Assessing Barriers and Solutions to Identifying and Reporting Social Determinants of Health Z-codes to a Health Maintenance Organization Nadia Aldahiri¹, PharmD Candidate, Mark J. Wrobel², PharmD, Joshua Sawyer², PharmD, Kevin Lynch³, PharmD, MBA, MS, BCPS, Nicole Abolins³, PharmD, BCPS ¹Belmont University College of Pharmacy, Nashville, TN; ²Independent Health Association, Inc., Buffalo, NY; ³Pfizer, Inc., New York, NY

Background

- Social determinants of health (SDoH) are "conditions in the environments" • 16 practices responded to the survey. where people are born, live, learn, work, play, worship, and age." SDoH • This included office manager/medical coders/other office staff may factor into as much as 90% of a patient's health outcomes. members (7/16), physicians (6/16), and nurses (3/16).
- Healthcare stakeholders (i.e., practitioners, healthcare and medical professional organizations, health maintenance organizations [HMO], and the Centers for Medicare and Medicaid Services, etc.) are interested in addressing SDoH to potentially decrease cost of care and improve health outcomes.
- SDoH can be captured with specific ICD-CM-10 diagnosis codes nicknamed "Z-codes."
- Despite efforts to encourage providers and practices to document and report Z-codes to HMOs, undercoding remains a problem due to systemic and practice-based barriers.

Objective

- To identify barriers providers and practices have faced related to documenting, reporting, and coding SDoH Z-codes.
- To identify solutions implemented to improve documenting, reporting, and coding SDoH Z-codes.

Methods

- A cross-sectional descriptive study was conducted using an 11-question online survey.
- The survey included demographic questions and questions about Z-code collection tools along with four main select-all-that-apply questions structured to address the study's objectives:
 - Barriers experienced when assessing/collecting SDoH information,
 - 2. Solutions to those barriers,
 - Barriers in reporting and coding SDoH information, and
 - 4. Solutions to those barriers.



- Each of the four main questions contained an option for "other" along with a free-text response.
- Practices with a history of high volume SDoH Z-code reporting to a regional 300,000-life HMO were asked to complete the survey. Practices were identified using the 3M Health Information Systems (Wallingford, CT) database.
- Microsoft Excel was used to analyze data.

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• Some practices had both physicians and a second group respond to the survey. Responses varied between participants within the same practice.

• The most common tools used to assess patients' SDoH were screening tools developed by EMR vendors, questionnaires developed by the practice, and HRA facilitated by a patient's health plan (including PRAPARE and HRSN screening tools).

• Most Z-codes used were related to housing issues, food insecurity, economic insecurity, and social problems such as life changes and relationship issues.

Code	Defined as problems with/related to	Count
Z59	housing and economic circumstances	9/16
Z60	social environment/life-cycle transitions	5/16
Z63	primary support group, including family circumstances	5/16
Z57	occupational exposure to risk factors	4/16
Z55	education and literacy	3/16
Z56	employment and unemployment	3/16
Z75	medical facilities and other health care	3/16
Z62	upbringing	1/16
Z64	psychosocial circumstances (mainly pregnancy)	1/16
Z65	psychosocial circumstances (mainly crime/violence)	1/16

Most Common Z-Codes Used by Responders

• The main reasons why Z-codes could not be assessed or documented were time constraints and patient preference not to answer. Only 3/16 respondents reported no barriers to overcome. Just 1 respondent out of 16 reported initiating education programs to educate patients on the importance of collecting SDoH.

• The main reasons why Z-codes could not be reported or coded related to software and capability to record and transmit Z-codes. Difficulties interpreting and translating documentation into Z-codes were also common. Just 2/16 respondents reported no barriers to overcome.

PATIENTS PREFERRED NOT TO ANSWER TIME CONSTRAINTS LACK OF REIMBURSEMENT INSUFFICIENT KNOWLEDGE TO ASSIST PATIENTS LIMITED AWARENESS OF Z-CODES LACK OF ASSESSMENT TOOLS

TRYING DIFFERENT ASSESSMENT TOOLS INCREASING OFFICE VISIT TIME

CONTINUOUSLY TRAINING AND HIRING STAFF IMPLEMENTING PRE-VISIT SDOH ASSESSMENT

Z-CODE DESCRIPTION TOO VAGUE

LACK OF SUFFICIENT SPACE TO CAPTURE Z-CODES PROBLEMS TRANSLATING DUE TO OUTDATED EMR DIFFICULTY IN CODING/DOCUMENTING IN OFFICE LACK OF FAMILIARITY WITH IMPORTANT Z-CODES DIFFICULTY TRANSLATING FREE TEXT INTO Z-CODE

Results

Barriers to assessing and documenting SDoH Z-codes



Methods used to overcome assessment/documentation barriers



Barriers to reporting and coding SDoH Z-codes



Methods used to overcome reporting/coding barriers

IMPROVING EDUCATION ON Z-CODING UPDATING EMR TO INCLUDE A LIST OF Z-CODES PROVIDING A LIST OF Z-CODES WITH EXAMPLES CREATING FORMS WITH DEDICATED Z-CODE SPACE CREATING A LIST OF COMMON Z-CODES



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internship.

• Staff hiring and training was the most common method cited by respondents used to overcome barriers to documenting and coding SDoH. • While time constraints were a common barrier to assessment, increasing office visits and handing out SDoH questionnaires prior to the office visit were not used as often as expected.

• Though most barriers to coding were related to problems with the EMR, few solutions involved additions, alterations, or updates to the EMR.

Limitations

• Few practices completed the survey.

• Practices surveyed may not have captured all geographic locations in the target area; a wider array of practice sites may report barriers and solutions other than the ones listed and cover neighborhoods not reflected in survey results.

• Time constraints and internal concerns within the HMO impacted survey development, distribution, participation, and collection.

Conclusions

• Staff education was the main strategy in attempts to improve SDoH coding. • EMR updates and dedicated space on medical forms may help overcome many of the barriers in SDoH reporting/coding.

• Patient education programs seem to be underused; education on the importance of SDoH might help providers to assess and capture Z-codes and help patients mitigate SDoH.

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