Moving Upstream to Impact Health:
Building a Physician Workforce that Understands Social Determinants

Christine Petrin, Karen DeSalvo

Decades of rallying cries from professional societies, medical education and training programs, and government stakeholders have distilled the conversation of social determinants of health (SDOH) from theoretical proposals into practical solutions [1-3]. No longer standing on the precipice of change, we are now in the trenches. The nation's health care system recognizes SDOH as important drivers of health and is taking steps to address them in the practice environment.

More widespread action and attention by the health care system drives the need to train the next generation of physicians in the concepts and actions related to SDOH. This includes SDOH as a core part of the medical curriculum, offering clinical and research experiences and service in the community [4-5]. Unfortunately, to date only a handful of programs have brought this vision to fruition. Across the country, most programs offer educational content that is largely didactic and provided in short or one-time sessions [6]. Though a start, such approaches are insufficient to prepare the next generation of physicians for their important work ahead.

In New Orleans, the NOLA Hotspotters are an interdisciplinary group of medical, public health, nursing, and pharmacy students inspired by the work out of Camden, New Jersey, to "hot spot" patients with high utilization, which is often related to social needs [7]. While the results of the Camden program have been widely discussed following publication of their work, we argue the benefit of such a program exists beyond reduced emergency department visits or health care spending [8]. The experience undeniably does more to teach students about SDOH than any lecture series could. Sitting on the phone with Medicare for an hour to reissue a lost insurance card, working for months to schedule a dentist appointment, replacing the batteries in a smoke detector because a patient who uses a wheelchair can't reach—these are the hoops that, when jumped through, impart a far greater understanding of, and capacity to address, SDOH. We do not mean to suggest this educational opportunity should come at the expense of patient care, but that spending time in a different social context can prepare students to adequately care for socially complex patients.

It would be naive to predict a student group could, in a single academic year or other short course, "solve" the social drivers that contributed to a person being labeled a "high utilizer." These individuals often come from communities that have endured generations of poverty, systemic and institutionalized racism, and other structural biases that won't be fixed in a short period of time or by the medical system alone. But what courses like these can do is build a generation of physicians who understand how social context impacts health and are equipped to address these social challenges in partnership with other health professionals and community organizations.

A recent report from the National Academy of Medicine showcases several examples of interprofessional teams across the country successfully providing social care as a part of health care delivery, including Hennepin Health in Minnesota, Care Neighborhood in California, and Geisinger Health System in Pennsylvania [9]. Strong, interdisciplinary teamwork, bolstered and championed by providers, will be the most impactful approach [10]. As we do this work, we need to be mindful that it can unintentionally aggravate inequity and over-medicalize the social context of communities [11]. Scholars in this space recognize that the medical community, while well intentioned, is rarely the most effective sector to address social needs; as physicians engage in this work, they must seek out partnerships with those who are [12-14].

Programs like NOLA Hotspotters should not be extra-

curricular, but key components of a modern medical education. "Social determinants" may be the buzzword of the day, but we need to move beyond simply checking a box and get real about how to approach SDOH work. We need a dramatic restructuring of how medical schools and residency programs train future physicians. Actionable, interdisciplinary, and "boots on the ground" training around SDOH is critical. The framework for this overhaul exists [15-17]. The next of wave of innovation in medical education must put SDOH at the forefront. Doing so is a matter of life and death for the patients we serve. NCMJ

Christine Petrin, MPH medical student, Tulane University School of Medicine, New Orleans, Louisiana.
Karen DeSalvo, MD, MPH, MSc chief health officer, Google Health, Jefferson, Louisiana.

Acknowledgments

Potential conflicts of interest. The authors report no relevant conflicts of interest.

References

1. Centers for Disease Control and Prevention. Sources for Data on Social Determinants of Health. Centers for Disease Control and Prevention website. https://www.cdc.gov/socialdeterminants/data/. Updated February 15, 2018. Accessed/ December 17, 2019.
2. American Association of Medical Colleges. Teaching Hospitals' Commitment to Addressing the Social Determinants of Health. Washington, DC: American Association of Medical Colleges; 2017. https://www.aamc.org/data-reports/faculty-institutions/report/teaching-hospitals-commitment-addressing-social-determinants-health. Accessed February 24, 2020.
3. Wagner R, Koh N, Bagian JP, Weiss KB. CLER 2016 National Report of Findings. Issue Brief #4: Health Care Disparities. Chicago, IL: Accreditation Council for Graduate Medical Education; 2017. https://www.acgme.org/Portals/0/PDFs/CLER/CLER_Health_Care_Disparities_Issue_Brief.pdf. Accessed February 24, 2020.
4. Doobay-Persaud A, Adler MD, Bartell TR, et al. Teaching the social determinants of health in undergraduate medical education: a scoping review. J Gen Intern Med.2019;34(5):720-730. doi: 10.1007/s11606-019-04876-0
5. Mangold KA, Bartell TR, Doobay-Persaud AA, Adler MD, Sheehan KM. Expert consensus on inclusion of social determinants of health in undergraduate medical educational curricula. Acad Med. 2019;94(9):1355-1360. doi: 10.1097/ACM.0000000000002593
6. Gard LA, Peterson J, Miller C, et al. Social determinants of health training in U.S. primary care residency programs: a scoping review. Acad Med. 2019;94(1):135-143. doi: 10.1097/ACM.0000000000002491
7. LSU Health. NOLA Hot Spotters. LSU Health website. https://www.lsuhsc.edu/administration/academic/cipecp/hotspotting.aspx. Accessed January 14, 2020.
8. Finkelstein A, Zhou A, Taubman S, Doyle J. Health care hotspotting – a randomized, controlled trial. 2020;382(2):152-162. doi: 10.1056/NEJMsa1906848
9. The National Academies of Sciences, Engineering, and Medicine. Integrating Social Care into the Delivery of Health Care: Moving Upstream to Improve the Nation's Health (2019). The National Academies Press website. https://www.nap.edu/read/25467/chapter/1. Accessed February 24, 2020.
10. DeSalvo KB, Gracia JN. Health is more than health care. Ann Intern Med. 2020;172(suppl 2):S66-S67.
11. Gottlieb LM, Alderwick H. Integrating social and medical care: could it worsen health and increase inequity? Ann Fam Med. 2019;17(1):77-81. doi: 10.1370/afm.2339
12. Castrucci B, Auerbach J. Meeting individual social needs falls short of addressing social determinants of health. Health Affairs blog. https://www.healthaffairs.org/do/10.1377/hblog20190115.234942/full/. Published January 16, 2019. Accessed February 24, 2020.
13. Lantz PM. The medicalization of population health: who will stay upstream? Milbank Q. 2019;97(1):36-39. doi: 10.1111/1468-0009.12363
14. Lantz PM, Lichtenstein RL, Pollack HA. Health policy approaches to population health: the limits of medicalization. Health Aff. 2007;26(5):1253-1257.
15. Committee on Educating Health Professionals to Address the Social Determinants of Health; Board on Global Health; Institute of Medicine; National Academies of Sciences, Engineering, and Medicine. A Framework for Educating Health Professionals to Address the Social Determinants of Health. Washington, DC: National Academies Press; 2016.
16. Mangold KA, Bartell TR, Doobay-Persaud AA, Adler MD, Sheehan KM. Expert consensus on inclusion of the social determinants of health in undergraduate medical education curricula. Acad Med. 2019;94(9):1355-1360. doi: 10.1097/ACM.0000000000002593
17. Gourevitch MN, Curtis LH, Durkin MS, et al. The emergence of population health in US academic medicine: a qualitative assessment. JAMA Netw Open. 2019;2(4):e192200-e192200. doi: 10.1001/jamanetworkopen.2019.2200

Electronically published May 4, 2020.

Address correspondence to Christine Petrin, Tulane University School of Medicine, 1400 Tulane Ave., New Orleans, LA 70112 (cpetrin@tulane.edu).

N C Med J. 2020;81(3):188-189.
0029-2559/2020/81310