

2023 CIHR Health System Impact (HSI) Fellowship Award Recipients

Award Recipient	Host Institution / Research Location	Project Title	Lay Summary
Mar'yana Fisher	University of Victoria BC Cancer	Advancing Equitable Cancer Care for Incarcerated Populations	<p>An estimated 40,000 individuals are imprisoned in Canadian correctional facilities at any time. Incarcerated people, often individuals from marginalized populations, bear an unequal burden of cancer because they experience chronic disabilities, mental health concerns and substance use disorders. Increased risk factors also include family violence, childhood abuse, housing insecurity, lack of education, low-income status, high rates of suicide, high-risk sexual behaviors, and physical injuries. Despite international recognition of the importance of palliative and cancer care as a shared universal right, a health equity gap exists between the general and carceral populations in Canada. Incarcerated people face significant health inequities before, during and post incarceration.</p> <p>This project aims to address BC Cancer's goal of promoting high-quality cancer services that are equitable, accessible, and respectful for all British Columbians.</p> <p>The specific objective is to provide evidence-based recommendations for advancing equitable cancer care for incarcerated populations in BC by examining barriers in access to cancer treatment and care.</p>
William Hall	University of British Columbia BC Ministry of Health	Modelling the Future of Home Health for Seniors - A Markov based Cost Effectiveness Analysis	<p>The task of providing high quality care has become increasingly difficult as pressure mounts on both the funding and demand side of the provision equation. This challenge is particularly acute for health leaders caring for a growing elderly population in an already strained system. While our senior patient populations consume more expensive acute healthcare resources with higher frequency, they are also more likely to experience negative outcomes in these venues of care and often prefer to remain in their homes for as long as possible.</p> <p>The Economic Learning Health System (eLHS) is a framework designed to guide continuous improvement and optimization of limited health care resources to achieve the highest possible quality of care for patients. This research project is aimed at applying this framework to the challenge of caring for seniors in British Columbia. Anticipated outcomes include an analytic infrastructure that will quantify care needs, simulate potential innovations to address these needs, and determine the most sustainable path to caring for our seniors now and in the future.</p> <p>This project was funded by the Health System Impact Fellowship from CIHR, and is being conducted in partnership with the BC Ministry of Health. The fellow leading this project is Dr. William Hall – a health economist trained at UBC and creator of the eLHS framework. He will be working with Dr. Michael Law from the Centre for Health Services and Policy Research, and Christine Voggenreiter from the BC Ministry of Health.</p>

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Salma Shickh	University of British Columbia	Implementation of a clinical population screening program for BRCA1/2 mutations among individuals of Ashkenazi Jewish ancestry	<p>Approximately 1 in 40 individuals with Ashkenazi Jewish ancestry are born with a mutation in the <i>BRCA1</i> or <i>BRCA2</i> gene, in comparison to 1 in 200 in the general population. These individuals are at a high risk to develop multiple cancers over their lifetime, including breast and ovarian cancer for females. Genetic testing can help to determine whether an individual has a <i>BRCA1/2</i> mutation. Once identified to have a mutation, patients can become eligible for more cancer screening (e.g. yearly breast mammograms and MRIs for females) and have the option to undergo surgery to reduce their risk (e.g. removal of ovaries). These can reduce the risk of cancer or help to detect it early. Current programs to identify individuals with <i>BRCA1/2</i> mutations are not effective; less than 50% of these individuals are identified. To address this gap in cancer care, Dr. Intan Schrader, Dr. Sophie Sun and their team at the Hereditary Cancer program at BC Cancer have designed a pilot population screening program, which will allow anyone of Ashkenazi Jewish ancestry to obtain testing for <i>BRCA1/2</i> gene mutations. The proposed project will also involve design and implementation of a public education campaign and adaption of a patient-facing digital tool that will guide patients through the population screening program. Altogether we hope this project generates evidence to support the implementation of a population-wide screening program for all residents of BC, to reduce the burden of cancer in the province.</p>
Christine Mulligan	University of British Columbia	Optimizing research impact and building capacity for youth-driven research within the learning health system of an integrated youth services initiative	<p>Led by Dr. Christine Mulligan, this project will take place at Foundry, an integrated youth service initiative (IYS) providing comprehensive support to youth across BC. IYS can improve youth mental health and substance use outcomes, issues afflicting 1 in 5 Canadian youth. Foundry operates virtually and in physical centres in BC, supporting youth through 5 service streams: physical and mental health, substance use, peer support and social services. Foundry is implementing a Learning Health System (LHS), a care model where data and learnings are used in real-time for continuous improvement and strong, equitable impact. This project is supported by a partnership between Foundry and the University of British Columbia, and jointly funded by the Canadian Institutes of Health Research (CIHR) and Michael Smith Health Research BC, as part of the CIHR Health Systems Impact Fellowship program. This research program will evaluate and enhance feedback loops between research, policy, and practice (iKT), focusing on building capacity for youth-driven inputs into Foundry research. The fellow will engage with Foundry knowledge users/creators to assess current iKT feedback loops at Foundry, highlighting areas for improvement, and finding solutions. This project will create a Youth Advisory Council (YAC) to give input into Foundry research, such as by co-developing (i.e., with Foundry youth) a plan to identify young people's needs and co-designing new ways to track youth-reported outcomes. The YAC will co-develop a youth-centered iKT plan, and results will feed into the iKT feedback loops improved in this project and into the LHS, through arts-based methods, talking circles, and other publications. Importantly, the project's outputs (iKT feedback loops and capacity for youth input) are sustainable and will develop beyond this program. This research program has immense potential for lasting impact on Foundry, and ultimately, the well-being of BC youth.</p>