Program Summary

VCH-SFU Embedded Research Program for Modelling and Operations Research

Overview

The Embedded Research Program (ERP) is a co-created partnership between Vancouver Coastal Health (VCH) and researchers from Simon Fraser University (SFU). The ERP pilot launched in 2024, integrating operations research and mathematical modelling across VCH programs. With a Learning Health Systems approach focused on co-production and joint governance, the ERP aims to improve the quality of patient care and the health of communities, to support a robust and sustainable health system.

Key Points

- 18-month ERP pilot evaluates the feasibility and efficacy of a sustained partnership
- Pilot projects span community health, public health and Indigenous health, supported by a VCH-SFU Leadership Team
- Made possible with funding and support from the BC SUPPORT Unit, VCH and SFU

Goals and Objectives

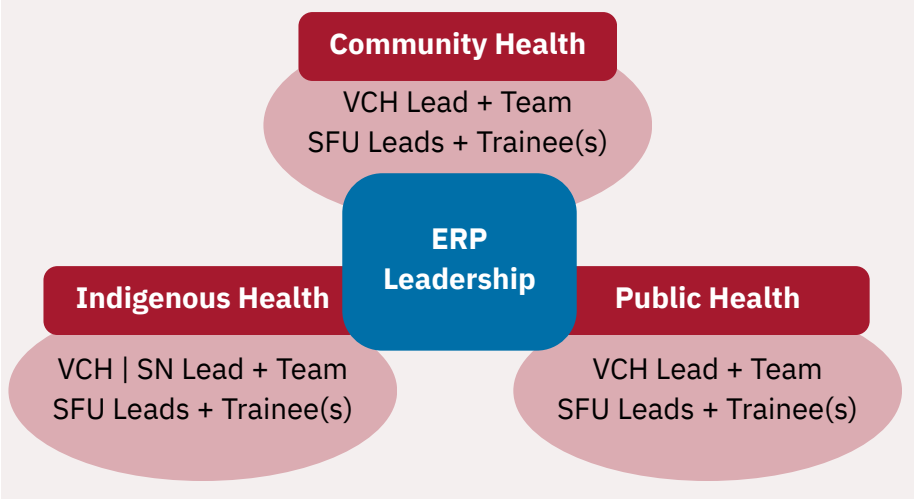
The ERP aims to position VCH as a leader in learning health systems within the province by:

Building sustainable capacity for bridging the evidence-to-practice gap

Providing training and mentorship to foster a new generation of learning health system workforce

Developing streamlined frameworks to support ongoing embedded research in the health system

Structure



- Three core research teams are guided by a cross-institution Leadership Team for strategic direction
- Each VCH program identified a research project, in consultation with SFU researchers
- Squamish Nation (SN) partners codesigned the Indigenous Health project
- Two faculty embedded researchers and three graduate trainees join integrated teams with clinical, operational and analytical representation
- Pilot running Sept 2024 - Mar 2026, following 9 months planning and preparation
- Program evaluation assessing value and impact throughout the pilot

Research Projects

1. Using simulation modelling to improve placements for Mental Health and Substance Use Supported Housing
2. Finding optimal models for patient attachment and culturally-grounded care with the Squamish Nation Kal'nímet Primary Care Clinic
3. Identifying a cohort of people experiencing homelessness from acute and community electronic medical records