https://doi.org/10.1093/jnci/djac175 First published online September 8, 2022 Editorial

Social Determinants of Health and Cancer Care: Where Do We Go From Here?

Chanita Hughes Halbert, PhD (1,2,*

¹Department of Population and Public Health Sciences, University of Southern California, Los Angeles, CA, USA; and ²Norris Comprehensive Cancer Center, University of Southern California, Los Angeles, CA, USA

*Correspondence to: Chanita Hughes Halbert, PhD, University of Southern California, Soto Street Building, Suite 325, 1845 North Soto St, MC 9239, Los Angeles, CA 90089, USA (e-mail: hughesha@usc.edu)

Social determinants of health (SDOH) include the nonmedical factors that contribute to disease risks and health-care outcomes: social risk factors reflect these nonmedical variables at an individual level (1). Now more than ever, health-care systems and National Cancer Institute (NCI)-designated cancer centers are expected to understand and address social risk factors among patients to improve health-care quality and outcomes. It is also anticipated that mitigating social risks in clinical settings will enhance equity among disparity populations. As a result, efforts are now being made to screen patients for social risk factors, provide services to address these issues as part of delivering health care, and/or link patients to community-based social service agencies and organizations (2). The results presented by Sanchez and colleagues (3) in this issue of the Journal demonstrate that the implementation of efforts to address social risk factors among cancer patients may be outpacing empirical data and the evidence base about the efficacy of strategies to screen patients for these factors and adjust, assist, or align cancer care to respond to social risks. Based on the author's portfolio review of NCI-funded studies, 30 studies were funded to understand social risks from January 2010 to April 2022. Although the number of funded studies increased from 1 in 2010 to 7 in 2021, and 11 studies were funded since January 2021, studies were unequally distributed across key components of the Social and Health Care Integration Framework (eg, awareness, adjustment, alignment) (4). For instance, most funded grants included in the portfolio review (80%) were designed to identify patients who had social risks, and only 4 grants examined activities to adjust cancer care to address 1 or more social risks. Several of the 11 funded grants included in the portfolio review used interventions to assist patients with addressing social risk factors through referrals and/or connections to social service agencies and community-based organizations. Notably, most of these intervention studies were guided by conceptual frameworks from implementation science or healthcare delivery models. This suggests that the primary intervention focus may be on how to implement strategies to identify and address social risks among patients rather than on generating

empirical data about the efficacy of alternative screening, assistance, adjustment, and alignment approaches. This distinction is important because the goals for implementation science are to understand how to enhance the uptake of evidence-based interventions and empirical data (5). Clearly, understanding best methods for implementing screening for social risk factors is important, but empirical data from randomized trials on the effects of alternate screening and intervention strategies on health outcomes are lacking (6).

The research conducted by Sanchez et al. (3) has several important strengths that include being guided by the Social and Healthcare Integration Framework (4) and using rigorous methods to characterize the landscape of past and current research on social risks and needs in cancer care. The methods used by Sanchez et al. (3) could be replicated by other National Institutes of Health (NIH) institutes and organizations that fund cancer research to develop a more robust understanding of the investments that have been made to understand and address social risks as part of cancer care. The National Institute on Minority Health and Health Disparities, for instance, has funded several investigator-initiated studies (eg, R01 and U54) to identify and address SDOH among cancer patients and individuals at increased risk for developing this disease. Zhu and colleagues (7), for example, used natural language processing to determine the extent to which social isolation was documented in the electronic health records among prostate cancer patients, and financial strain was measured using self-report instruments among patients undergoing prostate biopsy as part of a transdisciplinary center in precision medicine and minority men's health (8,9). An important next step may be to understand the broader landscape of funded research on social risk factors and cancer care across all NIH institutes using the methods reported by Sanchez et al. It is also critical to characterize the amount of funding that has been awarded to grants on social risk factors to understand how much of the NCI extramural budget has been allocated to support research in this area.

Received: August 23, 2022; Accepted: August 30, 2022

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Although a modest number of funded grants were identified through the portfolio review completed by Sanchez et al. (3), several previous efforts have been supported through federal funding to understand and address SDOH. Some of these early studies include consortia such as the Centers for Population Health and Health Disparities (10), the Community-Based Research Program at the National Institute on Minority Health and Health Disparities, and the Racial and Ethnic Approaches to Community Health at the Centers for Disease Control and Prevention that were established during the past 2 decades to understand the contribution of multilevel determinants of population health and disparities in health outcomes and to work collaboratively with diverse stakeholders to translate these findings into evidence-based interventions. Communityengaged research, which can focus on addressing SDOH collaboratively with community and public health stakeholders, has also been integrated into several NIH research programs (11), objectives related to SDOH were included in early Healthy People goals (12), and several reports have been commissioned by the World Health Organization to increase awareness about these issues (13,14). More recently, the National Academies of Sciences, Engineering and Medicine convened workgroups and conferences to identify issues and best practices for integrating social needs care into health-care delivery (4). Nevertheless, identifying and addressing social risks among patients is a relatively new priority and focus for health-care systems that coincides with several pivotal current events that include the COVID-19 pandemic, which revealed the vulnerabilities and consequences of food insecurity, financial instability, and social isolation in the US population. Subsequently, the Center for Medicare and Medicaid Service issued a road map to address SDOH as part of their strategic plan to lower health-care costs, reduce disability, and improve health outcomes using valuebased care models (14). Also an increasing number of companies are being established to link patients with social service organizations (eg, Aunt Bertha), and several legislative activities are being introduced to address SDOH. For instance, there is now a Caucus on Social Determinants of Health, SDOHs have been included in several areas in the FY2023 Senate appropriations, and many bills related to SDOH have been introduced into Congress. Given the long history and extensive previous efforts that have been made to increase awareness about the contribution of SDOHs to disease risk and outcomes to healthcare disparities, we should be optimistic and excited by the recent attention and focus addressing SDOH now has in multiple sectors. We should also be cautious and careful.

The study conducted by Sanchez et al. (3) shows that a modest number of studies on social risks and cancer care have been funded by NCI during the past decade. Although the number of funded studies has increased, greater funding is needed to build the evidence base about the nature, distribution, and impact of these variables on cancer care delivery. Greater investment in research on social risk factors is also urgently needed to ensure that emerging clinical efforts to address social risk factors are informed by empirical data generated through carefully designed studies that compare alternate strategies for screening patients and intervening to address social needs. Increased funding in studies that compare the effects of alternate methods for identifying and addressing social risk factors and needs would also be important to inform policies on how to address these issues and reimbursement for delivering these services. The first-generation studies and efforts were critical to increase awareness about SDOH (10,12) and set the stage for ongoing efforts to improve the precision and understanding of these

terms (1), research that is now being conducted to examine the concordance between self-reported data on SDOH and those documented in the electronic health record as part of delivering health care, studies that have identified barriers and facilitators to screening patients for social risks (15), and interventions that have addressed social needs among patients (2). With SDOH's current national focus, a more integrated approach is also needed to identify funding priorities at NIH and other federal agencies to ensure that grant-making activities are aligned to verify that these resources are used to achieve the long-term goal of reducing disparities, enhancing health-care quality, and improving population health by addressing social risks and needs as part of health-care delivery.

Funding

This work was supported by grants #U54MD010706 from the National Institute of Minority Health and Health Disparities and #P20CA252717 from the National Cancer Institute.

Notes

Role of the funder: The funder did not play a role in the preparation of this editorial or the decision to submit it for publication.

Disclosures: CHH has no disclosures.

Author contributions: Conceptualization, methodology, writing—original draft, writing—review & editing: CHH.

Data Availability

No new data were generated or analyzed in support of this editorial.

References

- Alderwick H, Gottlieb LM. Meanings and misunderstandings: a social determinants of health lexicon for health care systems. Milbank Q. 2019;97(2): 407-419.
- Gottlieb LM, Wing H, Adler NE. A systematic review of interventions on patients' social and economic needs. Am J Prev Med. 2017;53(5):719-729.
- Sanchez JI, Adjei BA, Randhawa G, et al. National Cancer Institute-funded social risk research in cancer care delivery: opportunities for future research. J Natl Cancer Inst. 2022;114(12):1628-1635.
- National Academies of Sciences, Engineering, and Medicine. Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health. The National Academies Press; 2019:194.
- Bauer MS, Damschroder L, Hagedorn H, Smith J, Kilbourne AM. An introduction to implementation science for the non-specialist. BMC Psychol. 2015;3:32.
- Eder M, Henninger M, Durbin S, et al. Screening and interventions for social risk factors: technical brief to support the US Preventive Services Task Force. JAMA. 2021;326(14):1416-1428.
- Zhu VJ, Lenert LA, Bunnell BE, Obeid JS, Jefferson M, Halbert CH. Automatically identifying social isolation from clinical narratives for patients with prostate Cancer. BMC Med Inform Decis Mak. 2019;19(1):43.
- Bauer AG, Jefferson M, Nahhas GJ, et al. Financial toxicity and strain among men receiving prostate cancer care in an equal access healthcare system. *Cancer Med*. 2020;9(23):8765-8771.
- Halbert CH, Allen CG, Jefferson M, et al. Lessons learned from the Medical University of South Carolina Transdisciplinary Collaborative Center (TCC) in precision medicine and minority men's health. Am J Mens Health. 2020;14(6): 1557988320979236.
- Warnecke RB, Oh A, Breen N, et al. Approaching health disparities from a population perspective: the National Institutes of Health Centers for Population Health and Health Disparities. Am J Public Health. 2008;98(9): 1608-1615.
- Eder MM, Evans E, Funes M, et al. Defining and measuring community engagement and community-engaged research: clinical and translational science institutional practices. Prog Community Health Partnersh. 2018;12(2): 145-156.

- Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020. Healthy People 2020: an opportunity to address societal determinants of health in the United States. 2010. https:// www.healthypeople.gov/sites/default/files/SocietalDeterminantsHealth.pdf. Accessed August 2022.
- World Health Organization. Commission on Social Determinants of Health final report. 2008. https://www.who.int/social_determinants/en. Accessed August 2022.
- Department of Health and Human Services. Center for Medicare and Medicaid Services. Opportunities in Medicaid and CHIP to address social determinants of health (SDOH). https://www.medicaid. gov/federal-policy-guidance/downloads/sho21001.pdf. Accessed August 2022.
- Hamity C, Jackson A, Peralta L, Bellows J. Perceptions and experience of patients, staff, and clinicians with social needs assessment. *Perm J.* 2018;22: 18-105.