Fairness for Whom? Learning Health Systems' Approach to Equity in Healthcare

Équité pour qui? : approche des systèmes de santé apprenants en matière d'équité dans les soins de santé



NAKIA K. LEE-FOON, MHSc, PhD Health Equity Research Lead Institute for Better Health Trillium Health Partners Mississauga, ON

ROBERT J. REID, MD, PhD

Hazel McCallion Research Chair in Learning Health Systems
Chief Scientist
Institute for Better Health
Trillium Health Partners
Mississauga, ON
Professor
Institute of Health Policy, Management and Evaluation
University of Toronto
Toronto, ON

ADALSTEINN BROWN, DPHIL

Dean

Dalla Lana School of Public Health

Professor

Institute of Health Policy, Management and Evaluation

University of Toronto

Toronto, ON

Abstract

Many healthcare systems use "equity" as a catch-all term to underscore their commitment to delivering care matching users' needs. Despite its ubiquity, it is often haphazardly used and applied to care and improvement efforts. As the learning health systems (LHSs) approach gains prominence, LHS researchers have sought to embed equity into their work while

navigating systems with differing views of equity. We examine several components of equity, its definitions within LHSs and knowledge from LHSs' equity approach that could be implemented across systems. We conclude by suggesting various ways in which readers can embed equity into their respective LHSs.

Résumé

De nombreux systèmes de santé emploient le terme « équité » pour souligner leur engagement à fournir des soins correspondant aux besoins des usagers. Malgré son omniprésence, le terme est souvent utilisé au hasard pour caractériser les efforts d'amélioration ou les soins fournis. À mesure que la démarche des systèmes de santé apprenants (SSA) gagne en importance, les chercheurs tentent d'intégrer l'équité dans leur travail mais ils ont des points de vue différents sur cette notion. Nous examinons plusieurs aspects de l'équité, ses diverses définitions ainsi que les connaissances tirées du concept d'équité dans les SSA qui pourraient être mises en œuvre dans l'ensemble des systèmes. Nous concluons en suggérant diverses façons, pour les lecteurs, d'intégrer l'équité dans leur SSA.

Introduction

In recent years, the term *equity* has become a hot topic in healthcare. Healthcare systems have used it to underscore their commitment to fairness in care and patient treatment. Furthermore, equity has become part of diversity and inclusion approaches in many systems. This addition attempts to acknowledge and begin addressing decades of systemic biases that have negatively impacted the employment opportunities and treatment of marginalized groups. In many systems, *equity* has also become a catch-all term. It is used to signal to patients, funders, policy makers and partners that systems are working on delivering care in a way that critically considers its users' varied needs.

Despite this term's ubiquitous use in healthcare, a closer look reveals that it is often used in a haphazard and poorly conceived way and inconsistently applied to various facets of care. Equity, equality and disparity are frequently conflated in healthcare literature. Furthermore, equity and equality are often used interchangeably despite their differing meanings of fairness (resources provided based on need versus equal resources for all irrespective of need). Equity-specific data collection and analysis tools are sparse. Additionally, definitions of equity vary from one system to the next, yielding diverse views on this term and its significance in healthcare settings.

The learning health systems (LHSs) approach has gained national and international prominence (Bernstein et al. 2015; Friedman et al. 2015). At the same time, calls for equity-informed healthcare systems have risen. Unfortunately, LHS researchers have had to find ways to embed equity into their work while navigating healthcare systems with differing views on equity. Although LHSs are still an emerging concept with no single paradigmatic example, the LHS provides systems and scholars with the tools needed to produce and derive value from rapid-cycle research embedded within health systems (Zurynski et al. 2020).

Additionally, it may offer an innovative way to address some of the most pervasive and tenacious healthcare challenges of our time (Coley et al. 2022) through a critical equity lens. This commentary examines this lens, how equity is defined within the context of LHSs and what can be gleaned from LHSs' approach to equity that could be implemented across all sectors of healthcare.

Defining and Conceptualizing Equity

Much like healthcare systems, definitions of equity in LHSs abound. However, most LHS approaches share several aspects of equity, which are best summarized by Braveman and Gruskin's (2003) explanation of this term. They define equity in health as the void of systematic health disparities among groups that experience differing levels of social advantage and/or disadvantage. These disparities systematically place those who experience disadvantages based on various factors (e.g., race, low socio-economic status, gender identity) at worse health outcomes compared to their socially advantaged counterparts (Braveman and Gruskin 2003). Equity prompts researchers, clinicians and systems to examine these disparities and identify ways to deliver care that can reduce or eliminate the differences. Healthcare equity seeks to ensure that individuals get the care they need relative to their healthcare needs.

What Does Equity Mean in the Context of LHSs?

Incorporating equity into the LHS encourages researchers to acknowledge variations in healthcare access and outcomes based on individuals' level of healthcare needs (Fein 2005). Additionally, this incorporation prompts them to tailor resources and deliver care to individuals or populations that serve their needs. This tailoring goes beyond the traditional *one size fits all* approach to healthcare. Within LHSs, equity is a key health outcome and embedded into all healthcare sectors. Assessments of equitable approaches to care may vary from one sector to the next.

In healthcare systems such as Ontario's – Canada's most populous province (Statistics Canada 2022) – assessments may include individual (e.g., socio-demographic data collection) and population-level (e.g., Ontario Marginalization Index [ON-Marg], the Relative Index of Inequality [RII]) data collection tools. The ON-Marg is an Ontario-specific piece of the Canadian Marginalization Index. It uses various demographic indicators to measure several axes of deprivation, such as economic, ethnoracial and social marginalization. Analyzing data from the index can help researchers understand health inequities and other social problems connected to health among various populations. The RII may help identify, within a particular population, the impact of environmental, social and economic disparities; where they occur; and those most affected (Ontario Ministry of Health and Long-Term Care 2018). Public reporting of these data may entice systems to improve their delivery of equitable care to patients.

In order to understand inequities or areas for improvement in healthcare, the LHS approach requires data collection, analysis and buy-in from leadership. Data collection and

analysis are important as inequities are often not readily apparent. These requirements ensure that they are committed to frequently identifying and understanding drivers of inequities and take actionable, timely steps to address any issues found.

Additionally, it requires the frequent refinement of approaches, monitoring for equity improvement and engagement of equity-deserving groups on system design and redesign to match their needs. This commitment must occur in all sectors of the healthcare system and include diverse patients who play an active role in the work being done.

Key Barriers to Implementing Equity in LHSs

Despite the increasing interest in LHSs in Ontario, LHSs' incorporation into healthcare and the use of equity to inform LHS practices have been slow. Researchers and clinicians often remain separate (Pronovost et al. 2017), not interacting with one another unless that is critical for patients. Some healthcare leaders are committed to equity and, in tandem, building their LHS. However, even fewer have explicitly stated how their commitment will be converted into measurable actions for improvement purposes.

This conversion may be hampered by healthcare systems' policies around equity and research funding requirements, which are often in development or are non-existent. Without, for example, dedicated financing and personnel, this LHS approach cannot function. Personnel and financing are needed for analyses of the current state of healthcare systems, to find areas for improvement and recommend innovative approaches to care. Funding requirements must be changed to reflect this need. Even the Canadian Institutes of Health Research's Institute of Health Service and Policy Research has identified the need to develop policy research funding programs to accelerate the development of LHSs across Canada (CIHR 2021). Additionally, failure to create a patient engagement framework that actively seeks participation from equity-deserving groups — groups that are marginalized in healthcare due to factors such as race, socio-economic status, gender identity and sexual orientation — in healthcare system governance and co-design will likely lead to unsuccessful LHSs.

Conclusion

As interest in the use of equity to inform the LHS approach continues gaining ground in healthcare, several steps must be taken by healthcare systems when implementing this approach. We have narrowed them to three key steps.

First, equity must be made a priority, not an afterthought. Finding the best way to embed equity that mirrors the context in which LHSs reside will prompt healthcare systems to continuously view their actions through this lens and enhance care. As equity-deserving groups often vary, systems must commit to regularly collecting and analyzing patients' sociodemographic data to better understand the composition of the groups they serve. Policy makers will need to review and revise data standards to achieve this commitment. These revisions must come with changes to funding requirements that make funding contingent on

collecting this data. These changes will help define these groups and allow systems to critically examine any differences in their health and healthcare delivery.

Second, consensus must be reached by system leaders and collaborators on defining and applying equity in LHSs. A commonly used definition would enable its instrumentation and provide opportunities for continuous learning. This would ensure that researchers implement this concept in an easily understood, reproducible and consistent way.

Finally, institutions must include measures that hold systems and their leaders accountable, with steps taken if negative outcomes occur. One way to achieve this is through an LHS equity checklist. This checklist would be developed through a patient engagement framework and parallel key components of the LHS. Working with patients on an ongoing basis will be critical to ensuring that its contents are relevant and helps healthcare systems identify the tools needed to assess the state of their equity-informed research and practices. This checklist would mirror key aspects of healthcare delivery tools and services. It would include various agreed-upon measures and performance management systems. Ultimately, these steps and more will help create a truly just and equitable healthcare system.

Acknowledgment

We wish to acknowledge financial support from The Ontario SPOR SUPPORT Unit (OSSU) and philanthropic financial support from the Hazel McCallion Research Chair in Learning Health Systems at Trillium Health Partners.

Correspondence may be directed to Nakia K. Lee-Foon by e-mail at nakia.lee-foon@thp.ca.

References

Bernstein, J.A., C. Friedman, P. Jacobson and J.C. Rubin. 2015. Ensuring Public Health's Future in a National-Scale Learning Health System. *American Journal of Preventive Medicine* 48(4): 480–87. doi:10.1016/j. amepre.2014.11.013.

Braveman, P. and S. Gruskin. 2003. Defining Equity in Health. Journal of Epidemiology & Community Health 57(4): 254–58. doi:10.1136/jech.57.4.254.

Canadian Institutes of Health Research (CIHR). 2021. Strategic Plan 2021–2026. Retrieved November 16, 2022. https://cihr-irsc.gc.ca/e/documents/ihspr_strat_plan_2021-26-en.pdf>.

Coley, R.Y., K.I. Duan, A.J. Hoopes, G.T. Lapham, K. Liljenquist, L.M. Marcotte et al. 2022. A Call to Integrate Health Equity into Learning Health System Research Training. *Learning Health Systems* 6(4): e10330. doi:10.1002/lrh2.10330.

Fein, R. 2005. On Achieving Access and Equity in Health Care. The Milbank Quarterly 83(4). doi:10.1111/j.1468-0009.2005.00427.x.

Friedman, C., J. Rubin, J. Brown, M. Buntin, M. Corn, L. Etheredge et al. 2015. Toward a Science of Learning Systems: A Research Agenda for the High-Functioning Learning Health System. *Journal of the American Medical Informatics Association* 22(1): 43–50. doi:10.1136/amiajnl-2014-002977.

Ontario Ministry of Health and Long-Term Care. 2018, February. *Improving the Odds: Championing Health Equity in Ontario*. Retrieved November 16, 2022. https://www.health.gov.on.ca/en/public/programs/drugs/publications/opdp/docs/odb_report_15_16.pdf.

Pronovost, P.J., S.C. Mathews, C.G. Chute and A. Rosen. 2017. Creating a Purpose-Driven Learning and Improving Health System: The Johns Hopkins Medicine Quality and Safety Experience. *Learning Health Systems* 1(1): e10018. doi:10.1002/lrh2.10018.

Statistics Canada. 2022. Population Estimates, Quarterly. Retrieved November 16, 2022. https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000901.

Zurynski, Y., C.L. Smith, A. Vedovi, L.A. Ellis, G. Knaggs, I. Meulenbroeks et al. 2020. *Mapping the Learning Health System: A Scoping Review of Current Evidence: A White Paper.* Australian Institute of Health Innovation and the NHMRC Partnership Centre for Health System Sustainability, Macquarie University. Retrieved November 3, 2022. https://www.mq.edu.au/__data/assets/pdf_file/0011/1083809/Mapping-the-Learning-Health-System-A-white-paper-web.pdf>.

JOIN THE CONVERSATION



instagram.com/longwoods_publishing



youtube.com/longwoodstv



twitter.com/longwoodsnotes



pinterest.com/longwoods



facebook.com/longwoodspublishingcorporation

Linked in

ca.linkedin.com/company/longwoods-publishing

Longwoods.com