Coding and Reporting Social Determinants of Health (SDOH)

Introduction

ICD-10 CM codes Z55-Z65 describe "Persons with potential health hazards related to socioeconomic and psychosocial circumstances, which are linked to Social Determinants of Health (SDOH)". Social Determinants of Health may have a significant impact on a patient's overall health and outcomes. Examples of SDOH may include:

- Safe housing, transportation, and neighborhoods

- Access to nutritious foods and physical activity opportunities

- Polluted air and water

- Racism, discrimination, and violence

- Education, job opportunities, and income

- Language and literacy skills

Reporting Z codes and identifying patients with social determinants of health "can help improve quality, care coordination, and experience of care." (USING Z CODES: The Social Determinants of Health (SDOH) Data Journey to Better Outcomes).

Data Collection and Utilization

Data Collection Challenges

Data collection on SDOH using various screening tools is common in different settings. However, the information is not always connected to standardized data due to a lack of uniformity regarding technical specifications. Other challenges include:

- Lack of a standardized EHR-based screening tool.
- A simultaneous lack of and multiplicity of codes.
- Lack of awareness among providers and medical coders.

Potential solutions to the challenges are filling gaps in codes when appropriate, reducing reliance on clinicians to capture SDOH, and improving clinician and medical coder education.

Utilization

A study conducted by the Centers for Medicare and Medicaid Services using 2019 data found that only 1.59% of Medicare beneficiary claims contained Z codes Z55-Z65 *"Persons with potential health hazards related to socioeconomic and psychosocial circumstances (Z55-Z65)."* Low utilization is likely due to the following:

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- Lack of awareness regarding the codes.
- Difficulty in determining when and how to report the codes.
- Lack of internal processes to incorporate Z codes into the workflow.
- Confusion as to who can (or should) document SDOH.
- Lack of explicit financial incentives for their use.

CMS Data Highlight
No. 24 September 2021
Utilization of Z Codes for Social Determinants of Health among Medicare Fee-for-Service Beneficiaries, 2019

Connecting Z Codes with Social Determinants of Health Data

To effectively utilize the Z codes and inform practice initiatives, it will be crucial to have a process in place to connect the Z codes to SDOH data. The CMS resource "Using Z Codes: The Social Determinants of Health (SDOH) Data Journey to Better Outcomes" outlines a five-step data collection process:

1. **Collect SDOH data-** Any member of a patient's care team can collect SDOH data via health risk assessments, screening tools, person-provider interaction, and self-reporting.

2. **Document SDOH data-** Record data in a patient's paper or electronic health record.

3. **Map SDOH data to Z codes-** Appropriate codes should be assigned based on the data in the patient's health record. Z codes and guidelines can be found in the ICD-10 CM codebook.

4. **Use SDOH Z code data**- Analyze the data to identify risk factors and needs to improve quality, care coordination, and care experience.

5. **Report SDOH Z code data findings-** Data may be added to key reports and shared with social service organizations, providers, health plans to identify unmet needs of a population. A "Disparities Impact Statement" may be used to identify opportunities for advancing health equity with the aim of:
   - **Identifying** health disparities, priority populations, and needs.
   - **Defining** goals and targets.
   - **Establishing** a health equity strategy.
   - **Monitoring** and evaluating progress.

Addressing these codes is not a linear process. Instead, the process is an ongoing, circular flow of information from patient to provider to organizations and individuals tasked with meeting the needs of a growing population and back to provider. Processes will require periodic evaluation to ensure the needs of the patient continue to be met.

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Coding and Reporting Guidance

ICD-10 CM Z Codes

If a patient is identified as having SDOH, the information needs to be connected to a Z code. The Z codes in "Persons with potential health hazards related to socioeconomic and psychosocial circumstances" (Z55-Z65) describe the following:

- Z55- Problems related to education and literacy

- Z56- Problems related to employment and unemployment

- Z57- Occupational exposure to risk factors

- Z58- Problems related to physical environment

- Z59- Problems related to housing and economic circumstances

- Z60- Problems related to social environment

- Z62- Problems related to upbringing

- Z63- Other problems related to primary support group, including family circumstances

- Z64- Problems related to certain psychosocial circumstances

- Z65- Problems related to other psychosocial circumstances

Under each heading are subcodes to further describe the patient's SDOH, therefore it is important to code to the highest level of specificity.

Code Identification and Selection

Example: A 50-year-old woman with breast cancer is currently receiving chemotherapy and experiencing serious side effects. The patient is also caring for her 80-year-old father with dementia, who lives with her. The patient is experiencing a significant amount of stress regarding her father's care while undergoing treatment.

1. Since the patient indicated the source of her stress is related to the care of her father, see "problems" in the index of the ICD-10/CM which lists "care of sick or handicapped person in family or household (Z63.6).
2. Go to chapter 21 in the ICD-10 CM manual- "Factors influencing health status and contact with health services (Z00-Z99)."
3. The codes related to SDOH can be found in "Persons with potential health hazards related to socioeconomic and psychosocial circumstances" (Z55-Z65).
4. Under Z63, it is verified that in this circumstance the most specific code that is appropriate would be "**Z63.6 Dependent relative needing care at home.**"

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Reporting Guidelines

- Z55-Z65 identify issues related to a patient's socioeconomic situation and are not procedural in nature. Therefore, they must always be accompanied by a procedure or service code like CPT®, HCPCS, ICD-10 CM.
- The codes should only be reported as secondary diagnoses.
- As noted earlier, physicians are not the only ones who can document and report SDOH data. This can also be performed by a case manager, social worker, discharge planner, clinical staff, or by the patient themselves.
- Code assignment may be based on medical record documentation from other clinicians involved in the patient's care who are not the patient's provider.

Connecting SDOH to Z Codes

Assigning the appropriate Z code to the patient's SDOH can be challenging. A screening tool that corresponds to "Persons with potential health hazards related to socioeconomic and psychosocial circumstances" will make the process easier. However, it should be noted some of the Z codes are ambiguous, not a one-to-one match, or may not exist for a particular SDOH.

Steps for Code Selection

1. The patient indicates in the screening tool they are experiencing significant stress regarding medical expenses (they do not currently have insurance) and covering rent. They are also currently unemployed.

2. In the index of the ICD-10/CM manual, you would look up "problems" and find "finance" (Z59.9), "housing" (Z59.9), and "employment – unemployed" (Z56.0) which closely match the SDOH factors identified in the screening tool.

3. Go to chapter 21 in the ICD-10 CM manual and then "Persons with potential health hazards related to socioeconomic and psychosocial circumstances" (Z55-Z65).

4. Under the headings Z59- "Problems related to housing and economic circumstances" and Z56- "Problems related to employment and unemployment" select the codes with the highest specificity that most closely describe the patient's indicated SDOH.

Social Determinants of Health	ICD-10 CM Z Codes
Healthcare coverage- no insurance	Z59.7 Insufficient social insurance and welfare support
Housing- behind on rent, threat of eviction	Z59.81 Housing instability, housed
Work- unemployed	Z56.0 Unemployment, unspecified

> 💡 **Reminder!**
>
> - Code to the highest level of specificity
> - Include other relevant diagnoses in the claim and medical record
> - Z codes must be accompanied by a procedure or service code (CPT®, HCPCS, ICD-10 PCS)

Connecting Z Codes and CPT® Codes

There are certain CPT codes that may be used to account for the work of addressing patient SDOH such as evaluation and management services, chronic and principal care management services, and transitional care management services.

Office and Outpatient Evaluation and Management (E/M) Services

Office and outpatient E/M services account for the work of evaluating, assessing, and managing a new or established patient. As of 2021, the codes are selected either based on time or MDM (Medical Decision Making).

In the new MDM, it is specifically noted that SDOH can have a significant impact to diagnosis or treatment which may present a moderate risk of morbidity from additional diagnostic testing or treatment. To support the level of MDM for a patient with SDOH, it will be important to include the appropriate Z code in addition to any other relevant diagnosis codes.

The other factor for selection is based on time. The definition of time now includes both face to face *and* non-face to face activities such as referring and communicating with other health care providers and care coordination, which could potentially be related to SDOH.

Prolonged E/M services may be reported to account for additional work and time involved with patient care when required criteria is met.

Care Management Services

Care management services include chronic care, complex chronic care, and principal care management services. These services describe the management and support for patients with a single high-risk condition or multiple conditions. Care management services are encouraged for use to address SDOH, as it may be considered part of the care plan, coordination of care, and communication with home and community based clinical service providers.

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Transitional Care Management Services

Transitional Care Management services describe the work of managing patients who are being transitioned or discharged from a hospital/facility to a home or community setting. This is often a time when patients are most vulnerable and need the most care, especially when SDOH are involved. The Z code will indicate if the patient needs special attention to psychosocial needs and activities of daily living. Like the other care management services, this may involve coordination of care with community service agencies, follow ups, and referrals.

CPT® Code Comparison

Evaluation and Management Services	Care Management Services	Transitional Care Management Services
- May be reported based on time or medical decision making. **Date of service** activities only. - Time includes **face to face and non face to face activities**.	**Time based** CPT codes. - Accounts for time over a **calendar month** (not date of service). - Time includes **face to face and non face to face activities**. - May only be reported by **one provider per beneficiary** per calendar month (exception may be made for PCM services).	**Time based** CPT codes. - Accounts for time over **29 days**. - Time includes **face to face and non face to face activities**. - May only be reported by **one provider per beneficiary**.

Example: *Patient indicates to the nurse that they are experiencing issues in their relationship with their spouse. Since their last clinic visit, the patient and the spouse have become temporarily estranged. The patient is having trouble caring for themself because their spouse was also their caregiver. The physician spends 30 minutes evaluating the patient's current health status and coordinating care once it was determined that the patient could benefit from home health visits.*

Z63.5 Disruption of family by separation or divorce would be appropriate to report in this situation, as the description in Chapter 21 includes marital estrangement. You could also include Z63.8 Other specified problems to primary support group, as the patient has inadequate family support.

The codes would be reported in addition to any applicable primary clinical ICD-10 CM codes to be reported with the 99214 Evaluation and Management of established patient assigned as based on the documented total time spent evaluating the patient and coordination of care.

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Resources

American Society of Clinical Oncology

[Health Equity](#)

ASCO has developed a wide range of resources to help its members and the larger cancer community better understand and address health equity issues in cancer research and care.

Centers for Medicare and Medicaid Services

[Equity Initiatives](#)

The CMS Office of Minority Health has designed several initiatives to eliminate disparities in health care quality and access, so that all CMS beneficiaries can achieve their highest level of health.

[Utilization of Z Codes for Social Determinants of Health among Medicare Fee-for-Service Beneficiaries, 2019](#)
 Provides an update to the past-published data highlight focused on Z code claims for Medicare fee-for-service (FFS) beneficiaries in 2017 (Mathew, Hodge, & Khau, 2020)

[CMS Disparities Impact Statement](#)

All health care stakeholders can use this tool to achieve health equity for racial and ethnic minorities, people with disabilities, sexual and gender minorities, individuals with limited English proficiency, and rural populations.

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Appendix

Chapter 21- Factors Influencing Health Status and Contact with Health Services

Persons with potential health hazards related to socioeconomic and psychosocial circumstances (Z55-Z65)

Source: 2022 ICD-10 CM

Heading	Sub-headings
Z55- Problems related to education and literacy	Z55.0 Illiteracy and low-level literacy Z55.1 Schooling unavailable and unattainable Z55.2 Failed school examinations Z55.3 Underachievement in school Z55.4 Educational maladjustment and discord with teachers and classmates Z55.5 Less than a high school diploma Z55.8 Other problems related to education and literacy
Z56- Problems related to employment and unemployment	Z56.0 Unemployment, unspecified Z56.1 Change of job Z56.2 Threat of job loss Z56.3 Stressful work schedule Z56.4 Discord with boss and workmates Z56.5 Uncongenial work environment Z56.6 Other physical and mental strain related to work Z56.8 Other problems related to employment Z56.81 Sexual harassment on the job Z56.82 Military deployment status Z56.89 Other problems related to employment Z56.9 Unspecified problems related to employment
Z57- Occupational exposure to risk factors	Z57.0 Occupational exposure to noise Z57.1 Occupational exposure to radiation Z57.2 Occupational exposure to dust Z57.3 Occupational exposure to other air contaminants Z57.31 Occupational exposure to environmental tobacco smoke Z57.39 Occupational exposure to other air contaminants Z57.4 Occupational exposure to toxic agents in agriculture Occupational exposure to solids, liquids, gases, or vapors in agriculture Z57.5 Occupational exposure to toxic agents in other industries Z57.6 Occupational exposure to extreme temperature Z57.7 Occupational exposure to vibration Z57.8 Occupational exposure to other risk factors Z57.9 Occupational exposure to unspecified risk factor
Z58- Problems related to physical environment	Z58.6 Inadequate drinking-water supply
Z59- Problems related to housing and economic circumstances	Z59.0 Homelessness Z59.00 Homelessness unspecified Z59.01 Sheltered homelessness Z59.02 Unsheltered homelessness Z59.1 Inadequate housing Lack of heating Restriction of space Z59.2 Discord with neighbors, lodgers, and landlord Z59.3 Problems related to living in residential institution Z59.4 Lack of adequate food

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Heading	Sub-headings
	Z59.41 Food insecurity
	Z59.48 Other specified lack of adequate food
	Z59.5 Extreme poverty
	Z59.6 Low income
	Z59.7 Insufficient social insurance and welfare support
	Z59.8 Other problems related to housing and economic circumstances
	Z59.81 Housing instability, housed
	Z59.811 Housing instability, housed, with risk of homelessness
	Z59.812 Housing instability, housed, homelessness in past 12 months
	Z59.819 Housing instability, housed unspecified
	Z59.89 Other problems related to housing and economic circumstances
	Z59.9 Problem related to housing and economic circumstances, unspecified
Z60- Problems related to social environment	Z60.0 Problems of adjustment to life-cycle transitions
	Z60.2 Problems related to living alone
	Z60.3 Acculturation difficulty
	Z60.4 Social exclusion and rejection
	Z60.5 Target of (perceived) adverse discrimination and persecution
	Z60.8 Other problems related to social environment
	Z60.9 Problem related to social environment, unspecified
Z62- Problems related to upbringing	Z62.0 Inadequate parental supervision and control
	Z62.1 Parental overprotection
	Z62.2 Upbringing away from parents
	Z62.21 Child in welfare custody
	Z62.22 Institutional upbringing
	Z62.29 Other upbringing away from parents
	Z62.3 Hostility towards and scapegoating of child
	Z62.6 Inappropriate (excessive) parental pressure
	Z62.8 Other specified problems related to upbringing
	Z62.81 Personal history of abuse in childhood
	Z62.810 Personal history of physical and sexual abuse in childhood
	Z62.811 Personal history of psychological abuse in childhood
	Z62.812 Personal history of neglect in childhood
	Z62.813 Personal history of forced labor or sexual exploitation in childhood
	Z62.819 Personal history of unspecified abuse in childhood
	Z62.82 Parent-child conflict
	Z62.820 Parent-biological child conflict
	Z62.89 Other specified problems related to upbringing
	Z62.890 Parent-child estrangement NEC
	Z62.891 Sibling rivalry
	Z62.898 Other specified problems related to upbringing
	Z62.9 Problem related to upbringing, unspecified
Z63- Other problems related to primary support group, including family circumstances	Z63.0 Problems in relationship with spouse or partner
	Z63.1 Problems in relationship with in-laws
	Z63.3 Absence of family member
	Z63.31 Absence of family member due to military deployment
	Z63.32 Other absence of family member
	Z63.4 Disappearance and death of family member Assumed death of family member Bereavement

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Heading	Sub-headings
	Z63.5 Disruption of family by separation and divorce
	Z63.6 Dependent relative needing care at home
	Z63.7 Other stressful life events affecting family and household
	Z63.71 Stress on family due to return of family member from military deployment
	Z63.72 Alcoholism and drug addiction in family
	Z63.79 Other stressful life events affecting family and household
	Z63.8 Other specified problems related to primary support group
	Z63.9 Problem related to primary support group, unspecified Relationship disorder NOS
Z64- Problems related to certain psychosocial circumstances	Z64.0 Problems related to unwanted pregnancy
	Z64.1 Problems related to multiparity
	Z64.4 Discord with counselors
Z65- Problems related to other psychosocial circumstances	Z65.0 Conviction in civil and criminal proceedings without imprisonment
	Z65.1 Imprisonment and other incarceration
	Z65.2 Problems related to release from prison
	Z65.3 Problems related to other legal circumstances
	Z65.4 Victim of crime and terrorism
	Z65.5 Exposure to disaster, war, and other hostilities
	Z65.8 Other specified problems related to psychosocial circumstances
	Z65.9 Problem related to unspecified psychosocial circumstances

For full ICD-10 CM descriptions and guidelines, please refer to the 2022 ICD-10 CM coding manual.