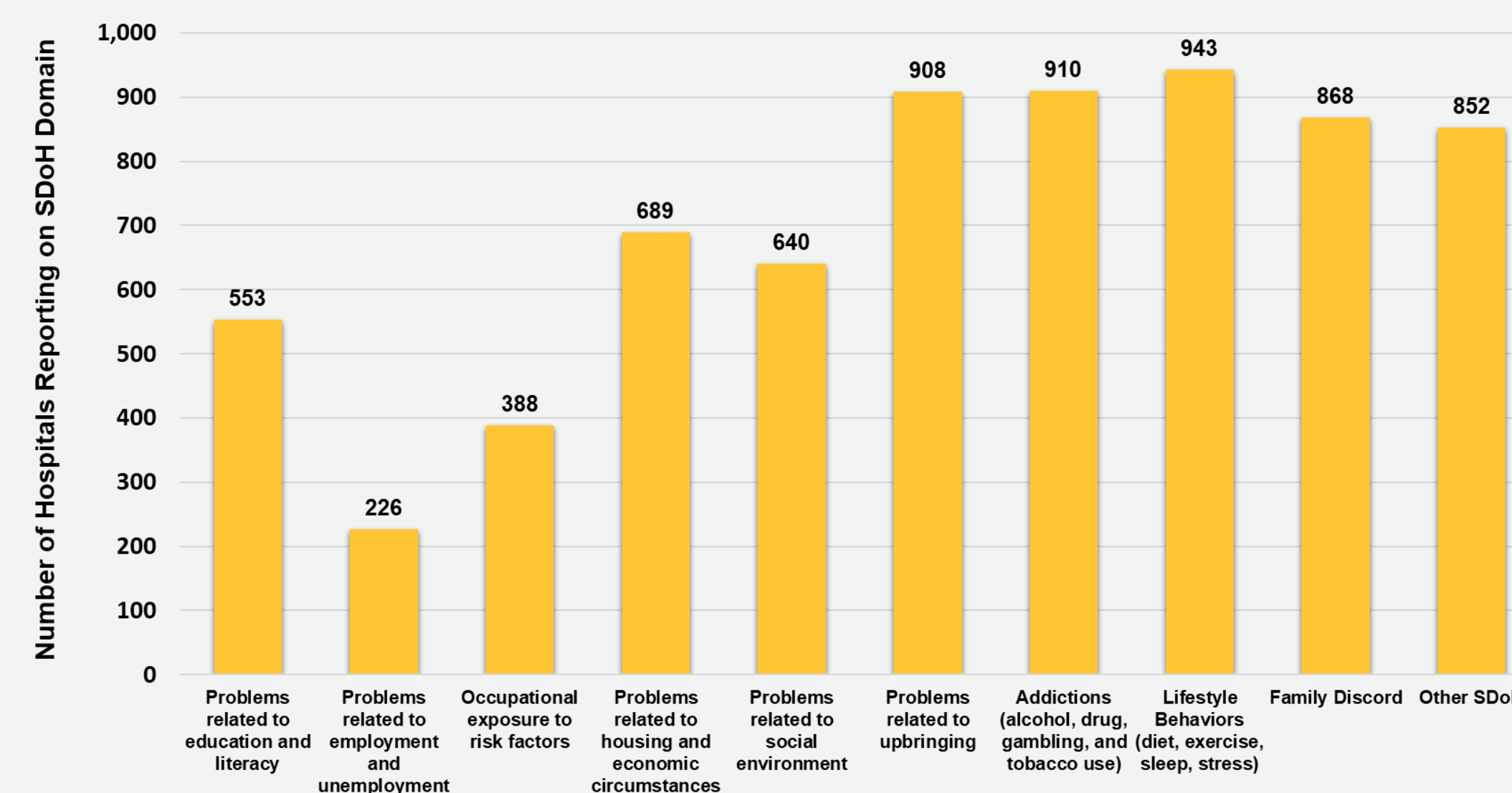


Distribution of Patients <18 Years of Age with Evidence of a Z Code by SDoH Domain
PINC AITM Database, 2016-2021
N = 360,706 patients



- Only 1.4%** ($n=360,706$) of pediatric patients had evidence of any Z code across 24,949,488 patients.
- Patients with evidence of Z codes were significantly more likely than the general population (all χ^2 p values $<.0001$) to be female (55% vs 49%), between the ages of 12-17 (52% vs 28%), African American (21% vs 16%), and to be covered by Medicaid (65% vs 50%).

Distribution of Premier Member Hospitals Reporting Z Codes for Children by SDoH Domain
PINC AITM Database, 2016-2021
N = 1,023 hospitals



- No differences by hospital characteristics were found (total beds, teaching status, urban vs. rural setting, geographic region of U.S.).
- The top three Z codes reported were dietary counseling and surveillance ($n=110,542$), other problems related to lifestyle ($n=56,672$), and other specific counseling ($n=48,441$).

CONCLUSIONS

- Because socioeconomic factors, physical environment, and health behaviors drive 80% of health outcomes,⁴ it is important to continue to encourage adoption of Z codes by clinicians across healthcare settings.
- Understanding underutilization of Z codes can serve as points of intervention for increasing their use during patient encounters to improve care delivery and health outcomes.

TAKEAWAYS

Z codes continue to be **underutilized** by the medical community, although their use can help **improve the quality, coordination, and experience of patient care.**

Because **socioeconomic factors, physical environment, and health behaviors drive 80% of health outcomes**, it is important to continue to **encourage adoption of Z code use by clinicians** across healthcare settings.

NEXT STEPS

- Explore use of Z codes among populations with chronic conditions and their impact on clinical and cost outcomes.
- Integrate Z codes with other SDoH data sources (e.g., AHRQ's set of SDoH indicators) to better understand the impact of non-medical factors on health care resource utilization.

REFERENCES

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