

# Using administrative data to identify homelessness and **improve health outcomes for a vulnerable community**

People experiencing homelessness face substantial barriers in accessing health care including but not limited to medical and surgical care, mental health care, prescription medications, eyeglasses and dental care. To provide care to this underserved group, researchers and policy makers alike have struggled to measure the homeless population. The most common way is through point-in-time estimates that measure the number of people sleeping in shelters or on the streets on a given night.

It is a costly approach that requires significant human resources yet will miss people (particularly some women and families) who do not stay in shelters, as well as individuals who are couch surfing, living in the rough or homeless only some of the time. Not being able to accurately measure this vulnerable population means programs and funding cannot be adequately allocated or evaluated.



Areas of impact:



**Makes policy better**



**Makes health care better**



**Makes people healthier**

## ICES Research

**Dr. Stephen Hwang** and his team recruited study participants in Toronto and Ottawa who were experiencing homelessness and obtained their permission to link their records to ICES data to track their health care use. The cohort was followed for four years and has been used in multiple studies, including a paper on the effects of housing on health care encounters and costs that will be published in Medical Care.

In 2019, using administrative data held at ICES, a team of researchers at ICES Western led by Lucie Richard and **Dr. Salimah Shariff** developed an **algorithm** that enabled them to follow individuals experiencing homelessness over time, and provided a reliable and less costly way to identify health needs, services and outcomes for a high-risk and understudied population. To ensure accuracy, the algorithm was validated using the homeless cohort created by Dr. Hwang's team.

**“There’s a cost to doing nothing. The status quo that allows people to be chronically homeless has a cost to it, and it’s borne by the health care system, the justice system and the shelter system. There’s a cost to providing affordable housing, but it results in cost offsets or cost savings and that is something we are able to demonstrate using ICES data.”**

Dr. Stephen Hwang, Senior Adjunct Scientist at ICES Central

# How this work is having impact

- The homeless cohort can be linked to ICES data to examine the impact of health care interventions on homelessness.
- The researchers are currently examining the Housing First model, which involves rapid access to housing using a rent subsidy and to mental health and social supports that enable the person to make a successful transition from homelessness to housing.
- The algorithm is being used to evaluate how Ontario’s new **heat warning system** has changed the way the homeless population uses health services during a heat wave; those findings will be presented at a workshop with stakeholders later in 2020.
- The researchers are working with teams across Canada to cross-validate the algorithm for national use.
- The algorithm is being used to understand the health impacts of COVID-19 among the homeless.
- The federal government’s **COVID-19 Immunity Taskforce** is including homelessness in its reporting.