Working together while staying apart
CHSPR Health Policy Conference

Interdisciplinary Clinical Care Network of
Post Covid Recovery: A BC example

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Translation and Implementation of Research

Post-COVID-19 Interdisciplinary Clinical Care Network (PC-ICCN)

- A case study for integration of research and clinical care
- Patient-centred and patient-informed from inception
- Clinicians, researchers and administrators working together
- Integrating care models and care providers
In the current time, doing what we have always done may not work so there is a need to modify and adapt.
The PC-ICCN:
Background and Overarching Purpose

• Guide the development and maturation of a BC network focused on patients who have recovered from COVID-19

• Post COVID-19 clinical care and knowledge generation and application requires a coordinated and networked approach

• Participation across health authorities critical to ensure equity, rigour and patient / community centricity
  o Improve understanding and patient outcomes
  o Enable responsible resource utilization
  o Guide and educate health care professionals and patients based on best evidence
  o Enhance capacity with primary care and specialty care
Generating the evidence to inform the practice: Science and Care

Systematic collection of information enables
• Improved understanding of biological consequences and mechanisms
• Identification of patient profiles
  o High, medium and low risk(s)
• Responsible ordering of tests for
  • Surveillance
  • Diagnosis
  • Monitoring of response to interventions
• Improved management of complex patients through shared learnings
• Collaboration between specialties
Examples of questions to be answered: Follow-up of people who have had COVID-19

• Short, medium, and long term impact on patients, health care system(s) and resource utilization
  o Planning and policy

• Progression of the condition/ organs affected acutely
  o Determine stability
  o Changes over time
  o Planning for transitions

• Progression of other conditions pre-existing
  o Lung and cardiovascular disease
  o Kidney and other conditions
  o Psychiatric conditions, depression
Goal

- To develop a province-wide ‘network’ to (1) support primary care providers and (2) enable access to clinics, that will provide:

  o **Coordinate care** (in-person and virtually)
    - Easy access to the right tests and avoiding unnecessary duplication
    - Access to evidence based care when available
    - Easy access to multiple specialists (interdisciplinary care – e.g. lung, heart, brain, kidney, physio, rehab, psychology, psychiatry,…etc.)
    - Linkages with RCC and use of RTVS

  o **Coordinate research** (basic, translational, clinical and implementation)
    - Reducing burden on patients (avoiding duplication of forms, tests, etc.)
    - Sharing results between scientists, clinicians and health policy makers
    - Ensuring enrolment in appropriate clinical studies

  o **Share of information** (data)
    - Linking of data from clinical care and research
    - Linking of data to inform long term needs
The Network: Components

- Post COVID-19 Recovery Clinical Programs (HAs)
- Provincial Post COVID-19 RACE help line
- Provincial Registry
- Provincial guidance and education coordinated
  - With and to GP
  - With and to patients
  - With and to specialists
- Provincial research activities
  - Coordinated with provincial registry data
  - Leveraging existing protocols/ funded research
  - Source of information to inform best practices in real time
Progress to Date on these components

• Care coordination including establishment of specific clinics

• Education and guidance to GP’s

• Research coordination
Post COVID-19 Recovery Clinics

As of March 2021, there are three post COVID-19 recovery clinics in British Columbia.

1. St Paul's Hospital
2. Vancouver General Hospital
3. Jim Pattison Outpatient Care and Surgery Centre

• Engagement of GPs, Rural Coordination Collaborative and other HA’s ongoing
• Established RACE for urgent clinical questions about a patient who is experiencing ongoing difficulties post COVID-19 infection.
• Developed standardized testing schedules, clinical assessment tools, referral pathways, clinical guidelines, etc.
Post COVID-19 clinical approach and clinical care

• **Provide** patients with
  - a standardized coordinated assessment
  - access to appropriate specialists, investigations, patient education, and
  - any additional services required for individualized clinical care and long-term monitoring.

• **Provide** access to peer reviewed, vetted and, where feasible, fully embedded research.
  - Central oversight and ensuring of quality by PHSA
  - Each regional clinical program operates under the jurisdiction of its local health authority or institution, with provincial and collaboratively
Provincial Network of Post COVID-19 Recovery Clinics
A Learning Health System

Integrated Network

Learning Health System

BC Community

At risk patients

COVID-19 positive patients

Hospitalized
Non-Hospitalized

Primary Care Physician +/- Specialist

Interdisciplinary Clinical Care Clinics

Fraser Health
Island Health
PHSA
Vancouver Coastal Health / Providence Health Care
Interior Health
Northern Health

Research

Clinical Protocols
Interventional Trials
Discovery Biobank
COVID-19 Cohort Data Sources: Administrative data to inform care, resource utilization and outcome monitoring
Using available data in novel ways to support care
Research and Analytics Program Funding

- **Current support for Research and ‘r’esearch initiatives**
  - UBC COVID-19 Strategic Investment Fund grant
  - Michael Smith Foundation For Health Research grant
  - UBC support in the form of database, data administration, and data science expertise
  - PHSA support
    1) PROMIS platform for data collection, organization and reporting,
    2) infrastructure and tools for data processing, data storage, and databasing
    3) data administration expertise and
    4) and ethics and privacy expertise

- **Planned support**
  - Cost recovery program for partial recovery of costs related to services provided to approved research projects including;
    - covering costs related to biospecimen collection, processing, storage & shipping
    - covering FTE of RAs and RNs spent supporting specific projects
    - potentially charging a data usage fee to offset costs associated with enabling access to data

- **Additional funding opportunities ( NIH, CITF etc)**
Enabling a province-wide approach to research and care

• Challenges
  o multiple clinics, multiple health authorities, different approaches to data privacy, human resources
  o new clinics need to organize quickly, need for standard approach to data collection adds complexity
  o need to identify qualified investigators within each HA as leads
  o enable resourcing of clinics for clinical and research support

• Solutions
  o As PHSA network, stewardship of the data collected @clinics established
  o Collaboration between Clinicians/ Research representatives re: set of standard procedures
  o HA understanding of need for ‘infrastructure’ support
For BC this network is an opportunity

• Create a truly integrated network of access to clinical care and research capabilities in the context of a new disease across a province
  o In collaboration with all stakeholders

• Describe and demonstrate the value proposition of the approach:
  o Reduced variation in care, testing, and access
  o Reduced random visits to outpatient offices, ERs and walk in clinics,
  o Improved knowledge of long term impacts (for planning)

• Establish a sustainable infrastructure for future
  o Pandemics and Public health emergencies
  o Post hospital/ ICU care
  o Integrated research activities
Integrating research into clinical practice: challenges and solutions for Canada

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KEY POINTS

- Although hundreds of millions of dollars have been invested in coronavirus disease 2019 (COVID-19) research nationally, contributions from other countries have greatly exceeded Canada’s research productivity.

- The UK National Institute for Health Research, with its Clinical Research Network infrastructure, has enabled rapid research production and knowledge dissemination and could be a model for Canada to emulate.

- Problems that impede the efficiency of clinical research in Canada include infrastructure, fragmented research and being separate from clinical practice.

- Federal and provincial political will is needed to change the culture of clinical research in Canada and to forge a partnership among the health systems and research institutes and organizations.

- A careful analysis of costs and inefficiencies in the present system, as well as thoughtful projections of potential return on investment of funding for a more efficient infrastructure, and jurisdictions willing to collaborate to try a new model, are needed to start the ball rolling.

A Canada-wide consensus on emulating the UK achievement is likely to take time and may proceed piecemeal. Initially, the system could undergo pilot testing in a few willing provinces; if the experiment proves successful, others will follow. Before the nan-
Co-ordinates care, research, and education for optimal outcomes for Patients and Health care systems.
Defining Integration

• the action or process of successfully joining or mixing with a different group of people:
• the action or process of combining two or more things in an effective way
Post COVID-19 Interdisciplinary Clinical Care Network: PC- ICCN

Integrating Research and Care
Integrating Care models and Care Providers
A collaborative effort: patients, clinicians, researchers and administrators