

3 key upstream factors that drive health inequities

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"Realize that everything connects to everything else," Leonardo da Vinci famously said.

One connection that's increasingly being understood is how what happens outside the walls of hospitals and exam rooms affects patients' long-term health outcomes.

"Upstream" factors, which—on the surface—might seem unrelated to medicine or health care actually have the "downstream" effect of lower life expectancy.

Information from California's Bay Area Regional Health Inequities Initiative (BARHII) helps to put the matter of upstream factors in perspective. The BARHII public health framework for reducing health inequities explains the connections between three categories of upstream factors and future health and is meant to focus attention "on measures which have not characteristically been within the scope of public health epidemiology."

Perhaps more than ever before, the COVID-19 pandemic has laid bare the health inequities that pervade American society. Throughout the pandemic, the AMA has curated critical health equity resources from across the web to examine the structural issues that contribute to and could exacerbate already existing inequities.

Social inequities

This is the first category of upstream factors identified that can have a downstream impact on health behaviors related to injury or disease and, ultimately, lower life expectancy.

Individual factors related to social inequities include:

- Class.
- Race or ethnicity.

- Immigration status.
- Gender.
- Sexual orientation.

Institutional inequities

These relate to the organizations that have such a big impact on patients' lives, in one way or another, and through which inequities can be entrenched. They include:

- Corporations and businesses.
- Government agencies.
- Schools.
- Laws and regulations.
- Nonprofit organizations.

Living conditions

This category of upstream factors, while directly outside the control of the health system, is adjacent to it and most commonly brought to mind in discussions of health inequities.

This category is composed of the following:

- The **physical environment**, which is affected by factors such as land use, transportation, housing, residential segregation and exposure to toxins.
- The **economic and work environment**, which includes employment, income, retail businesses and occupational hazards.
- The **social environment**, which includes culture, advertising, the media, violence, as well as the experience of class, racism, gender or immigration.
- The **service environment**, which includes health care, education and social services.

Poor outcomes are not preordained. Interventions such as community organizing and civic engagement, education and health care can make a difference. Additionally, policy and public health practice can serve to either help or hinder an individual's or a community's quest for health.

Downstream effects

These upstream factors affect patient behaviors such as smoking, poor nutrition, low physical activity, violence, alcohol and substance use, and sexual behavior.

Further downstream are disease and injury such as communicable disease, chronic disease and intentional and unintentional injury. These lead to mortality, the furthest downstream category, which includes infant mortality and lower life expectancy.

According to a BARHII report, "life expectancy in the Bay Area, as in the nation as a whole, conforms to a pattern called the 'social gradient,' in which the more income and wealth people have, the more likely they are to live longer."

The impact of these inequities is measurable, leading to wide disparities in life expectancy in neighborhoods that are only a few miles apart. For example, residents in the Bayview-Hunters Point area of San Francisco live 14 years fewer than those who live on the city's Russian Hill less than seven miles away.

Life-expectancy disparities like that can be found in cities across the nation as a person's zip code has become a leading indicator of their health status. In Chicago, for example, there is a 14-year life expectancy gap between lesser privileged and more affluent neighborhoods.

The AMA is working with a coalition of health systems called West Side United to cut that gap in half. Read how the AMA's Chicago investments tackle health inequities from the ground up.

Learn more about how the AMA is fighting for greater health equity by identifying and eliminating inequities through advocacy, community leadership and education.