

Reporting Social Determinants of Health

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Capturing socioeconomic data, also referred to as social determinants of health (SDOH), is rapidly becoming a necessary element of documentation. SDOH “are among the most influential factors that determine health outcomes of individuals,” according to the National Quality Forum.¹ The move toward pay-for-performance in the United States has led more healthcare providers to use and report SDOH,² including accountable care organizations (ACOs) that rely on providers to help identify patients at risk due to SDOH.³ As capturing this data becomes a necessary part of encounter documentation, clinicians and allied health staff can turn to the ICD-10-CM code set for help.

Before considering the following three sample determinants, consider who can report them. Historically, coding professionals have relied upon the patient’s provider to explicitly identify circumstances reported with an ICD-10-CM code.

There are exceptions in the guidelines, however, including pressure ulcer stage, body mass index (BMI), and coma and stroke scales. For 2019, Guideline I.B.1⁴ has been amended to allow coding professionals to report SDOH using the documentation of clinicians other than the patient’s provider. When using documentation provided by non-physician clinicians, SDOH codes may be assigned. With that in mind, consider the following three determinants.

Determinant One: Low Income

Low income has been identified as a key social determinant of health.⁴ While the effect of income on health has been the subject of debate and study, research appears to uphold the link between low income and health.⁵

ICD-10-CM coding options include:

- Z59.5 extreme poverty
- Z59.6 low income

There are no *Coding Clinic* references for these codes or their ICD-9-CM predecessor, V60.2. The federal government’s definition of poverty may provide guidance. Poverty-level income, according to this definition, is as follows:⁶

- \$12,140 for individuals
- \$16,460 for a family of two
- \$20,780 for a family of three
- \$25,100 for a family of four
- \$29,420 for a family of five
- \$33,740 for a family of six
- \$38,060 for a family of seven
- \$42,380 for a family of eight

Of course, poverty is not synonymous with low income. Low income has been defined as less than 200 percent of the poverty value. The poverty values above can be extrapolated for Low Income as follows:

- < \$24,280 for individuals
- < \$32,920 for a family of two
- < \$41,560 for a family of three
- < \$50,200 for a family of four
- < \$58,840 for a family of five
- < \$67,480 for a family of six
- < \$76,120 for a family of seven
- < \$84,760 for a family of eight

Values at the low end may be helpful, but noting the US median household income of \$61,372, values at the upper end may be less useful. Nonetheless, this table may be helpful in setting a definition for the “low income” relevant to Z59.6.

The US Census Bureau defines “deep poverty” as living in a household with a total cash income below 50 percent of its poverty threshold. Substituting “deep poverty” for “extreme poverty” and applying the “deep poverty” definition to the poverty level table yields the following numbers for deep poverty/extreme poverty income:

- < \$6,070 for individuals
- < \$8,230 for a family of two
- < \$10,390 for a family of three
- < \$12,550 for a family of four
- < \$14,710 for a family of five
- < \$16,870 for a family of six
- < \$19,030 for a family of seven
- < \$21,190 for a family of eight

These values, the highest of which barely surpasses one-third of median household income, seem to reflect dire economic circumstances. Having established some parameters for low income and extreme poverty, the next challenge would be verifying the same.

Collecting tax return data would impose a number of burdens upon providers and allied health staff before consideration of what is arguably the financial equivalent of HIPAA—1999’s Gramm-Leach-Bliley Act. At the provider level, collecting and retaining objective data may be unworkable. If the provider is part of a health system, some data may be available at the system level—for example, if the patient is in the system’s Health Care Assistance Program. Absent the same, and given a likely unwieldy circumstance of gathering and retaining income data at the provider level, using subjective data provided by the patient may be necessary.

Subjective measures can gauge objective states.⁷ Using subjective data to assess income is not inconsistent with techniques used by the Census Bureau. In the absence of a system mechanism to capture and score objective financial data, providers and practices should consider a set of subjective screening questions to identify circumstances that reflect Z59.5 or Z59.6. Consider permutations of questions for patients about their level of difficulty in completing tasks related to their healthcare, such as filling a prescription, taking into account the subjective data elements used by the Census Bureau.⁸ There should be practice- or system-wide consensus in the assignment of codes based upon this subjective questioning.

Determinant Two: Food Insecurity

The concept of “food security”—and its opposite “food insecurity”—dates back to the Life Sciences Research Office (LSRO) of the Federation of American Societies for Experimental Biology report based on the ad hoc panel convened in 1989 for the American Institute of Nutrition, subsequently published in the Journal of Nutrition.

Studies appear to link food insecurity to a number of health problems among the general population as well as increased assistance with activities of daily living (ADLs) for seniors.

ICD-10-CM coding options include Z59.4, lack of adequate food and safe drinking water.

Again, there are no *Coding Clinic* references for this code, but organizations such as Hunger Vital Sign point to this code as appropriate for reporting food insecurity.⁹

There are question sets that can be employed to gather subjective data, the result of which may trigger reporting Z59.4. The USDA has a short questionnaire that has been found to be an effective measure of food security. The form is available at <https://www.ers.usda.gov/media/8282/short2012.pdf>.

The questionnaire includes a simple raw score template based upon affirmative responses. Results fall into one of three categories: high or marginal food security, low food security, or very low food security.

Reasonably, code Z59.4 is reportable with this measure of low or very low food security. The USDA subjective questionnaire gives providers and staff a tool to assess food insecurity. As previously mentioned, the code description does not explicitly mention food insecurity but Hunger Vital Sign does point to this code for reporting food insecurity. There should be practice- and system-wide consensus to assigning code Z59.4 based upon a standard questionnaire.

Determinant Three: Housing Instability

Studies have established a link between housing instability and decreased health outcomes. According to the National Quality Forum, "Individuals who are housing unstable have also been found to be more likely to visit an emergency room, have longer hospital stays ... and have higher likelihoods of readmission."¹⁰ Housing instability is an important social determinant of health.

ICD-10-CM coding options include:

- Z59.0, Homeless
- Z59.1, Inadequate housing

ICD-10-CM synonyms for Z59.1 include "lack of heating," "restriction of space," and "technical defects in home preventing adequate care." There are no *Coding Clinic* references for these codes or their ICD-9-CM predecessors, V60.0 and V60.1. The Centers for Disease Control and Prevention has set forth a definition for inadequate housing, available at <https://www.cdc.gov/mmwr/pdf/other/su6001.pdf>. According to this definition, "Inadequate housing is defined as an occupied housing unit that has moderate or severe physical problems—deficiencies in plumbing, heating, electricity, hallways, and upkeep."

The *American Housing Survey* defines "severely inadequate" based on an affirmative response to any of the following:¹¹

1. Unit does not have hot and cold running water.
2. Unit does not have a bathtub or shower.
3. Unit does not have a flush toilet.
4. Unit shares plumbing facilities.
5. Unit was cold for twenty-four hours or more, and more than two breakdowns of the heating equipment have occurred that lasted longer than six hours.
6. Electricity is not used.

7. Unit has exposed wiring, not every room has working electrical plugs, and the fuses have blown more than twice.
8. Unit has five or six of the following structural conditions:
 - a. Unit has had outside water leaks in the past twelve months.
 - b. Unit has had inside water leaks in the past twelve months.
 - c. Unit has holes in the floor.
 - d. Unit has open cracks wider than a dime.
 - e. Unit has an area of peeling paint larger than eight by eleven inches.
 - f. Rats have been seen recently in the unit.

Consider developing a facility questionnaire to accurately report Z59.1.

While circumstances that would point to reporting the Z59.0 code might initially appear more straightforward, that may not be the case. Homelessness is a sensitive issue that's often denied because of shame and stigma. Asking patients if they are homeless may not yield a straightforward response. When individuals do not have a home address, they sometimes may provide the address of a local church, shelter, friend, or relative.¹²

Again, consensus on subjective data can provide the documentation that warrants reporting codes Z59.0 or Z59.1.

SDOH: The Way of the Future

The continued evolution of healthcare reimbursement, including pay-for-performance and emphasis on disease management, makes SDOH increasingly important. If objective income, food, and housing data are gathered and verified at the system level, providers and coding professionals can use that data to report SDOH-related ICD-10-CM codes. Systems may rely upon providers to help identify SDOH-related at-risk patients and obtaining and retaining objective data at that level may be problematic. In the absence of objective data, subjective data gathered through the use of standardized patient questionnaires, coupled with practice or system-wide consensus on scoring, can provide the documentation necessary to report SDOH-related ICD-10-CM codes.

Notes

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