

Swimming 'upstream' to tackle the social determinants of health

Tara Kiran,^{1,2,3} Andrew D Pinto^{1,2,3,4}

¹Department of Family and Community Medicine, St. Michael's Hospital, Toronto, Ontario, Canada

²Department of Family and Community Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

³Centre for Research on Inner City Health, Li Ka Shing Knowledge Institute, St. Michael's Hospital, Toronto, Ontario, Canada

⁴Division of Clinical Public Health, Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada

Correspondence to

Dr Tara Kiran, Department of Family and Community Medicine, St. Michael's Hospital, 30 Bond Street, Toronto, Ontario, Canada M5B 1W8; tara.kiran@utoronto.ca

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Quality improvement interventions typically focus on how to improve the care delivered within healthcare organisations or by health systems. Rarely do efforts venture beyond the walls of clinics and hospitals to target the social determinants of health. Berkowitz *et al*¹ remind us that swimming 'upstream' is essential if we want to improve health outcomes for vulnerable or disadvantaged patients. The authors conducted a cross-sectional study of a Health Leads intervention in two urban adult primary care practices. Social needs were identified and then addressed by advocates based in the practices. They found that 15% of patients seen had an unmet resource need, most commonly food insecurity or a health resource need such as difficulty obtaining health insurance or affording medications. Patients with unmet resource needs were less healthy, had more 'no-show' appointments, more emergency department visits and were less likely to meet care targets.

The association between social factors and health outcomes is well documented.² To take just one of the chronic conditions discussed by Berkowitz *et al*, having or developing diabetes is more common in patients living in low income neighbourhoods.^{3–5} Living with a low income is a key determinant of being food insecure, a factor independently related to diabetes prevalence.⁶ The physical environment where one lives is strongly determined by one's income and is also associated with the occurrence of diabetes, likely through access to active transportation and healthy food sources.⁷ Patients with a low income are less likely to meet targets for cholesterol, blood pressure and glycaemic control⁸ and are more likely to have diabetes complications, even in a setting with universal health insurance.⁹ Finally, low income and other measures of social disadvantage are associated with higher mortality among people with diabetes.^{10 11}

Despite these associations, few interventions to improve diabetes care tackle upstream factors. A large, well-conducted systematic review assessing the effectiveness of quality improvement strategies on diabetes management included 120 randomised trials testing interventions ranging from case management to audit and feedback.¹² But out of 120 trials, not one attempted to address unmet social needs, including financial or food insecurity—factors that Berkowitz *et al* confirmed were associated with poorer glycaemic control. It makes intuitive sense that a patient with food insecurity, who cannot access their medications, and who has a difficult time affording transportation to attend health visits, would have a hard time managing their diabetes. Yet, our quality improvement interventions often do not address these fundamental factors.

Efforts to reduce non-urgent emergency department use have likewise largely overlooked social factors.^{13–15} Berkowitz *et al* found that patients with unmet resource needs were more than twice as likely to use the emergency department repeatedly in a year. They were not able to identify which resource need contributed to high emergency department use, likely because of their relatively small sample. However, their findings are consistent with other studies that have associated high use of the healthcare system with low-income status.^{16 17}

Berkowitz *et al* did not find an association between resource use and cancer screening and attributed this to their own multifaceted intervention.¹⁸ Their intervention included intensive patient outreach for patients at high risk of not following up with screening and included efforts to address unmet resource needs such as transportation barriers. This work demonstrates that quality improvement can include actions that take into account social determinants. Their success in



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reducing socioeconomic disparities in cancer screening, however, may be more difficult to reproduce for chronic diseases like diabetes that require regular clinical visits, long-term behaviour change and sustained self-management.

Addressing the social determinants of health is essential to advance health equity. The 2001 Institute of Medicine report, *Crossing the Quality Chasm*, included 'equitable' as one of its six core aims for health system improvement stating that care should not vary based on personal characteristics such as gender, ethnicity or socioeconomic status.¹⁹ But, health systems should ensure not just that access to healthcare is *equal* but that access is *fair*.²⁰ Equality describes sameness or difference, but equity is the absence of socially unjust or unfair health disparities.²¹ A focus on equity would mean that care might vary based on patient characteristics if certain subgroups need *more* intensive service delivery to improve health outcomes, as is the case for socially disadvantaged patients with diabetes.²²

To go further than equity in access and to begin to discuss equity in health outcomes may make some healthcare leaders uncomfortable; others may find the task daunting. It requires judgements about what differences in health outcomes are unfair or avoidable and which are not. The article by Berkowitz *et al* reminds us that addressing inequities is necessary to improve clinical quality, that improving equity invariably means tackling the social determinants of health and that healthcare organisations have the ability to affect the social determinants.

How can we begin to 'swim upstream' in quality improvement work? First, healthcare organisations should be deliberate in efforts to uncover social factors that influence health, even when engaging in clinical microsystem improvement. Current quality improvement tools can inadvertently narrow our focus to the healthcare setting. Lean methodologies adapted from other industries can successfully improve efficiencies within a clinical setting but are not designed to help teams understand and influence the social factors influencing health. Process maps, cause and effect diagrams and Pareto charts can all similarly be focused only on the healthcare setting. We need to be intentional about having quality improvement tools include social causes, for example, including 'social determinants' as a category of causes in a cause and effect diagram.

Second, we should listen carefully to patients' experiences of self-care as these experiences may provide the most natural opportunity to identify social issues that are at the root of ill health and sub-optimal disease management. We can use principles of Experience-Based Design²³ to involve patients in co-designing services that meet not just their health needs but their social needs as well. We can go one step further and engage and listen to *communities* at

risk to understand their needs and priorities.²⁴ Healthcare organisations can develop mutually beneficial partnerships with community agencies to address identified needs, engaging patients directly in their health where they live and work.

Third, we can identify and address unmet resource needs within the clinical setting. Screening tools like those used by Berkowitz *et al* offer a structured approach to detecting resource needs. Alternatively, clinicians can be coached to probe patients for contextual factors that may influence care.^{25 26} Electronic medical records can be a valuable medium for storing information on social factors, flagging actionable items and triggering automated or clinician-directed referrals.²⁷ Referrals can connect patients to social workers, community workers, lawyers or others who can connect patients to appropriate resources or advocate on their behalf.^{28 29} These efforts should be rigorously studied to understand their impact on health and social factors as there is little research in this area to date.³⁰

Berkowitz *et al* described a model where clinicians address the social determinants of health for individual patients encountered in their clinic. But to truly improve health equity, we need to swim even further upstream and engage in advocacy for an entire population. The WHO Commission on the Social Determinants of Health was explicit that to achieve health equity, we need to tackle the inequitable distribution of power, money and resources.²⁰ Clinicians may feel uncomfortable with this calling but some would argue that advocacy is a logical extension of a healing, compassionate profession. In his moving address to Harvard Medical School graduates, Don Berwick urges graduating doctors not just to cure the disease, but to 'cure the killer injustice'.³¹

Twitter Follow Tara Kiran at @tara_kiran and Andrew Pinto at @AndrewDPinto

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