

Social Determinant of Health (SDH) ICD-10 Z Codes

As healthcare moves toward payment for outcomes rather than volume, health centers will increasingly have business and impact-related rationale for collecting and acting on social determinants of health (SDH). Standardized medical vocabulary like ICD-10 z-codes or LOINC could offer a way to aggregate and analyze SDH data across health centers, providers, and payers. This tool outlines existing ICD-10 z-codes that are a close match to social needs responses identified through use of the [PRAPARE tool](#). Linking standardized and commonly used medical codes to social domains, will allow health centers to use such structured data for improved treatment plan development, community resource connecting, and to build the beginning of a robust SDH dataset across health center populations for policy and evaluation.

Please note that not all PRAPARE questions have relevant z-codes. For example refugee status, Race, Latino or Hispanic, or Migrant Farmworker.

■ PRAPARE ■ PRAPARE Plus in OCHIN EPIC

Education, Literacy & Language			
SDH Questions	SDH Responses	Intervention Ideas and Community Resources	ICD-10 Z Codes
What language are you most comfortable speaking?	<ul style="list-style-type: none"> English Language other than English I choose not to answer this question 	<u>Clinical Level</u> <ul style="list-style-type: none"> - Develop dedicated services for medical interpretation that include in-person or telephonic qualified interpreters and medical documents and medication instructions in preferred language. - Recruit and hire culturally and linguistically competent providers/personnel and continuously train on communication and cultural competency. - Use “teach-back” to ensure patient understanding. - Ensure prescriptions and treatment instructions match patient’s literacy level. - Use visual aids like colored caps for pill containers or calendars to convey which medication need to be taken. <u>Non-Clinical Level</u> <ul style="list-style-type: none"> - Conduct monthly free health literacy classes in order to better prepare individuals when going into clinical settings. - Offer or refer patient to courses for English language, math, reading, financial literacy, computer skills, etc. - Promote early childhood development and school readiness, pre-school/Head Start, offer tutoring or homework assistance for 	Z55.0 Illiteracy and low-level literacy Z55.1 Schooling unavailable or unattainable Z55.2 Failed school examinations Z55.3 Underachievement in school Z55.4 Educational maladjustment and discord with teachers and classmates
What is the highest level of school that you have finished?	<ul style="list-style-type: none"> Less than a high school diploma High school diploma /GED More than high school I choose not to answer this question 		
How do you learn best?	<ul style="list-style-type: none"> Reading Listening Picture 		

		children or offer Read Out Loud program to increase children's literacy. - Prepare for GEDs, citizenship tests, and post-secondary education. <u>Community Level</u> - Establish or operate charter schools - Provide college grants/scholarships	Z55.8 Other problems related to education and literacy Z55.9 Problems related to education and literacy, unspecified Z60.3 Acculturation difficulty
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Economic Hardships (Resources & Materials)

SDH Questions	SDH Responses	Intervention Ideas and Community Resources	ICD-10 Z Codes
In the past year, have you or any family members you live with been unable to get any of the following when it was really needed?	<ul style="list-style-type: none"> • Food • Utilities • Medicine or any health care • Phone • Clothing • Childcare • Other 	<u>Clinical Level</u> - Provide list of social services in preferred language listing programs offered at organizations, state and federal levels. - To address patients without health care coverage, offer a sliding scale fee payment method or see if patient's sliding fee scale should be adjusted - Have an ACA enrollment agent/assister on-site to enroll for Medicaid, CHIP, and Medicare or Marketplace eligibility. - Prescribe generic versions of medications offered through discounted drug pricing programs (340B) or other free or low-cost prescription programs.	Z59 Problems related to housing and economic circumstances Z59.4 Lack of adequate food and safe drinking water Z59.5 Extreme poverty (100% FPL or below)
How hard is it for you to pay for the very basics like food, housing, heating, medical care, and medication?	<ul style="list-style-type: none"> • Not hard at all • Somewhat hard • Very Hard 	- Integrate community health care workers into primary care team to better inform patients of available resources available while they visit the clinic. - Integrate social services into care plan when seeing a patient in order to establish a comprehensive care treatment plan for patients challenged with an insurance barrier.	Z59.6 Low income (200% FPL or below) Z59.7 Insufficient social insurance and welfare support
Has lack of transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living?	<ul style="list-style-type: none"> • Yes, it has kept me from medical appointments or from getting my medications • Yes, it has kept me from non-medical meetings, appointments, work, or from getting things that I need 	- Offer and promote mobile clinic services, to partner organizations like churches or schools to increase mobile health care access and utilization. <u>Non-Clinical Level</u> - Connect patients to community resources and social services offered by state governments, federal programs, charities, and private companies	Z91.120 Patient's intentional under dosing of medication regimen due to financial hardship

	<ul style="list-style-type: none"> No I choose not to answer this question 	<ul style="list-style-type: none"> Collect gently used goods such as clothing, furniture, work uniforms, toys, school, and interview clothes to offer to patients. Alternatively, refer patients to local food banks or thrift stores. Provide classes to educate individuals on basic living, job training, and budgeting skills to enable them to help themselves. <p><u>Community Level</u></p> <ul style="list-style-type: none"> Initiate a dialogue about promoting civic involvement, economic development, workforce development, and leadership training, which may lead to developing and supporting coalitions to address economic challenges in community. 	
What is your main insurance?	<ul style="list-style-type: none"> None/uninsured Medicaid Medicare CHIP Medicaid Other public health insurance (not CHIP) Other public health insurance (CHIP) Private Insurance 	<ul style="list-style-type: none"> Centralize and integrate the strategic collection of health and economic data across project partners. Create an economic community development organization that organizes job fairs, workshops, and assistance with financial resource strain. 	
Do you have insurance through your job?	<ul style="list-style-type: none"> Yes No 		

Housing Security			
SDH Questions	SDH Responses	Intervention Ideas and Community Resources	ICD-10 Z Codes
What is your housing situation today?	<ul style="list-style-type: none"> I have housing I do not have housing I choose not to answer this question 	<p><u>Clinical Level</u></p> <ul style="list-style-type: none"> Avoid prescriptions of medications that require refrigeration where refrigeration is lacking Conduct home visits among seniors to check and remove causes for potential falls and other types of injuries while ensuring high quality of life <p><u>Non-Clinical Level</u></p> <ul style="list-style-type: none"> Refer patients to medical respite care services to recover from acute illnesses or injuries in a safe environment with access to 	<p>Z59 Problems related to housing and economic circumstances</p> <p>Z59.0 Homelessness</p> <p>Z59.1 Inadequate housing</p>
Are you worried about losing your housing?	<ul style="list-style-type: none"> Yes No I choose not to answer this question 		
What address do you live at?	Open ended question.		

<p>In the last month: Have you slept outside, in a shelter, or in a place not meant for sleeping?</p>	<ul style="list-style-type: none"> • Yes • No 	<p>care and supportive services outside the hospital and off the streets.</p> <ul style="list-style-type: none"> - Help patients navigate housing market in the area through referral, information, financial counseling, and classes for first-time buyers. - Create Medical Legal partnerships to advocate for patient with unsafe and unaffordable homes. 	<p>Z59.2 Discord with neighbors, lodgers and landlord</p> <p>Z59.5 Extreme poverty (100% FPL or below)</p>
<p>In the last 12 months, how many times have you moved from one home to another?</p>	<p>Open ended question.</p>	<p><u>Community Level</u></p> <ul style="list-style-type: none"> - Develop informational resources for agents, builders, developers, and lenders of needs of special populations to consider when building or leasing buildings. - Organize community donation day to ensure local shelter is well stocked with essentials: shampoo, toothpaste, toothbrushes, sanitary napkins, winter and interview clothing, blankets, pillows, etc. - Centralize and integrate the strategic collection of health and housing data across project partners. Use data to create and implement new referral systems between agencies. - Create a housing and community development organization that organizes housing fairs, workshops, and assistance with the purchase of a home, tenant services, and assistance in improvements for income-eligible homeowners and landlords. - Participate in community-wide coordinated entry systems, such as the HUD-funded Continuum of Care, to provide fair and equal access to affordable housing, whether transitional housing, shelter services, supportive housing, or affordable assisted living residences. - Convene discussions on gentrification policies and how and where to build affordable and safe housing with access to resources to live healthy lives (healthy foods, parks, gyms, etc.) - Work with other organizations (Habitat for Humanity, etc.) to build or renovate homes for those in need. 	<p>Z59.6 Low income (200% FPL or below)</p> <p>Z59.8 Other problems related to housing and economic circumstances</p> <p>Z59.9 Problem related to housing and economic circumstances, unspecified</p>

<h2 style="color: #0070C0;">Employment</h2>			
SDH Questions	SDH Responses	Intervention Ideas and Community Resources	ICD-10 Z Codes
<p>Have you been discharged from the armed forces of the United States?</p>	<ul style="list-style-type: none"> • Yes • No • I choose not to answer this question 	<p><u>Clinical Level</u></p> <ul style="list-style-type: none"> - Continuously inquire about patient's employment situation and type of employment beyond the initial new patient form. 	<p>Z56 Problems related to employment/unemployment</p> <p>Z56.0 Unemployment</p>

<p>What is your current work?</p>	<ul style="list-style-type: none"> • Unemployed and seeking work • Part-time or temporary work • Full-time work • Otherwise unemployed but not seeking work 	<ul style="list-style-type: none"> - For patients who report fair or poor health, ask if there are any health and social services that they think or feel they need and coordinate link to services requested. - Screen for mental health disorders and provide appropriate treatment. <p><u>Non-Clinical Level</u></p> <ul style="list-style-type: none"> - Refer patients to temp agencies for temporary work, employment centers for assistance with resume building and interviewing practice, community colleges to further education or to acquire new marketable skills. - Offer SNAP/TANF enrollment and unemployment compensation process assistance if loss of income is a result of loss of employment. <p><u>Community Level</u></p> <ul style="list-style-type: none"> - Encourage community business development involving community members to encourage local hiring practices. - Organize job fair with representatives from both local and community-serving businesses 	<p>Z56.82 Military deployment status</p> <p>Z56.9 Unspecified problems related to employment</p> <p>Z59.5 Extreme poverty (100% FPL or below)</p> <p>Z59.6 Low income (200% FPL or below)</p>
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<h2 style="color: #4F81BD;">Food Security</h2>			
SDH Questions	SDH Responses	Intervention Techniques and Community Resources	ICD-10 Z Codes
<p>In the last 12 months: (I/we) worried whether (my/our) food would run out before (I/we) got money to buy more.</p>	<ul style="list-style-type: none"> • Often true • Sometimes true • Never true 	<p><u>Clinical Level</u></p> <ul style="list-style-type: none"> - Refer patients to food pantry (either in-house or through partnership) so they can access free foods. - Check to see if patient is eligible for food programs and benefits, such as WIC (Women, Infant, and Children Food Nutrition Service), SNAP (Supplemental Nutrition Assistance Program), etc. 	<p>Z59.4 Lack of adequate food and safe drinking water</p> <p>Z59.5 Extreme Poverty (100% FPL or below)</p>
<p>In the last 12 months: The food that (I/we) bought just didn't last, and (I/we) didn't have money to get more.</p>	<ul style="list-style-type: none"> • Often true • Sometimes true • Never true 	<ul style="list-style-type: none"> - Ensure children are enrolled in free or reduced breakfast and lunch at school. <p><u>Non-Clinical Level</u></p> <ul style="list-style-type: none"> - Start a food pantry filled with donated foods. Hold donation drives throughout the year requesting certain foods if pantry is lacking in specific food groups. 	<p>Z59.6 Low income (200% FPL or below)</p> <p>Z72.4 Inappropriate diet and eating habits</p>
<p>In the last 12 months: (I/we) couldn't afford to eat balanced meals.</p>	<ul style="list-style-type: none"> • Often true • Sometimes true • Never true 	<ul style="list-style-type: none"> - Build a community garden with classes or other educational opportunities to teach patients and community about food, nutrition, and healthy cooking and eating. Grow foods used in cultures present in your patient population. 	

		<ul style="list-style-type: none"> - Establish a kitchen at your health center to teach healthy cooking and eating skills. Hire (or obtain volunteer) chef to demonstrate healthy cooking with easy recipes. <p><u>Community Level</u></p> <ul style="list-style-type: none"> - Work with farmer’s markets and request they accept SNAP benefits and “fruit and veggie prescription” vouchers. - Work with local soup kitchens to organize regular meals at locations adjacent to the health center for ease of access. - Encourage community convenience stores to offer healthier items like fruits and nuts. - Organize a group to build and manage community gardens. - Work with schools to establish fruit and vegetable gardens at the school. - Work with local Parent-Teacher Associations to help bring free and reduced breakfasts and lunches to local schools. - Talk to local developers and/or Chambers of Commerce about developing mixed-use buildings to bring in more supermarkets or grocery stores on ground floors. 	
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Physical Health (Exercise)			
SDH Questions	SDH Responses	Intervention Techniques and Community Resources	ICD-10 Z Codes
<p>On average, how many: Days per week do you engage in moderate to strenuous exercise?</p> <p>Minutes do you exercise at this level?</p>	Open ended question.	<p><u>Clinical Level</u></p> <ul style="list-style-type: none"> - Provide a list of recreation centers offering free or low-cost sports classes; provide a list of nearby hiking trails or parks as alternatives to unsafe parks <p><u>Non-Clinical Level</u></p> <ul style="list-style-type: none"> - Offer/find community volunteer to lead exercise and wellness classes at the health center such as yoga, Zumba, aerobics, etc. - Conduct <p><u>Community Level</u></p> <ul style="list-style-type: none"> - Partner with local health and wellness facilities to offer open gym times for community members of your clinic - Organize community running or walking clubs, softball teams, soccer team, and etc. - Work with community partners, policy makers, and funders to develop a community park. 	<p>Z72.3 Lack of physical exercise</p> <p>Z59.5 Extreme poverty (100% FPL or below)</p> <p>Z59.6 Low income (200% FPL or below)</p>

Social & Emotional Health

SDH Questions	SDH Responses	Intervention Techniques and Community Resources	ICD-10 Z Codes
How often do you see or talk to people that you care about and feel close to?	<ul style="list-style-type: none"> • Less than once a week • 1 or 2 times a week • 3 to 5 times a week • More than 5 times a week • I choose not to answer this question 	<p><u>Clinical Level</u></p> <ul style="list-style-type: none"> - Engage new patients who come into the clinic by asking if they just moved to the area, why they came to the new facility, etc. Then take note of what you hear that you can relate to and provide information on places that may be of interest to patient. - Host community events on or near healthcare facility to actively be inclusive of community members and open up a door for current patients who may be having trouble socially. - Leave flyers and posters about all-inclusive community group events in and around the clinical setting for patients to easily access and learn more. <p><u>Non-Clinical Level</u></p> <ul style="list-style-type: none"> - Work with community organizations in order to increase awareness of their presence as well as what resources they can provide. - Be intentional about inclusion of full community when creating and hosting local. - Host peer support groups. <p><u>Community Level</u></p> <ul style="list-style-type: none"> - Initiate a dialogue about promoting civic involvement, economic development, workforce development, and leadership training, which may lead to developing and supporting coalitions to address economic challenges in community. - Collaborate with other health centers to provide community space for workshops and developmental clinics on health and wellness. - Have 'town hall meetings' (if they do not presently exist) for individuals in the neighborhood to be able to come together in order to discuss their thoughts about their environment. - Actively engage community members on a consistent basis focusing on high priority needs as determined by the community. - Coordinate volunteer days for patients at local shelter, food pantries, and other community partner organization 	<p>Z60 Problems related social environment</p> <p>Z60.0 Problems of adjustment to life-cycle transitions</p> <p>Z60.2 Problems related to living alone</p> <p>Z60.3 Acculturation difficulty</p> <p>Z60.4 Social exclusion and rejection</p> <p>Z60.5 Target of (perceived) adverse discrimination/persecution</p> <p>Z60.8 Other problems related social environment</p>
Are you married or living together with someone in a partnership?			
In a typical week, how often do you: Talk with family, friends, or neighbors by phone or video chat Get together with family, friends, or neighbors? Use email, text messaging, or internet to communicate with family, friends, or neighbor?			<p>Z62 Problems related to upbringing</p> <p>Z62.2 Upbringing away from parents</p>
How often do you: Attend church or religious services? Attend meetings of the clubs or organizations you belong to?			<p>Z62.22 Institutional upbringing</p>
How often do you feel lonely or isolated from those around you?			<p>Z63 Other problems related to primary support group, including family circumstances</p>

Mental Health & Stress

SDH Questions	SDH Responses	Intervention Ideas and Community Resources	ICD-10 Z Codes
<p>Stress is when someone feels tense, nervous, anxious, or can't sleep at night because their mind is troubled. How stressed are you?</p>	<ul style="list-style-type: none"> • Not at all • A little bit • Somewhat • Quite a bit • Very much • I choose not to answer this question 	<p><u>Clinical Level</u></p> <ul style="list-style-type: none"> - Be proactive in helping the patient identify where the stressors are coming from. - Work with patient to draw links between the stressors and resources to help alleviate them - Provide patient with healthy stress management alternatives to medication such as exercising, yoga, meditation, etc. - Directly address physical manifestations of patient identified stressors - Help patient identify calming activities they enjoy and routinely work into their lives to alleviate stressors. - Screen for PTSD, suicide ideation, and alcohol and substance abuse; offer or refer to clinical psychologists and peer-support groups; provide or link them to a case manager. 	<p>Z56 Problems related to employment and unemployment</p> <p>Z56.1 Change of job</p> <p>Z56.2 Threat of job loss</p> <p>Z56.3 Stressful work schedule</p>
<p>During the past month, how much stress would you say you experienced?</p>	<ul style="list-style-type: none"> • A lot of stress • A moderate amount of stress • Relatively little stress • Almost no stress at all 	<p><u>Non-Clinical Level</u></p> <ul style="list-style-type: none"> - Connect individuals with healthy outlets to reduce stress such as community gardens, low-cost yoga studios, parks & walking trails, etc. - Work with the individual to connect them with social groups that appeal to their interests - Provide education on ways one can reduce stress and bad habits associated with stress. - Connect individuals to counseling services to help reduce adverse health factors associated with stress <p><u>Community Level</u></p> <ul style="list-style-type: none"> - Develop a community organizing campaign to keep the neighborhood safe such as: working together to create a safe atmosphere can in turn provide less anxiety or stress concerning personal safety for individuals in the community - Establish a firm network of social and psychological communal support through community organizing and deliberate interaction with neighbors and local officials - Advocate for the growth & maintenance of more parks and open space in your neighborhoods - Starting wellness initiatives (Free yoga in the park on Saturdays, community hiking/walking trips, etc.) 	<p>Z56.4 Discord with boss and workmates</p> <p>Z56.6 Other physical and mental strain related to work</p> <p>Z56.89 Other problems related to employ</p> <p>Z64 Problems related to certain psychosocial circumstances</p> <p>Z65 Problems related to other psychosocial circumstances</p> <p>Z73 Problems related to life management difficulty</p> <p>Z73.3 Stress, not elsewhere classified</p>

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Safety & Domestic Violence			
SDH Questions	SDH Responses	Intervention Ideas and Community Resources	ICD-10 Z Codes
Do you feel physically and emotionally safe where you currently live?	<ul style="list-style-type: none"> • Yes • No • Unsure 	<u>Clinical Level:</u> <ul style="list-style-type: none"> - Train physicians/health care providers to be able to identify the early indicators of abuse within a clinical visit. Refer to behavioral health services if necessary. - Create an atmosphere of safety for the patient being seen (i.e. “patient-only” signs beyond a certain point in the office). If partner attends clinic visit with patient, ask partner to leave for part of the visit to discuss private matters, but do not mention it is for domestic violence screening. - Display educational posters and flyers about domestic violence in and around the clinic to help create a safe, welcoming, and empowering environment. - Develop partnerships with local shelters and housing organizations for victims of domestic violence. - Have staff trained in assessment and screening for domestic violence victims, including their legal obligations for reporting such abuse. <u>Non-Clinical Level</u> <ul style="list-style-type: none"> - Offer support groups for victims of domestic violence. - Establish a community referral system with ties to local healthcare providers and other social services organizations. 	Z60.4 Social exclusion and rejection 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
In the past year, have you been afraid of your partner or ex-partner?	<ul style="list-style-type: none"> • Yes • No • Unsure • I have not had a partner in the past year • I choose not to answer this question 		
Have you ever been physically or emotionally hurt or threatened by a spouse/ partner or someone else you know?	<ul style="list-style-type: none"> • Yes • No 		

		<ul style="list-style-type: none"> - Organize neighborhood clean-up and beautification days— painting over gang-related graffiti with community designs, trash and recycling receptacle painting, park/beach clean-ups, etc. <p><u>Community Level</u></p> <ul style="list-style-type: none"> - Work with local government officials to advocate for policies and laws concerning domestic violence victims - Educate your community on the indicators of domestic violence for all age groups. - If dealing with overcrowding at shelters, advocate building more shelters. - Work with community groups (e.g., churches) to develop a network of “safe houses” where victims of domestic violence can stay and receive support for a period if shelters are overcrowded. - Develop a network of community leaders willing to take initiative when necessary for the betterment of the community. - Charge community business owners and leaders to hold themselves accountable to learn, be trained in and recognize the signs, as well as how to take appropriate action. 	<p>Z62.819 Personal history of unspecified abuse in childhood</p> <p>Z63 Other problems related to primary support group, includes family circumstances</p> <p>Z63.9 Problems in relationship w/ spouse or partner</p> <p>Z65.8 Other specified problems related to psychosocial circumstances</p> <p>Z91.41 Personal history of adult abuse</p> <p>Z91.410 Personal history of adult physical and sexual abuse</p>
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Incarceration History			
SDH Questions	SDH Responses	Intervention Techniques and Community Resources*	ICD-10 Z Codes

<p>In the past year, have you spent more than 2 nights in a row in a jail, prison, detention center, or juvenile correctional facility?</p>	<ul style="list-style-type: none"> • Yes • No • I choose not to answer <p>If yes, what was your release date? _____</p>	<p><u>Clinical Level</u></p> <ul style="list-style-type: none"> - Include medically necessary information in the electronic health record and be mindful of the language used to avoid stigma and bias from other care team members - Create a safe and nurturing space for all patients to reduce the social stigma. Normalize the experience of the patient and speak openly and nonjudgmentally. <p><u>Non-Clinical Level</u></p> <ul style="list-style-type: none"> - Hire and train CHWs with a personal history of incarceration to assist in case management support, navigation of medical care and local social services available to patient. <p><u>Community Level</u></p> <ul style="list-style-type: none"> - Advocate for legislation to increase the number of job opportunities for people with a criminal or incarceration history. - Advocate for a decrease in administrative or financial costs of such as probation or parole fees. <p>*Resources in this section compiled from: http://journalofethics.ama-assn.org/2017/09/ecas2-1709.html and https://www.ncbi.nlm.nih.gov/pubmed/22813476</p>	<p>Z65.0 Conviction in civil and criminal proceedings without imprisonment</p> <p>Z65.1 Imprisonment and other incarcerations</p>
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Sources:

This document was adapted from the Primary Care Social Determinants of Health Survey Implementation Toolkit by Therese McIntyre, 2017 and the PRAPARE Toolkit by National Association of Community Health Center.

For a complete list of ICD-10 z codes visit <http://www.icd10data.com/>