

Tucker-Seeley Lab

Social Determinants of Health

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**HEALTH
EQUITY
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Introduction

- ***Social determinants of health (SDOH):***
 - conditions in which we are born, live, learn, work, play, worship, and age that affect our health, functioning, and quality-of-life outcomes and risks for disease. (*Healthy People 2020*)
 - ...and “the fundamental drivers of these conditions” (*WHO*)
 - the interrelated social, economic, and environmental factors that shape health inequity in the United States, like income and wealth or employment (*National Academy of Medicine, Communities in Action Report*)
 - “Social determinants of health refer to both specific features of and pathways by which societal conditions affect health and that potentially can be altered by informed action” (Krieger, 2001)

Sources: <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>

1. Braveman, P., & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public health reports* (Washington, D.C. : 1974), 129 Suppl 2(Suppl 2), 19–31.
2. National Academies of Sciences, Engineering, and Medicine. (2017). *Communities in action: Pathways to health equity*.
3. Krieger, N. (2001). A glossary for social epidemiology. *Journal of Epidemiology & Community Health*, 55(10), 693-700.

Key Terms

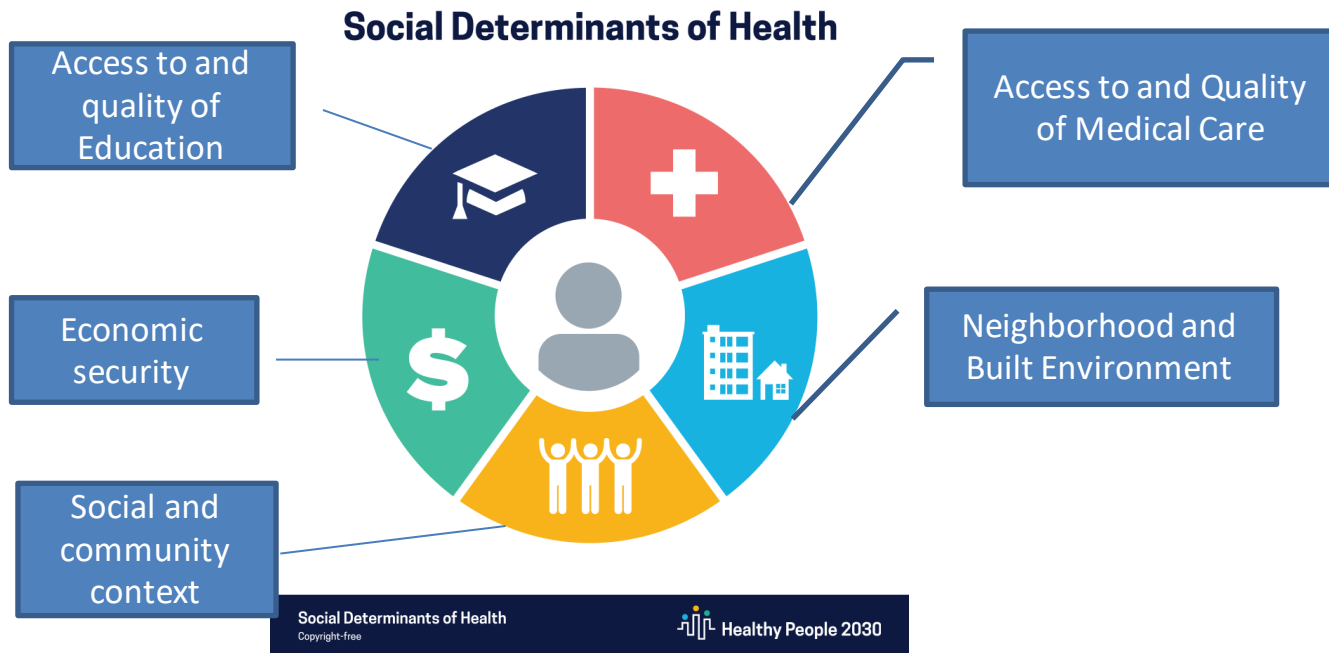
Term	Definition
Social determinants of health (SDOH)	The nonmedical factors that influence health outcomes, research participation, and how cancer care is navigated by patients and families. SDOH are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaped by the distribution of money, power, and resources at global, national, and local levels.
Social risks	“Specific adverse social conditions that are associated with poor health, like social isolation or housing instability.” ¹¹
Social needs	Self-reported patient social care needs that are impacting the patient’s health, ability to participate in research (eg, clinical trials), and how the patient is navigating cancer care.

Source: Tucker-Seeley and Shastri, Integrating Social Care Into Cancer Care Delivery: Are We Ready? ASCO Daily News June 2022 (link: <https://dailynews.ascopubs.org/doi/integrating-social-care-into-cancer-care-delivery-we-ready>)

Background

- There have been many calls for the healthcare delivery system to tackle the social determinants of health (SDOH) to reduce healthcare costs and to facilitate efficient health care utilization.
 - A focus on SDOH recognizes that health does not only happen in a doctor's office, but our health is created where we live, learn, work, play, and age.

Healthy People Social Determinants of Health Framework



Source: Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved [accessed: June 4], from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>

SDOH across the cancer continuum

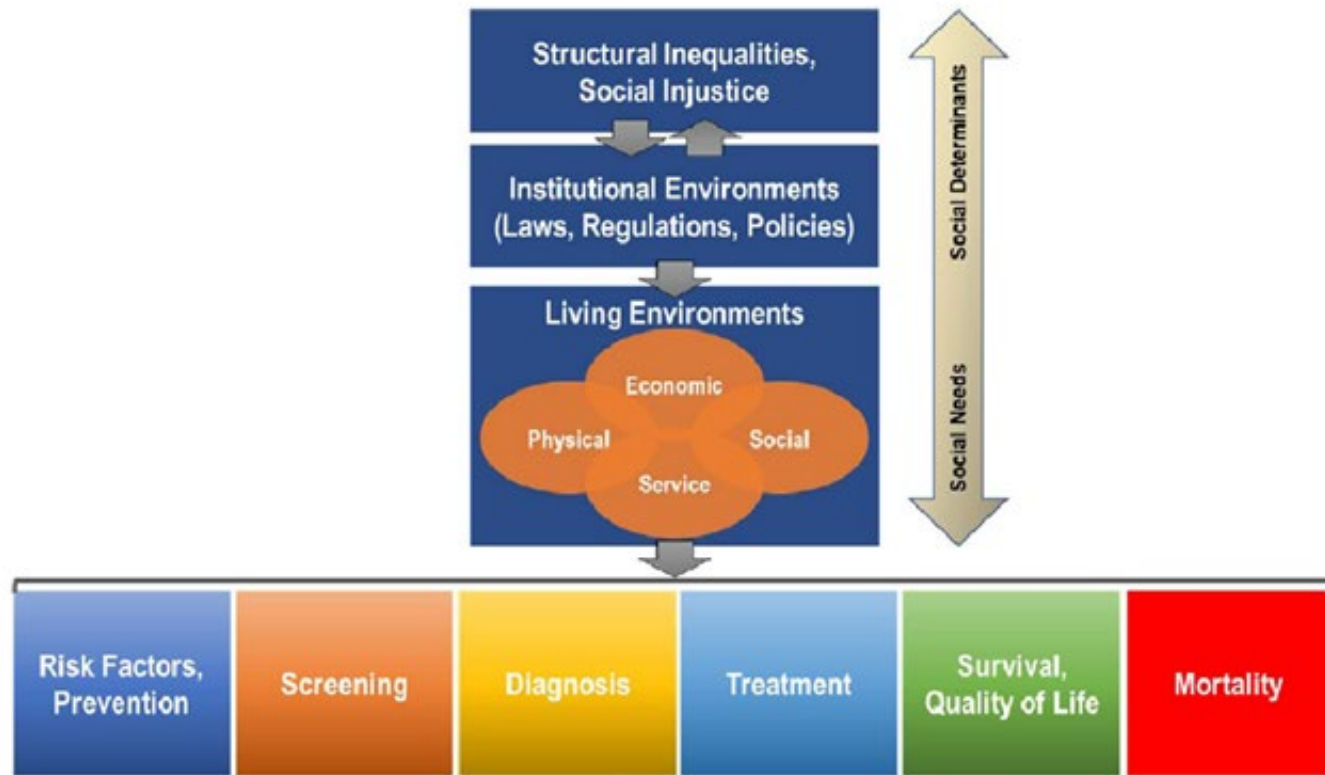


FIGURE 1. Social Determinants of Health and Cancer Disparities.

Source: Islami, F., Guerra, C.E., Minihan, A., Yabroff, K.R., Fedewa, S.A., Sloan, K., Wiedt, T.L., Thomson, B., Siegel, R.L., Nargis, N. and Winn, R.A., 2021. American Cancer Society's report on the status of cancer disparities in the United States, 2021. CA: a cancer journal for clinicians.

SDOH Impact on Cancer Care

- We know that there are substantial differences in the environments in which individuals are born, grow, live, work, and age. These are the differences that then accompany us when entering/navigating healthcare generally, and cancer care specifically.
- The impact of SDOH manifests as individual social needs, which can present in the clinical setting as financial hardship (financial toxicity), food insecurity, housing insecurity, and transportation needs.
- The disproportionate distribution of these social needs across demographic groups influence the disparities we see in clinical outcomes.

Social Determinants of Health operationalized as Patient Social Needs

TABLE 1. SDOH and Social Needs to Screen Based on Healthy People 2030

SDOH	Examples of Social Needs to Screen
Neighborhood and built environment	Crime and exposure to violence Access to food Transportation resources
Health and Health care	Usual source of care Access to primary care Health literacy
Social and community contexts	Experiences of discrimination Social isolation and loneliness Social support
Education	High school graduation Language and literacy
Economic stability	Financial hardship (financial toxicity) Food insecurity Housing instability

Abbreviation: SDOH, social determinants of health.

Integrating social care in healthcare

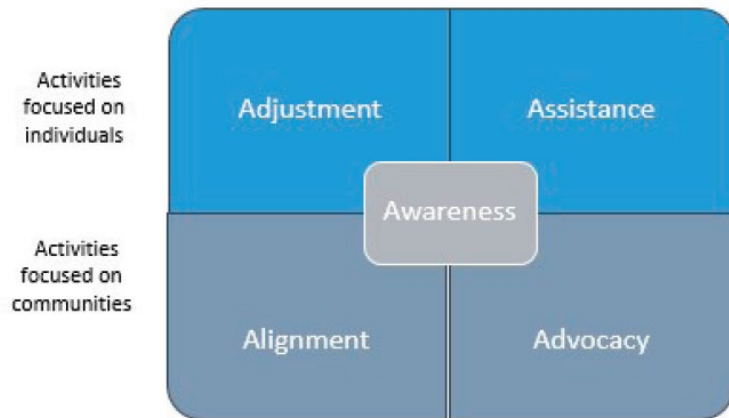


NEJM
Catalyst | Innovations in Care Delivery

IN DEPTH

A Formative Evaluation of Social Care Integration Across a Safety-Net Health System

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A Framework for the Integration of Social Care with Health Care at the Individual Patient Level

This depicts how the screen-navigate-connect-address-evaluate framework describes the steps by which social care is operationalized. Note that this is a continuous cycle.

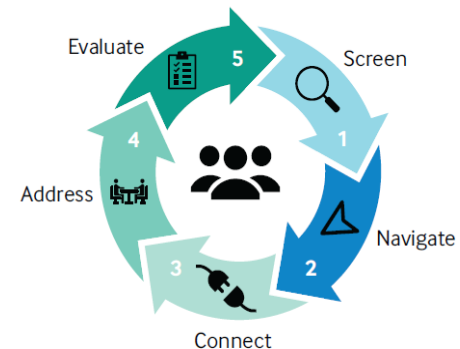


FIGURE S-1 Health care system activities that strengthen social care integration.

Source: National Academies of Sciences, Engineering, and Medicine: Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health. Washington, DC: National Academies Press, 2019

Social needs vs. SDOH

- “...health care navigators and similar enhancements to health care can’t actually change the availability of resources in the community. They can’t raise the minimum wage, increase the availability of paid sick leave, or improve the quality of our educational system. These are the systemic changes that are necessary to truly address the root causes of poor health.” (Castrucci & Auerbach, 2019)

Social Determinants of Health and Z-Codes

- Z-codes are a group of ICD-10-CM codes that capture a very broad range of social determinants of health that used by researchers, health systems, and payers to capture patient social needs
- Z-codes are vastly underutilized
- Barriers to Z-code utilization exist across multiple levels (individual, health systems, and policy)
- Payment/reimbursement pathway unclear

Source: <https://www.cms.gov/files/document/z-codes-data-highlight.pdf>; <https://www.cms.gov/files/document/zcodes-infographic.pdf>

SDOH and Aging

- “Older adults with lower incomes are more likely to have disabilities and die younger.¹ In addition, disability is likely to start earlier in life for people with lower incomes — further raising the risk of early mortality.²
- Social isolation and loneliness are associated with a higher risk of dementia and other serious health problems in older adults — while having positive social relationships can help people live longer, healthier lives.³
- About 8 in 10 older adults struggle to use medical documents like forms or charts,⁴ which could make it harder for them to make well-informed health decisions.
- Most older adults in the United States have at least 1 chronic health condition,⁵ making access to affordable, quality health care a priority.
- As mobility decreases with age,⁵ accessible neighborhoods and a built environment with convenient access to grocery stores and safe places to get active become increasingly important. “(source: <https://health.gov/our-work/national-health-initiatives/healthy-aging/social-determinants-health-and-older-adults>)

Sources: 1. Mode, N. A., Evans, M. K., & Zonderman, A. B. (2016). Race, neighborhood economic status, income inequality and mortality. PLoS ONE, 11(5), e0154535. 2. Brady, D., Kohler, U., Zheng, H. (2023). Novel Estimates of Mortality Associated With Poverty in the US. JAMA Intern Med, 183(6):618–619. 3. National Academies of Sciences, Engineering, and Medicine. (2020). Social isolation and loneliness in older adults: Opportunities for the health care system. Washington, DC: The National Academies Press. 4. National Center for Education Statistics. (2006). The health literacy of America’s adults: Results from the 2003 National Assessment of Adult Literacy. 5. Administration for Community Living. (2022). 2021 profile of older Americans.

Summary

- Social determinants of health are multifactorial and operate at multiple levels across the lifecourse.
- The successful implementation and sustainability [of a screen-navigate-connect-address-evaluate framework]....will require input from multiple stakeholders, such as patients, health care providers (ie, primary care and specialty care), payers, as well as social service and community-based organizations. (Tucker-Seeley & Shastri, 2022)
- Social needs screening might already be happening in the clinical setting, but may not be standardized, resourced appropriately, or adequately communicated across the system. Building on this, rather than adding a separate layer may facilitate provider buy-in.
- “Appoint leadership that has decision-making authority and operational know-how to coordinate, monitor, and evaluate social care delivery.” (Taira, et al, 2023)

Concluding Questions

- What does an equitable healthcare/cancer care delivery system look like?
- What are the tools that patients and their families need to not only expect, but get equity when we are navigating the healthcare/cancer care delivery system?

ASCO SDOH Resources

- **SDOH Podcasts:**

- Season 1 (Launched in Fall 2020):

https://www.youtube.com/playlist?list=PLwVG_3RvChvHULyE_fc5IFGxbOg11WTZ

- Topics include “social determinants and cancer care”; “taking a social history” and “understanding the costs of care”
- Season 2: (Launched in May 2023)
 - Implemented by the ASCO SDOH Task Force and topics include perspectives from physicians, patients, community-based organizations, and global perspectives



ASCO SDOH Resources

- **ASCO Connection**

- “Cancer Care in the Hispanic/Latinx Population: A Tale From the Real World” By Carol Y. Ochoa, PhD, MPH, Tricia Kalwar, MD, MPH, and Narjust Florez, MD

- (link: <https://connection.asco.org/blogs/cancer-care-hispaniclatinx-population-tale-real-world>)

- **ASCO Daily News**

- “Integrating Social Care Into Cancer Care Delivery: Are We Ready?” by Reginald Tucker-Seeley, ScD and Surendranath S. Shastri, MBBS, MD, DPh

- (link: <https://dailynews.ascopubs.org/do/integrating-social-care-into-cancer-care-delivery-we-ready>)

- **JCO Oncology Practice**

- “Social Determinants of Health and Cancer Care: An ASCO Policy Statement” by: Reggie Tucker-Seeley, MA, ScM, ScD; Maysa Abu-Khalaf, MD, MBA; Kira Bona, MD, MPH; Surendra Shastri, MBBS, MD, DPh;; Wenora Johnson, BAsC; Jonathan Phillips, MPH; Azam Masood, MPH; Allyn Moushey, MSW; and Leslie Hinyard, PhD, MSW (link: <https://ascopubs.org/doi/full/10.1200/OP.23.00810>)

Conclusion

- Sir Geoffrey Vickers on the goals of public health, *“the landmark of political, economic and social history are the moments when some condition passed from the category of the given into the category of the intolerable.”*