



AMERICAN OSTEOPATHIC ASSOCIATION

AOA Resources to Address Health Disparities and Social Determinants of Health (SDOH)

The resources in this toolkit were developed by the AOA Bureau of Osteopathic Research and Public Health to assist osteopathic physicians in talking with their patients on SDOH.

Recognition: SDOH Educational Resources

[Social Determinants of Health: Making a Difference in the Lives of Your Patients and Their Families](#)

Identification: SDOH Patient Assessment

[Osteopathic SDOH Patient Assessment Tool](#)

Coding: SDOH Coding Resources, CMS-SDOH Z code

[Coding for Social Determinants of Health Services](#)

[CMS SDOH Z Code Infographic](#)

Informational: SDOH Existing Resources

[Health Disparities Web Resources](#)

[SDOH Web Resources](#)



Social Determinants of Health: Making a Difference in the Lives of Your Patients and Their Families

What are social determinants of health?

Social determinants of health (SDOH) are conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.^{1,2} Many of the SDOH significantly impact health including the mental health of patients and can have long term effects contributing to the increased prevalence of chronic disease. The National Academy of Medicine found that medical care only accounted for 10–20% of individual's health outcomes, while SDOH are 80-90% of contributing factors.³

Examples of SDOH include:

Health Care System: health coverage; provider availability; provider linguistic and cultural competency; quality of care.

Economic Stability: employment; income and expenses; debt.

Physical Environment: housing; transportation; safety; parks and playgrounds; zip code geography.

Education: literacy; language; early childhood education; higher education.

Food: hunger; access to healthy options.

Community and Social Relationships: social integration; social systems; community engagement; discrimination; stress.



Osteopathic Philosophy and SDOH?

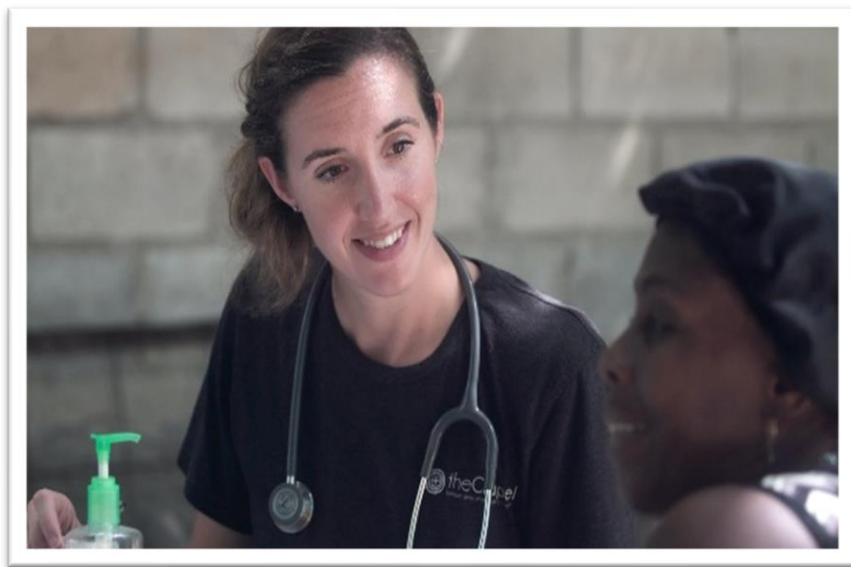
As a trusted source of health information and guidance it is important that osteopathic physicians partner with patients and families to address their immediate and long-term needs including the risk and protective factors that affect their quality of life. It is essential to address problems as they are identified and work with the practice team to refer to community-based resources.

Osteopathic physicians:

- Focus on understanding the patient as a complete individual including body, mind, and spirit.
- Believe there is more to good health than the absence of pain or disease and provide a holistic and comprehensive approach to treating patients.
- Support each patient in achieving a high level of wellness by focusing on physical and behavioral health and the individual's environment.

Steps to incorporating SDOH assessment and referral in your practice:

Below are key issues to consider with incorporating SDOH assessment and a referral system in your practice.



Work with the practice team on adopting a “whole-person” approach.

Educate staff on the importance of screening for and documenting patients’ SDOH needs.

Identify SDOH assessment tools and resources appropriate for your practice.

Collaborate with the practice team on developing an effective workflow system.

Obtain training for the practice team on identifying SDOH risk and protective factors and effective referral to community resources.

Document any SDOH needs by utilizing the established SDOH ICD-10 Z codes.

Making a Difference for Your Patients During Difficult Times

The COVID-19 pandemic has significantly changed the lives of families in the US and worldwide. Families are experiencing the social, economic, and health effects of the pandemic. Stressors including poverty and food insecurity, loss of employment, isolation, changes in child care and school systems, risk of infection, complications following infection and loss of family members due to the pandemic will continue to have long-term effects on your patients and their families.

The immediate and long-term impacts of the pandemic have not been evenly distributed and stressors increased for individuals already struggling with low-wage work and meeting their family needs from paycheck to paycheck. The pandemic also disproportionately affected racial and ethnic minority groups considering the inequities in the rate of poverty, health care access, and other socioeconomic factors. These stressors can contribute to a toxic environment and can lead to mental health problems, family violence, and substance use, further affecting quality of life.

Osteopathic physicians partnering with families on their immediate and long-term needs during these difficult times is crucial. As a trusted health care provider, you can make a difference more than ever in the lives of your patients and their families.

¹“Social Determinants of Health,” World Health Organization, accessed May 18, 2021, https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1.

²“Social Determinants of Health: Know What Affects Health,” Centers for Disease Control and Prevention, accessed, May 18, 2021, <https://www.cdc.gov/socialdeterminants/index.htm>.

³Hood, C. M., K. P. Gennuso, G. R. Swain, and B. B. Catlin. 2016. County health rankings: Relationships between determinant factors and health outcomes. *American Journal of Preventive Medicine* 50(2):129-135. <https://doi.org/10.1016/j.amepre.2015.08.024>.



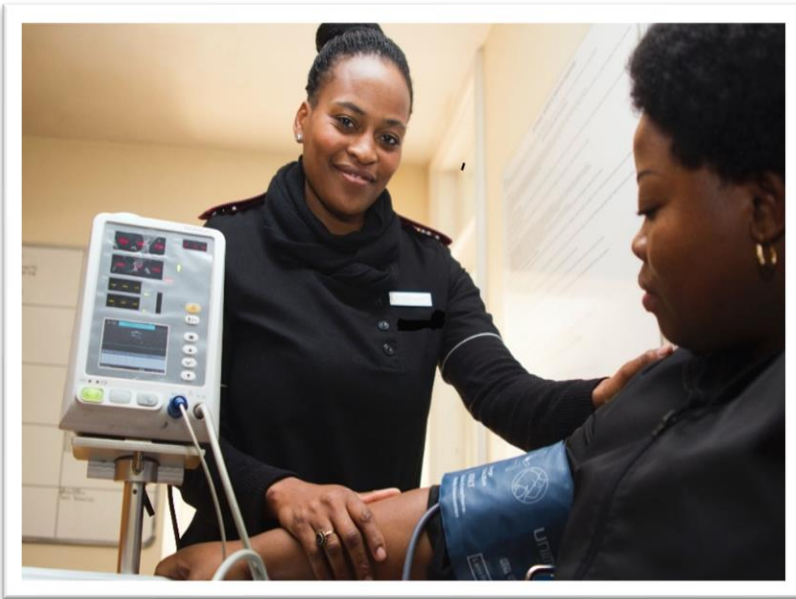
AMERICAN OSTEOPATHIC ASSOCIATION

Coding for Social Determinants of Health Services

In January 2021, several changes were made to the descriptions of the outpatient Evaluation and Management (E&M) codes. Level of service can now be determined by either total time spent on patient care on the calendar day of service, or by the level of Medical Decision Making (MDM).

Diagnosis or treatment limited by Social Determinants of Health (SDOH) is an element in either the Moderate (99204 / 99214) or the High (99205 / 99215) levels of MDM.

Documentation of SDOH elements in the medical record increase the correct level of coding and should be considered carefully. The Z-codes are not presently included in many electronic medical record systems for explicit entry, but the appropriate documentation should be entered in the chart and the level of billing adjusted accordingly.



Examples of patient experiences related to SDOH:

- Patient returns to the office today having missed the last two scheduled appointments due to difficulties with transportation. Patient has been out of medications for several weeks and has presented to a local Emergency Department at least once for associated symptoms.
- Patient has recently been evaluated by Orthopedics for bilateral knee pain. Found with severe tricompartmental degenerative disease and total knee replacements were advised. Scheduling of this is delayed due to patient's morbid obesity and continued daily tobacco use.
- Patient was prescribed additional anti-hypertensive agents on last visit, however, was unable to afford them and has continued taking prior medications. Blood pressure has been very high when checked at the local fire station.

Established SDOH ICD-10 Z codes:

Use of these codes can potentially increase payment to the practice for patient care.

ICD-10-CM Code Category	Problems/Risk Factors Included in Category
Z55 – Problems related to education and literacy	Illiteracy/low-level, schooling availability, failing school, underachievement, discord with teachers.
Z56 – Problems related to employment/unemployment	Changing of job, losing job, no job, stressful work schedule, discord with boss/co-workers, bad working conditions.
Z57 – Occupational exposure to risk factors	Noise, radiation, dust, other air contaminants, tobacco, toxic agents in industry, extreme temperatures, vibration, others.
Z59 – Problems related to housing and economic circumstances	Homeless, inadequate housing, discord with neighbors/landlord, problems with residential living, lack of adequate food/safe drinking water, extreme poverty, low income, insufficient social insurance/welfare support.
Z60 – Problems related to social environment	Adjustment to life-cycle transitions, living alone, cultural differences, social exclusion and rejection, discrimination/persecution.
Z62 – Problems related to upbringing	Inadequate parental supervision/control, parental overprotection, upbringing away from parents, child in custody, institutional upbringing (orphan or group home), hostility towards child, inappropriate/excessive parental pressure, child abuse including history of (physical and/or sexual), neglect, forced labor, child-parent conflict.
Z63 – Other problems related to primary support group, including family circumstances	Spousal conflict, in-law conflict, absence of family member (death, divorce, deployment), dependent relative needing care, family alcoholism/drug addiction, isolated family.
Z64 – Problems related to certain psychosocial circumstances	Unwanted pregnancy, multiparity, discord with counselors.
Z65 – Problems related to other psychosocial circumstances	Civil/criminal convictions, incarceration, problems after release from prison, victim of crime, exposure to disaster/war, religious persecution.

USING Z CODES:

The Social Determinants of Health (SDOH) Data Journey to Better Outcomes

What are **Z codes**

SDOH-related Z codes ranging from Z55-Z65 are the ICD-10-CM encounter reason codes used to document SDOH data (e.g., housing, food insecurity, transportation, etc.).

SDOH are the conditions in the environments where people are born, live, learn, work, play, and age.



Step 1 Collect SDOH Data

Any member of a person's care team can collect SDOH data during any encounter.

- Includes providers, social workers, community health workers, case managers, patient navigators, and nurses.
- Can be collected at intake through health risk assessments, screening tools, person-provider interaction, and individual self-reporting.

Step 2 Document SDOH Data

Data are recorded in a person's paper or electronic health record (EHR).

- SDOH data may be documented in the problem or diagnosis list, patient or client history, or provider notes.
- Care teams may collect more detailed SDOH data than current Z codes allow. These data should be retained.
- Efforts are ongoing to close Z code gaps and standardize SDOH data.

Step 3 Map SDOH Data to Z Codes

Assistance is available from the ICD-10-CM Official Guidelines for Coding and Reporting.¹

- Coding, billing, and EHR systems help coders assign standardized codes (e.g., Z codes).
- Coders can assign SDOH Z codes based on self-reported data and/or information documented in an individual's health care record by any member of the care team.²

Step 4 Use SDOH Z Code Data

Data analysis can help improve quality, care coordination, and experience of care.

- Identify individuals' social risk factors and unmet needs.
- Inform health care and services, follow-up, and discharge planning.
- Trigger referrals to social services that meet individuals' needs.
- Track referrals between providers and social service organizations.

Step 5 Report SDOH Z Code Data Findings

SDOH data can be added to key reports for executive leadership and Boards of Directors to inform value-based care opportunities.

- Findings can be shared with social service organizations, providers, health plans, and consumer/patient advisory boards to identify unmet needs.
- A **Disparities Impact Statement** can be used to identify opportunities for advancing health equity.



USING SDOH Z CODES

Can Enhance Your Quality Improvement Initiatives



Health Care Administrators

Understand how SDOH data can be gathered and tracked using Z codes.

- Select an SDOH screening tool.
- Identify workflows that minimize staff burden.
- Provide training to support data collection.
- Invest in EHRs that facilitate data collection and coding.
- Decide what Z code data to use and monitor.

Develop a plan to use SDOH Z code data to:

- Enhance patient care.
- Improve care coordination and referrals.
- Support quality measurement.
- Identify community/population needs.
- Support planning and implementation of social needs interventions.
- Monitor SDOH intervention effectiveness.



Health Care Team

Use a SDOH screening tool.

- Follow best practices for collecting SDOH data in a sensitive and HIPAA-compliant manner.
- Consistently document standardized SDOH data in the EHR.
- Refer individuals to social service organizations and appropriate support services through local, state, and national resources.



Coding Professionals

Follow the ICD-10-CM coding guidelines.³

- Use the CDC National Center for Health Statistics [ICD-10-CM Browser](#) tool to search for ICD-10-CM codes and information on code usage.⁴
- Coding team managers should review codes for consistency and quality.
- Assign all relevant SDOH Z codes to support quality improvement initiatives.

Z code Categories	Description
Z55	Problems related to education and literacy
Z56	Problems related to employment and unemployment
Z57	Occupational exposure to risk factors
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

This list is subject to revisions and additions to improve alignment with SDOH data elements.

³ cms.gov/medicare/icd-10/2021-icd-10-cm
⁴ cdc.gov/nchs/icd/icd10cm.htm



AMERICAN OSTEOPATHIC ASSOCIATION

Health Disparities Resources

Agency for Healthcare Research and Quality

[2019 National Healthcare Quality and Disparities Report](#) – Shows the progress and opportunities for improving healthcare quality and reducing healthcare disparities. [Chartbooks](#) on specific topics, such as access to care, patient safety, and healthy living, provide more detailed information. In addition, downloadable slides are available for presentations.

[Priority Populations](#) – Information regarding the delivery of healthcare to low-income individuals, minority groups, women, children, the elderly, and individuals with special health care needs.

[AHRQ Data Highlight Inequities Related to COVID-19 Hospitalizations and How Vaccination Prioritization May Effect Equity](#)

National Institutes of Health

The National Institute on Minority Health and Health Disparities (NIMHD) is one of the 27 Institutes and Centers of the National Institutes of Health (NIH), the nation's premiere medical research agency. NIMHD's work touches the lives of millions of Americans burdened by disparities in health status and health care delivery, including racial and ethnic minority groups, rural populations, populations with low socioeconomic status, and other population groups.

[National Institute of Minority Health and Health Disparities
The State of Health Disparities in the United States](#)

Centers for Disease Control and Prevention

[CDC Health Disparities Topics](#) – Information on populations identified to be at-risk for health disparities. Includes lists of COVID-19 Articles on Health Equity and COVID-19 Webinars on Health Equity.

[National Center for Health Statistics](#)

[Health Equity Considerations and Racial and Ethnic Minority Groups](#)

[Health Equity: Promoting Fair Access to Health](#)

Office of Minority Health - Think Cultural Health

This website features information, continuing education opportunities, resources, and more for health and health care professionals to learn about culturally and linguistically appropriate services, or CLAS. Launched in 2004, Think Cultural Health is sponsored by the Office of Minority Health.

[Advancing Health Equity at Every Point of Contact](#)

National Academy of Medicine

[Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care](#)

Substance Abuse and Mental Health Administration

[Double Jeopardy: COVID-19 and Behavioral Health Disparities for Black and Latino Communities in the U.S.](#)

Additional Publications

[How to Help Someone with Anxiety or Depression During COVID-19](#)

[Hospitalization and Mortality among Black Patients and White Patients with COVID-19.](#)



AMERICAN OSTEOPATHIC ASSOCIATION

Social Determinants of Health (SDOH) Resources

Centers for Disease Control and Prevention – Social Determinants of Health (SDOH) Website

This website provides CDC resources for SDOH data, research, tools for action, programs, and policy. They may be used by people in public health, community organizations, research organizations, and health care systems to assess SDOH and improve community well-being. Information and tools available on this website were generated or funded by CDC within the last 10 years.

[Social Determinants of Health: Know What Affects Health](#)

Healthy People 2030 – SDOH

One of Healthy People 2030's 5 overarching goals is specifically related to SDOH: "Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all." In line with this goal, Healthy People 2030 features many objectives related to SDOH. These objectives highlight the importance of "upstream" factors — usually unrelated to health care delivery — in improving health and reducing health disparities.

[Social Determinants of Health - Healthy People 2030](#)

Healthy People 2020- SDOH

The Social Determinants of Health topic area within Healthy People 2020 is designed to identify ways to create social and physical environments that promote good health for all. This website also shows Healthy People 2020 data on SDOH.

[Social Determinants of Health - Healthy People 2020](#)

Rural Health Information Hub

Provides evidence-based models and resources to address social determinants of health in rural communities from the Rural Health Information Hub.

[Social Determinants of Health in Rural Communities](#)

SCREENING TOOLS FOR SOCIAL DETERMINANTS OF HEALTH

National Association of Community Health Centers

[Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences tool.](#)

The tool includes 15 core questions and 5 supplemental questions. The data can be directly uploaded into many electronic health records as structured data. It is generally administered by clinical or nonclinical staff at the time of the visit, but a paper version can be given to the patient to self-administer.

The Centers for Medicare & Medicaid Services Accountable Health Communities

A 10-question screening tool from the Centers for Medicare & Medicaid Services (CMS) Center for Medicare and Medicaid Innovation (CMMI) is meant to be self-administered.

[Health-Related Social Needs Screening Tool](#) (AHC-HRSN) (innovation.cms.gov)

Addressing Food Insecurity: A Toolkit for Physicians

Toolkit providing guidance on incorporating the food screening process into practice workflow, choosing the right tool, and intervening to help address food insecurity.

[Addressing Food Insecurity: A Toolkit for Physicians](#)

Strengths-based Approaches to Screening Families for Health-Related Social Needs

Document providing recommendations to guide strengths-based screening for health-related social needs.

[Strengths-based Approaches to Screening Families for Health-Related Social Needs](#)

What are ACEs and how do they relate to toxic stress?

This infographic explains how to reduce the effects of ACEs and Toxic stress that affect people at all income and social levels.

[What are ACEs and how do they relate to toxic stress?](#)

Screening for Adverse Childhood Experiences and Trauma

This technical assistance tool offers various approaches and considerations for screening adults and children for ACEs and trauma.

[Screening for Adverse Childhood Experiences and Trauma](#)

Fostering Resilience and Recovery: A Change Package for Advancing Trauma-Informed Primary Care

This report includes effective strategies primary care providers can implement to improve the health and resiliency of individuals with histories of trauma.

[Fostering Resilience and Recovery: A Change Package for Advancing Trauma-Informed Primary Care](#)

BACKGROUND INFORMATION ON SOCIAL DETERMINANTS OF HEALTH

Meanings and Misunderstandings: A Social Determinants of Health Lexicon for Health Care Systems

[Meanings and Misunderstandings: A Social Determinants of Health Lexicon for Health Care Systems](#)

Social Determinants of Health–Related Needs During COVID-19 Among Low-Income Households with Children. October 1, 2020

[SDOH-Related Needs During COVID-19 Among Low-Income Households with Children](#)

COVID-19 and the Impact of Social Determinants of Health, May 18, 2020

[COVID-19 and the Impact of SDOH](#)

Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity, May 10, 2018

[Beyond Health Care: The Role of SDOH in Promoting Health and Health Equity](#)