Guidance Document for Clinical Documentation of Social Determinants of Health (SDOH) Data for Pharmacists

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Pharmacy Health Information Technology Collaborative

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1. SUMMARY

The main purpose of this paper is to provide pharmacists with further guidance about the impact of social determinants of health (SDOH) on their patients and the importance of pharmacists using their clinical documentation systems to capture SDOH data. By using standardized coding to document SDOH and understanding the data collected, pharmacists will be able to identify where health disparities occur and help mitigate health inequities their patients may be experiencing. Among the areas presented:

- An overview of SDOH related to health disparities and health equity;
- Use cases for pharmacy settings;
- Coding claims and encounters for payer programs; and
- Quality measurement.

2. RECOMMENDATIONS

- Advocate for SDOH awareness.
  - Pharmacists have frequent access to patients to assess and address SDOH. It is important to bring awareness of pharmacists SDOH assessment capabilities to care team members, social services, and payers.
  - The pharmacy profession should encourage pharmacists to document SDOH assessments, interventions, and outcomes across all practice settings, using standard codified terminology to improve patient and population health.
- Encourage the use of SDOH standardized terminology to promote health disparities research among different populations.
- Recognize the use of SDOH codified data to help identify the relationship between health disparities and how to apply resources to mitigate health inequity.

The pharmacy profession should encourage pharmacists to document SDOH assessments, interventions, and outcomes across all practice settings.

3. INTRODUCTION

"The social determinants of health are the conditions in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels."[1] Examples of SDOH include economic stability, literacy, social support, and access to food, housing, and transportation. Addressing gaps in these areas help mitigate adverse effects of SDOH and is a critical component of providing patient-centered and value-based care. Both the U.S. government and independent organizations of health care professions, quality, and informatics are placing greater emphasis on the assessment of social determinants of health and intervention with the goals of improving outcomes at the patient level and improving health equity and consequently population health.

SDOH becomes the indicator that identifies health disparities. he U.S. Department of Health and Human Services (HHS) has a responsibility to assure health equity is established among the U.S. population. Therefore, there is a relationship between SDOH, health disparities, and health equity. Although identifying SDOH issues by a care provider can individually improve that patient's

1 Filicia Hill-Briggs, Nancy E. Adler, et al, "Social Determinants of Health and Diabetes: A Scientific Review," Published online November 2, 2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7783927/

overall care, it does not improve population health unless the data is captured systematically, in a standardized manner, for all patients to evaluate health disparities within the U.S. population.

Documentation of these assessment and intervention efforts using standardized terminologies would facilitate information capture, information sharing, clinician and staff reimbursement for their services, and population health research and additional outreach.

4. BACKGROUND

Although there are several definitions of SDOH, it is important to understand the relationship between capturing codified SDOH data and using the data to analyze health disparities that can lead to health equity. There are definitions that best define the terms SDOH, health disparities, and health equity.

It is important to understand the relationship between capturing codified SDOH data and using the data to analyze health disparities that can lead to health equity.

HEALTH EQUITY – The World Health Organization (WHO) defines equity as "the absence of avoidable, unfair, or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other means of stratification." Health equity or equity in health implies that ideally everyone should have a fair opportunity to attain their full health potential and that no one should be disadvantaged from achieving this potential.[2] In addition, the Office of Disease Prevention and Health Promotion at HHS defines "health equity as the attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities."[3]

HEALTH DISPARITIES – According to the U.S. Department of Health and Human Services, health disparities are "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; sex; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."[4]

SDOH – "The SDOH have an important influence on health inequities—the unfair and avoidable differences in health status seen within and between countries."[5]

SDOH became part of the U.S. government's health information technology (health IT) initiative and is outlined in the HHS 2020-2025 Federal Health IT Strategic Plan. The strategic plan outlines the importance of collecting data across populations, goals, quality patient outcomes through value-based care, and strategies for interoperable data exchange. The plan encourages collaborative efforts of health care professionals and community-based organizations using technology to

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2 Social determinants of health; Health Equity. World Health Organization. Accessed May 9, 2023. https://www.who.int/topics/health_equity/en/

3 Disparities. Healthy People 2020, U.S. Office of Disease Prevention and Health Promotion. Accessed Many 9, 2023. https://wayback.archive-it.org/5774/20220414003754/https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities

4 "The Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020; Phase I Report: Recommendations for the Framework and Format of Healthy People 2020," Section IV, pages 19-36. U.S. Department of Health and Human Services, October 28, 2008. Accessed May 12, 2023. https://wayback.archive-it.org/5774/20220415232534/https://www.healthypeople.gov/sites/default/files/PhaseI_0.pdf

5 Social determinants of health; Overview. World Health Organization. Accessed May 9, 2023. https://www.who.int/topics/health_equity/en/

exchange SDOH information and track public health activities directed at remediation of health inequities among underserved rural populations and minority individuals of color. As a result, the hope is that the U.S. will experience decreased costs and improved health outcomes for individuals at the intersection of poverty, and health and social disparities. Access to health IT supports stakeholders' roles in performing disease surveillance, case reporting and management, laboratory testing, clinical data collection, and outcomes reporting.[6]

One of the strategic objectives of the federal government is to mitigate many health care challenges facing the U.S. today. These challenges include higher health care spending, poor health outcomes, increased rates of mental illness and substance use disorders, and inconsistent access to health care professionals, health care, technology, clean and affordable housing, safe community environments, and nutrition. Health IT is one of the tools that supports a more interoperable health care system and systematic remediation of disparities that exist where people live, work, and play.[7] The advent of value-based care provides incentives for greater improvement in SDOH, population health, preventative care, and disease and medication management.[8] Provision of person-centered health care and human services is facilitated by bidirectional sharing and access to integrated health care data among public health providers. The current lack of standardization in human services data is a deterrent to sharing integrated data among state, territorial, regional, local agencies, and tribes.[9] Standardization and integration of data fosters more efficient collaboration between agencies.[10] The vast amount of information currently available through smartphone technology, devices, and health applications can be contextualized for public health officials and health care providers to inform the development of public programs and address SDOH in underserved populations. Safe, secure sharing of these standardized data will enable researchers, health care providers, payers, and governmental agencies to improve health care through innovation and collaboration.[11]

Pharmacists can play an important role in assessing patients' SDOH issues and capturing SNOMED codified data in interoperable standards.

Pharmacists can play an important role in assessing patients' SDOH and capturing SNOMED codified data in interoperable standards (e.g., Pharmacist eCare Plan). It's important for care coordination for the patient to identify a primary care provider within the care team to manage care coordination for the pharmacist eCare Plan to be effective. As pharmacists assess and capture SDOH inequities through the patient care process, the codified data should be exchanged using health IT standards (e.g., pharmacies with electronic health records (EHR)connectivity, health information exchanges (HIEs), and health information networks (HINs)). To help pharmacists further improve medication use quality, the Pharmacy Quality Alliance (PQA) is developing pharmacy quality measures for SDOH.[12]

One way in which pharmacists, by their frequent access to patients (e.g., medication reconciliation or counseling), can capture, better understand, and act on SDOH issues is by using and completing the PRAPARE® Questionnaire. This clinical SDOH data may be codified and shared in an interoperable way with payers and other members of the health care team. The codified data may feed into SDOH registries, allowing public health agencies and the government to identify areas of health disparity and resolve health inequities.

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6 "2020-2025 Federal Health IT Strategic Plan,"p. 7. The Office of the National Coordinator for Health Information Technology, Office of the Secretary, U.S. Department of Health and Human Services, October 2020. Accessed May 12, 2023. https://www.healthit.gov/sites/default/files/page/2020-10/Federal%20Health%20IT%20Strategic%20Plan_2020_2025.pdf

7 Ibid., p. 9.

8 Ibid., p. 15.

9 Ibid., p. 23.
10 Ibid., p. 23.
11 Ibid., p. 29.
12 PQA Social Determinants of Health Resource Guide Second Edition. PQA Social Determinants of Health Resource Guide Second Edition, Pharmacy Quality Alliance, 2023.

5. DISCUSSION

The federal government has developed the United States Core for Interoperability (USCDI), which is a standardized set of health data classes and data elements (minimum data set) for nationwide, interoperable health information exchange. Pharmacists and pharmacy systems should include areas identified in USCDI version 3 (see Table 1). Some pharmacy systems use standard SDOH codification, while others may need to work with their vendors to have these included. When the government identifies the USCDI version within regulations, there will be updates and newer versions for consideration. As of July 2022, USCDI v3 is the latest published version and contains standard vocabulary for SDOH. USCDI v3 SDOH data classes identify four elements and the standard vocabulary linked to each element. Table 1 outlines the data class, data elements, descriptions, and terminology standards for SDOH within USCDI v3.

This clinical documentation of SDOH data can be codified and shared in an interoperable way with payers and other members of the health care team.

TABLE 1

Data Class	SDOH Data Element	Data Element Description	Applicable Vocabulary Standard(s)
Assessment and Plan of Treatment (Health professional's conclusions and working assumptions that will guide treatment of the patient.)	SDOH Assessment	Screening questionnaire-based, structured evaluation (e.g., PRAPARE, Hunger Vital Sign, AHC-HRSN screening tool) for a Social Determinants of Health-related risk. (e.g., food insecurity, housing instability, or transportation insecurity).	• Logical Observation Identifiers Names and Codes (LOINC®) version 2.72 Optional: SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2022 Release
Goals (Desired state to be achieved by a patient.)	SDOH Goals	Desired future states (e.g., food security) for an identified Social Determinants of Health-related health concern, condition, or diagnosis. (e.g., food insecurity)	• SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2022 Release • Logical Observation Identifiers Names and Codes (LOINC®) version 2.72

Source: USCDIv3 https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi#uscdi-v3, accessed May 15, 2023.

USCDI v3 SDOH data classes identify four elements and the standard vocabulary linked to each element.

Data Class	SDOH Data Element	Data Element Description	Applicable Vocabulary Standard(s)
Problems (Condition, diagnosis, or reason for seeking medical attention.)	SDOH Problems/ Health Concerns	Social Determinants of Health-related health concerns, conditions, or diagnoses. (e.g., homelessness, food insecurity)	• SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2022 Release • International Classification of Diseases ICD-10-CM 2022
Procedures (Activity performed for or on a patient as part of the provision of care.)	SDOH Interventions	Actions or services to address an identified Social Determinants of Health-related health concern, condition, or diagnosis (e.g., education about food pantry program, referral to non-emergency medical transportation program)	• SNOMED International, Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT®) U.S. Edition, March 2022 Release • Current Procedural Terminology (CPT®) 2022, as maintained and distributed by the American Medical Association, for physician services and other health care services • Health care Common Procedure Coding System (HCPCS) Level II, as maintained and distributed by HHS.
Source: USCDIv3 https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi#uscdi-v3, accessed May 15, 2023.			

Pharmacists have a role in assessing and sharing SDOH information with the care team, using standardized vocabulary in an interoperable way. Pharmacists represent the most accessible point of entry to our health care system nationwide. This frequent access puts pharmacists in the unique position to assess SDOH medication-related concerns. Examples of medication-related SDOH indicators are: no refrigerator when refrigerated medications are prescribed; the patient is unable or has challenges with transportation to pick up their prescriptions; the patient does not have funds to purchase their medications or afford their co-pay; a patient with diabetes does not have access to foods to help control their diabetes.

Pharmacists provide holistic clinical services that prevent adverse drug events, misuse of medications, and prevention and management of chronic diseases. Assuring pharmacists capture codified SDOH assessments, interventions, outcomes, and goals data will help payers, providers, caregivers, and patients manage chronic conditions and optimize medication use. Opportunity exists for pharmacists to be recognized and reimbursed for services related to assessments, interventions, and outcomes.

THE ROLE OF PHARMACISTS IN SDOH

The role of pharmacists in SDOH is further described in the following topics: Annual Wellness Visits (AWV) for Medicare beneficiaries, maternal health, and multiple chronic conditions (MCC) eCare Plan. These unique clinical settings and patient circumstances represent a depth and breadth of opportunities for pharmacists' influence on social disparities.

ANNUAL WELLNESS VISIT

Medicare reimburses health care providers for beneficiaries' annual wellness visits after they have the patient complete the AWV Health Risk Assessment questionnaire, which includes SDOH assessments.[13] Medicare and AWV have questions related directly to SDOH include:

- Barriers to Care: Affording medications, transportation/driving to appointments, increased stress in your life, other.
- Nutrition: Type of diet.
- Living Situation: Who lives with you, who can you call for help?
- Speciality Providers: Access to specialists.

Pharmacists are ideally positioned to identify and correct the linkage between mothers and their children and align them with necessary health and wellness.

These aspects of the AWV interview can be documented by pharmacists during their usual workflow. While interviewing patients and documenting demographic and clinical characteristics, pharmacists can include inequities related to the patient's inability to afford their medications, lack of access to transportation, and food deserts in selected urban or rural areas where nutritionally rich food is unavailable or priced out-of-reach for the individual. Further, documentation of the next of kin, family caregivers, or neighbors should occur as emergency contacts. If the individual has a clinical condition treated by a specialty provider, pharmacists can document this information in their SDOH workflow. Because of the repeated access to patients, pharmacists are well-positioned to identify and monitor SDOH and contribute to and document solutions, where appropriate.

Pharmacists who work in outpatient clinics or provider offices can schedule return visits with patients when remedies for health disparities are identified, such as provision of transportation, access to food vouchers, or appointments with specialty providers.

MATERNAL HEALTH

Establishment of industry standards is a goal outlined in the Fast Healthcare Interoperability Resource (FHIR) Implementation Guide (IG) for Longitudinal Maternal and Infant Health Information for Research. Through testing of multiple use cases, issues such as linking multiple children to a single patient and pulling in supplemental data like SDOH, were revealed. Pharmacists are ideally positioned to identify and correct the linkage between mothers and their children and align them with necessary health and wellness services. The National Alliance of State Pharmacy Associations (NASPA) developed a Maternal Health Services Set Toolkit for Pharmacists. The toolkit emphasizes the importance of interventional opportunities, such as referrals to social services (e.g., food banks and transportation). The role for the pharmacist is to gather patient consent and document through structured clinical coding for SDOH. The standards for maternal health documentation follows SDOH USCDI v3 (Assessments, Goals, Problems/Health Concerns, and Interventions). It also follows the US Core Implementation Guide – SDOH Guidance.

13 https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/preventive-services/medicare-wellness-visits.html

MCC eCARE PLAN SDOH GUIDANCE

According to Health Level 7 (HL7) standard MCC eCare Plan the SDOH Guidance, SDOH activities describe the differences between U.S .Core Profiles and their corresponding MCC profiles. The linkages between profiles represent the care planning process of assessing individuals to identify conditions or health concerns and the activities, goals, and desired outcomes associated with given conditions. The description and supporting diagram (Figure 1) shows the care planning process with an SDOH view and describes the profiles used to represent the SDOH concepts.

- SDOH Assessment: Assessments represent the recording of SDOH assessment screening tools and other questionnaires, as well as individual clinical observations. These assessments are represented by the MCC Observation Social History profile derived from the US Core Observation Social History Profile and the MCC Observation Survey Profile derived from the US Core US Core Observation Survey Profile.
- SDOH Problems/Health Concerns: Identifying an SDOH-related condition (e.g., being unhoused) is represented by the Multiple Chronic Condition Care Plan Chronic Disease Conditions derived from US Core Condition Problems and Health Concerns Profile.
- SDOH Interventions: Services offered to a patient to address identified SDOH problems/ health concerns (e.g., referral to transportation support programs) are represented by the MCC profile derived from US Core ServiceRequest Profile. In addition, the Multiple Chronic Condition Care Plan Procedure derived from US Core Procedure Profile can be used to record a completed service or intervention.
- SDOH Goals: Identifying and defining a future desired condition or change in condition related to an SDOH risk (e.g., has adequate quality meals and snacks) is represented by the Multiple Chronic Condition Care Plan Goal derived from the US Core Goal Profile.

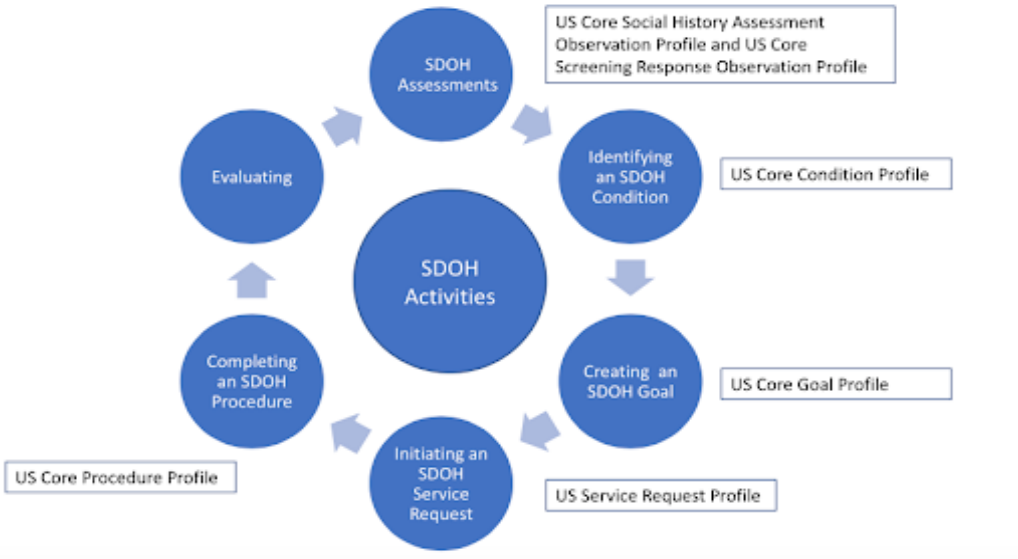

Figure 1 Source: HL7 https://build.fhir.org/ig/HL7/fhir-us-mcc/branches/master/mcc_care_plan_sdoh_guidance.html.

SDOH STANDARD CODES

The National Library of Medicine (NLM) Value Set Authority Center (VSAC) is a publicly available site where groups of codes, as value sets, can be added to clinical documentation workflow in pharmacy systems by vendors. The Pharmacy Health Information Technology Collaborative (PHIT) SDOH Value Set contains 31 SNOMED CT codes. The Gravity Project has three value sets, containing a total of 192 codes (3 CPT Codes, 24 SNOMED CT codes, and 165 ICD-10 and SNOMED CT codes). In addition, there are value sets for SDOH ICD-10 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.). See Additional Resources section for examples of specific codes.

The choice of terminology standard is based on the requirements of the receiver of the codes. For example, if a payer is reimbursing the clinician for SDOH, they may want an ICD-10 Z code in a medical claim, whereas a care team member may use a SNOMED code for an SDOH assessment. Three health plans provided information for their providers to receive reimbursement for SDOH activities (see Appendix 2 to obtain details). Figures 2 and 3 depict the use of Z codes.

FIGURES 2 & 3

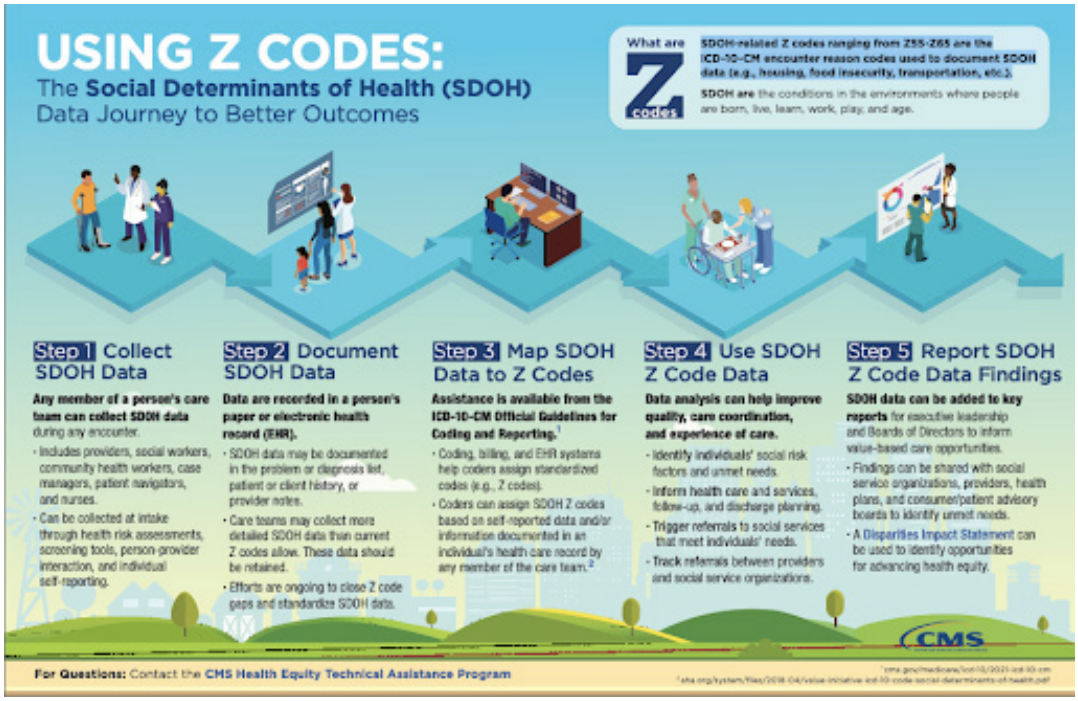

Figure 2 Source: CMS SDOH ICD-10 Z Codes https://www.cms.gov/files/document/zcodes-infographic.pdf.

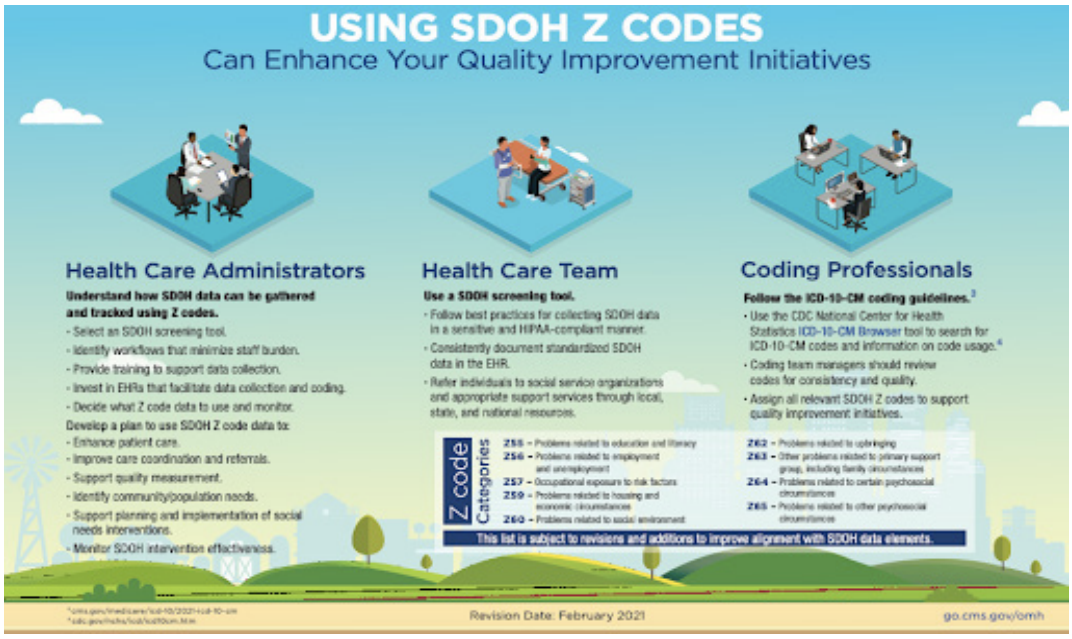

Figure 3 source: CMS SDOH ICD-10 Z Codes https://www.cms.gov/files/document/zcodes-infographic.pdf.

Identification of these inequities underscores the importance of following the pharmacist patient care process and incorporating SDOH into each element of that process. The pharmacist's use of SDOH information can also improve the pharmacist patient care process.

RECORDING SDOH IN RELATIONSHIP TO HEALTH DISPARITIES

Ongoing research links SDOH to health disparities. Identifiable SDOH inequities include lack of access to transportation for medical appointments or picking up medications, unsafe water, air pollution, lack of access to health care providers and specialists, food deserts, lack of safe space for exercising, distance from social resources, and lack of support by agencies of advocacy. Identification of these inequities underscores the importance of following the pharmacy profession's recognized pharmacist patient care process and incorporating SDOH into each element of that process.

Although sharing SDOH information with the care team is important, the pharmacist's use of SDOH information can also improve the pharmacist patient care process (e.g., recommending a dosage frequency change from four times daily to once daily).

PQA outlines several use cases for pharmacists' SDOH interventions and the outcomes of those interventions in its PQA Social Determinants of Health Resource Guide Second Edition. The PQA guide is categorized by the type of intervention, health care setting, and scope. Several programs outlined in the PQA guide were either led by pharmacists or focused on pharmacist collaborative activities with other health care partners, payers, and colleges of pharmacy. Noteworthy examples summarized on the next page are based on the programs outlined in the PQA guide.

COMMUNITY PHARMACIES[14]

Incorporation of SDOH into medication therapy management services occurred through a collaboration between Humana and OutcomesMTM.

SDOH screening was performed in community pharmacies across the United States to elicit individuals' access to decent, safe, and affordable housing, food security, social isolation, transportation, and other unmet needs. In over 17,000 pharmacist SDOH screenings conducted between November 15-December 31, 2019, with Humana Advantage members, food insecurity

14 PQA Social Determinants of Health Resource Guide Second Edition (January 2023), pgs. 60-3, 66-67. Accessd May 19, 2023.

(12.5%), social isolation (18%), and transportation challenges (11.2%) were the most prevalent SDOH. Through enrollment in the service, statistically significant increases in medication adherence were reported in up to 80% of patients with depression or COPD. Patients who completed the SDOH screening had an average $1,500 decrease in medical spending (statistically significant), while pharmacy spending increased $500. Pharmacists recorded their interventions in the OutcomesMTM digital platform, which codified responses.

Two other SDOH programs performed screening through community pharmacies. The Specialty Community Pharmacies in New York identified and referred individuals to address their transportation needs (21.5%) and provide financial assistance with daily needs (48.5%). Following specialized SDOH training, pharmacy technicians and delivery drivers performed the screening then made referrals to case managers. Documentation of interventions occurred in a regional organization's, Independent Practice Association, technology platform.

The Community Pharmacy Enhanced Services Network of Missouri, in conjunction with the Missouri Department of Health, used community pharmacies' SDOH trained delivery drivers to perform initial SDOH screening with subsequent referral to community health workers to perform follow-up. Over half of the patients screened had SDOH challenges that included affordability of daily needs (56.3%) and concerns navigating the health system (37.5%). Participants underwent blood pressure assessment (87.5%), chronic disease management (25%), and received vaccinations (25%) in addition to having SDOH challenges addressed.

PHARMACIST OUTREACH IN BARBER SHOPS AND CHURCHES [15]

Three innovative programs were conducted through the cooperation between community barber shops, churches, schools of pharmacy, and university health systems. Based on previous pilot data that showed the success of health engagement with Black men by taking the services to them in their communities where they receive services weekly, Cedar Sinai Medical Center, Vanderbilt University Medical Center, and the University of Illinois Hospitals and Health Sciences System implemented SDOH screening, blood pressure monitoring, and vaccination services. These programs demonstrated a five-fold average improvement in blood pressure control (Cedar Sinai, Vanderbilt) and expanded access to COVID-19 vaccines by parking a mobile unit in church parking lots. These approaches address transportation challenges and establish trust within the community, thereby facilitating access to health care services for racial minorities who might otherwise not receive care.

ACCESS TO MEDICATION IN RURAL COMMUNITIES[16]

The Faith Family Medical Center and Lipscomb University College of Pharmacy, as well as the Dispensary of Hope collaboration with St. Thomas Health, in Nashville, Tennessee, established programs to provide access to medication through pharmacist-led initiatives. Pharmacists are working through charitable organizations and with pharmaceutical manufacturers to acquire low-cost or donated medicines for rural , largely minority, marginalized communities. As a result of their interventions, Saint Thomas Health decreased inpatient utilization (37%), decreased the average cost per case (20%), and decreased the average length of stay (19%) for patients in their service area. Pharmacists working with the Faith Family Medical Center increased access to medications for under- and uninsured patients using discount pharmacies, samples, coupons, therapeutic medication switching, and patient assistance programs. In this pharmacist-led initiative, an estimated $3.5 million in high-cost medications was provided to patients in 2021.

15 Ibid., pgs. 10-11, 46-49, 64-65.
16 Ibid., pgs. 14-15.

6. CONCLUSION

This document is a comprehensive summary of SDOH services that pharmacists can provide and document in a codified way, with use cases showing the value of pharmacists involvement in SDOH. It is important to understand the relationship of SDOH data to identify where health disparities are occurring and how the government can level health equity.

In addition to the value of accurate coding of SDOH for reporting purposes, pharmacists by virtue of their involvement in the community, clinical skills, caring values, and frequency of longitudinal touchpoints, can affect social change for their patients. Assessments during transitions of care, medication reconciliation, or individualized patient encounters can be coded using ICD-10Z, LOINC, or SNOMED CT codes. The profession of pharmacy can leverage health IT to improve provider productivity and share SDOH data interoperably.

Real-world testing of intervention codes, occurring as a focus of the Office of the National Coordinator of Health Information Technology (ONC) Gravity Project, will facilitate exchange of SDOH information, while assuring individual privacy, safety, security, and accountability for patient records.

In the future, specific SDOH criteria will be applied to optimize patient conditions, e.g., indoor air quality for patients with COPD; air filtration systems to eliminate airborne infectious microbes; assuring refrigeration is available when needed for medication storage; making sure appropriate food is available for diabetic and hypertensive patients. Additional coding for population health is planned to augment standardized documentation for health professionals, including pharmacists who intervene across populations to improve health and wellness. The pharmacy profession should encourage pharmacists to document SDOH assessments, interventions, and outcomes across all practice settings, using standard codified terminology to improve patient and population health.

It is important to understand the relationship of SDOH data to identify where health disparities are occurring and how the government can level health equity. The profession of pharmacy can leverage health IT to improve provider productivity and share SDOH data interoperably.

7. RESOURCES

2020-2025 Federal Health IT Strategic Plan, Office of the National Coordinator, U.S. Department of Health and Human Services. Federal Health IT Strategic Plan_2020_2025.pdf.

APhA Social Determinants of Health: https://pharmacist.com/sdoh.

ASHP Statement on the Pharmacist's Role in Public Health. https://www.ashp.org/-/media/assets/policy-guidelines/docs/statements/role-of-health-system-pharmacists-in-public-health.ashx.

CDC and the U.S. Department of Health and Human Services (HHS) Office of Minority Health developed the Minority Health Social Vulnerability Index (SVI) Explorer to enhance existing resources to support the identification of racial and ethnic minority communities at greatest risk for disproportionate impact and adverse outcomes due to the COVID-19 pandemic. Given evidence on common factors contributing to social vulnerability, the MH SVI could potentially be applied to other public health emergencies.

CDC SDOH Z: https://www.cdc.gov/nchs/data/icd/social-determinants-of-health.pdf.

CDC/ATSDR Social Vulnerability Index (CDC/ATSDR SVI) https://www.atsdr.cdc.gov/placeandhealth/svi/index.html.

CMS Data element library: https://del.cms.gov/DELWeb/pubHome.

CMS Issues New Roadmap for States to Address the Social Determinants of Health to Improve Outcomes, Lower Costs, Support State Value-Based Care Strategies, January 7, 2021 https://www.cms.gov/newsroom/press-releases/cms-issues-new-roadmap-states-address-social-determinants-health-improve-outcomes-lower-costs.

CMS Health-Related Social Needs (HRSN). https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf.

Diabetes & Social Determinants of Health, Flip the Pharmacy. https://www.flipthepharmacy.com/diabetes-sdoh. Accessed May 23, 2023. "One example of a step-wise approach to implementing these services is a diabetes checklist to assist with patient assessment and education of treatment goals, such as A1c and blood glucose measurements. The progression also provides information to identify SDOH in patients (e.g., food security, house stability, transportation access, financial stability) and reviews ways to address SDOH during the workflow process."

Gravity Project HL7 https://www.hl7.org/gravity/.

Health Equity: Social Determinants of Health, Oxford Academic. https://academic.oup.com/journals/pages/health-equity-sdoh?utm_content=mainstory%2Bcta&utm_source=adestra&utm_medium=email&utm_term=Researcher%20Medicine&utm_campaign=oupac-campaign%3A1446887720209822768. Accessed May 23, 2023.

Health Level 7 (HL7) SDOH Clinical Care.

ICD-10-CM Coding for Social Determinants of Health: https://www.aha.org/system/files/2018-04/value-initiative-icd-10-code-social-determinants-of-health.pdf.

Improving research on integrating social and medical care integration. https://sirenetwork.ucsf.edu/.

Kyles, Tyler M., Borja-Hart, Nancy, et al., "Screening for social determinants of health in community pharmacy: Identifying best practices, barriers, and strategies for success," Journal of the American Pharmacists Association, Vol. 61, Issue 5, September-October 2021, https://www.sciencedirect.com/science/article/abs/pii/S1544319121001862. Accessed May 31, 2023.

Lenel, James; Buchanan, Silas, "Collaboration is Key to Address Social Determinants of Health," ICD10 Monitor, March 21, 2022. https://icd10monitor.com/collaboration-is-key-to-address-social-determinants-of-health/. Accessed May 23, 2023.

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8. APPENDIX

APPENDIX 1

APhA House of Delegates 2021 Policy on Social Determinants of Health.

1. APhA supports the integration of social determinants of health screening as a vital component of pharmacy services.

2. APhA urges the integration of social determinants of health education within pharmacy curricula, post-graduate training, and continuing education requirements.

3. APhA supports incentivizing community engaged research, driven by meaningful partnerships and shared decision-making with community members.

4. APhA urges pharmacists to create opportunities for community engagement to best meet the needs of the patients they serve.

5. APhA encourages the integration of community health workers in pharmacy practice to provide culturally sensitive care, address health disparities, and promote health equity.

Topic: Education, Curriculum And Competence For Pharmacy (JAPhA. 2021; 61:e16).

APPENDIX 2

EXAMPLES OF PAYER'S SDOH ICD-10 Z CODES

BCBS Illinois https://www.bcbsil.com/pdf/clinical/ICD-10_Z_codes_flier.pdf.

Anthem https://providers.anthem.com/docs/gpp/VA_CCC_SocialDeterminantsofHealthFlier.pdf?v=202103030017.

United HC https://www.uhcprovider.com/content/dam/provider/docs/public/policies/protocols/Social-Determinants-of-Health-Protocol.pdf.

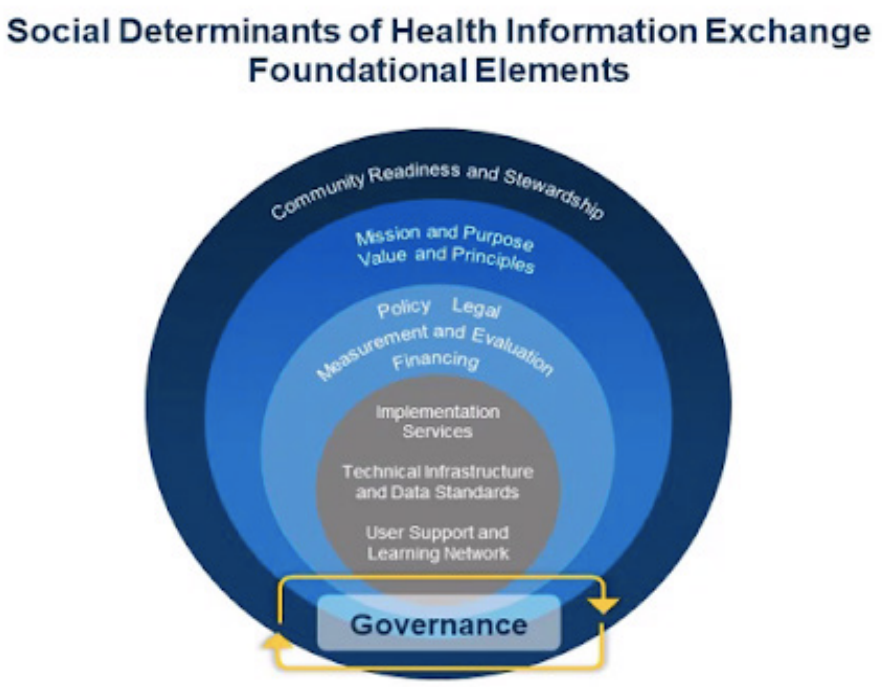
APPENDIX 3

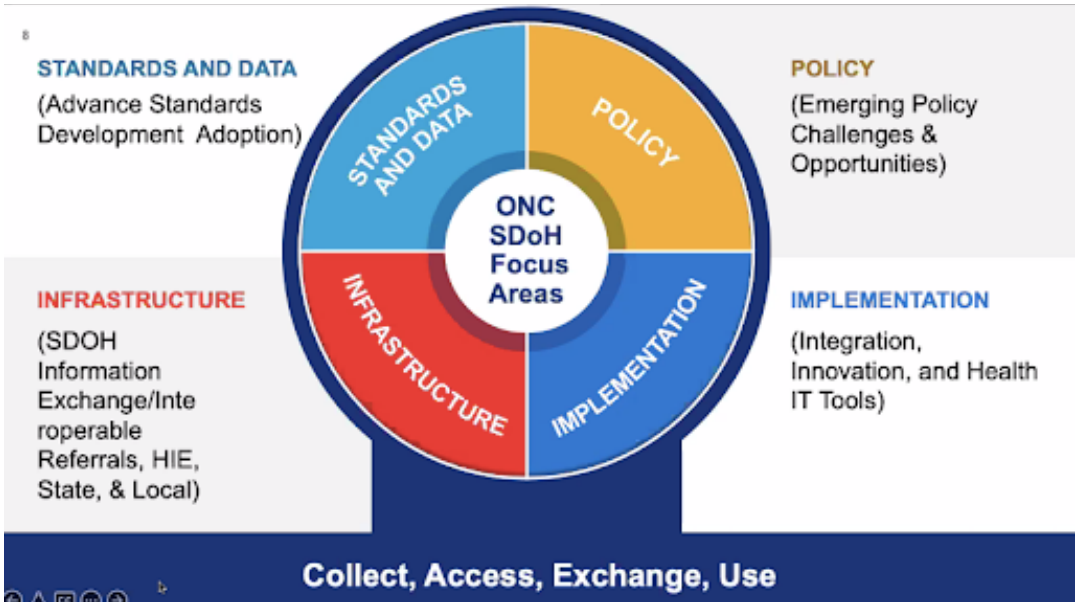
NLM VSAC SDOH

Social Determinants of Health Conditions	ICD10CM SNOMEDCT	Grouping	The Gravity Project	2.16.840.1.113762.1.4.1196.788	165
Social Determinants of Health General Interventions CPT	CPT	Extensional	The Gravity Project	2.16.840.1.113762.1.4.1247.8	3
Social Determinants of Health General Interventions SNOMEDCT	SNOMEDCT	Extensional	The Gravity Project	2.16.840.1.113762.1.4.1247.5	24
Social Determinants of Health Problem Observation	SNOMEDCT	Extensional	PharmacyHIT	2.16.840.1.113762.1.4.1096.224	31

Source: https://vsac.nlm.nih.gov/welcome.

APPENDIX 4





Source : ONC's Social Determinants of Health Information Exchange Learning Forum, February 23 and March 28, 2023. https://www.healthit.gov/news/events/oncs-social-determinants-health-information-exchange-learning-forum.

APPENDIX 5

PHARMACISTS' PATIENT CARE PROCESS

The figure depicts a proposed standardized pharmacist patient-centered collaborative care process for pharmacists providing medication therapy management (MTM) services.[17] The pharmacists' patient care process described in this illustration was developed by examining a number of key source documents on pharmaceutical care and MTM. Patient care process components in each of these resources were cataloged and compared to create the following process that encompasses a contemporary and comprehensive approach to patient-centered care that is delivered in collaboration with other members of the health care team.

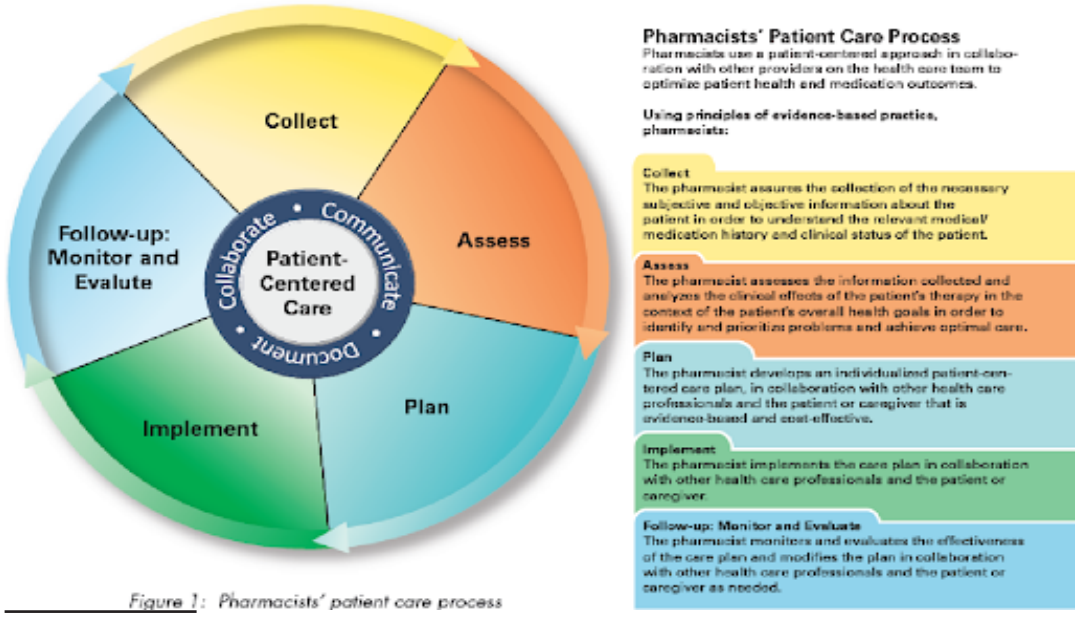


Figure 1: Pharmacists' patient care process

17 https://www.accp.com/docs/positions/misc/JCPP_Pharmacists_Patient_Care_Process.pdf.)

10. ACKNOWLEDGEMENTS

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