

Moving Upstream



This **Population Health** series explores the concept of population health and the role a hospital can play in producing population health. The series also offers local and international examples of health systems that have reached beyond their walls to improve the health of their communities.

What Does it Mean to Work Upstream?

In the classic public health tale credited to medical sociologist, Irving Zola, a person sees a drowning man in a river current. The person saves the man but is quickly drawn back into the river to rescue more drowning people. After rescuing many others, the person walks upstream to try to understand what is causing people to fall into the river¹.

This story illustrates the tension between the need to allocate resources to respond to acute issues of a population (i.e., the downstream endeavors; in the case of this tale, helping people caught in the current), and allocating resources to understand root causes (i.e., the upstream factors; in this case understanding why people are falling into the river).

Individuals, communities and organizations are calling for an upstream approach to health – one that addresses the determinants of health in order to reduce health disparities¹. These underlying health inequalities in society have been particularly exposed and amplified by the COVID-19 pandemic. For example, in Ontario, an IC/ES report in April 2020 revealed that those who tested positive for COVID-19 were more likely to live in marginalized neighbourhoods with a greater concentration of immigrants and visible minorities.² (This [OHA research page](#) captures some of the key research findings on the social determinants of health as it relates to COVID-19.)

For more information, watch the Institute for Healthcare Improvement’s Open School video with Dr. Rishi Manchanda: What is an “Upstreamist” in Health Care?



This chart explains what it means to act downstream, midstream and upstream and provides descriptions of actions at each level.

Working at all Levels²

| | Downstream | Midstream | Upstream |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Focus | Addressing immediate health needs of a population | Addressing the intermediary determinants of health, or material circumstances E.g., housing conditions, employment and working conditions, food security | Addressing the structural determinants of health E.g., social status, income and income distribution, racism, social exclusion, immigration, etc. |
| Interventions | Equitable access to health and social services, at an individual or family level Often occur at the service or access-to-service level Focus on altering the effects of the causes | Aim to reduce exposure to risks by improving material living and working circumstances, or to reduce risk by promoting healthy behaviours Often occur at the micro policy level (regional, local, community or organizational) Focus on changing the causes | Aim to fundamentally change the social and economic structures that distribute wealth, power, opportunities and decision-making Often occur at the macro policy level (national and transnational) Focus on reducing the causes-of-the-causes |

Additional Resources

The following resources may be helpful for exploring these topics in more depth.

- **Think Upstream:** A newsroom for the social determinants of health, a project of the Canadian Centre for Policy Alternatives (CCPA).
- The **Upstream Lab** develops and evaluates interventions to address social factors that impact health in collaboration with patients, health care workers, community organizations and policymakers. The lab also trains people to become “upstream” change agents.
- The Rapid Improvement Support and Exchange (RISE) team provides a one-hour webinar on **population health management** for Ontario Health Teams - March 12, 2020.
- The National Collaborating Centre for Determinants of Health- **Let’s Talk: Moving Upstream** (2014)

- The Ontario Hospital Association maintains a resource page on the **social determinants of health as it relates to COVID-19**.
- The University of Toronto’s Dalla Lana School of Public Health hosted a **four-part Virtual Symposium** on Population Health’s Past, Present, and Future.

References

- 1 National Collaborating Centre for Determinants of Health (2014). *Let’s talk: Moving upstream*. https://nccdh.ca/images/uploads/Moving_Upstream_Final_En.pdf
- 2 Chung, H., Fung, K., Ferreira-Legere, L.E., Chen, B., Ishiguro, L., Kalappa, G., Gozdyra, P., Campbell, T., Paterson, J.M., Bronskill, S.E., Kwong, J.C., Guttman, A., Azimae, M., Vermeulen, M.J. & Shull, M.J. (2020, May). *COVID-19 Laboratory testing in Ontario: Patterns of testing and characteristics of individuals tested*. IC/ES. <https://www.ices.on.ca/Publications/Atlases-and-Reports/2020/COVID-19-Laboratory-Testing-in-Ontario>