SAPCReN-CPCSSN-PIHCIN FALL DINNER 2017

November 29th, 2017

6:30 pm – 9:30 pm
Hotel Alma – University of Calgary
Senate Room, 7th Floor
169 University Gate NW

Agenda

- Introductions
- Current project updates
- Ideas for new projects

SAPCReN-CPCSSN

- 249 SAPCReN members
- 228 CPCSSN sentinels
- 29 family medicine and community paediatrics clinics
- 264 656 patients
- 10 PCNs

Current Project Updates

Theme 1: Linkage Projects

Theme 2: Case Definition Projects

Theme 3: Upcoming Projects

Theme 4: Data Management

Theme 1 – Linkage Projects

Secondary Use of Data Project: T1D Case Definition & Diabetes Dashboard

Theme 1 – Linkage Projects

SPOR Chronic Disease Network: Diabetes Action Canada

Academic Health Science Centres/Organizations, Charitable Health Organizations, Federal and Provincial Funding Agencies, Industry

1. To build a national registry of diabetes patients as the basis for 'first in man' clinical trials
2. SAPCReN-CPCSSN becoming a major contributor to registry development: T1DM case definition, dashboard.

Current Status of Project: prototype S Alberta CPCSSN diabetes patient registry established at CRU UoC

Theme 1 – Linkage Projects

Complex chronic disease & high system use: investigating patient profiles, resource use & health outcomes (PI: Dr. Paul Ronksley)

Summary: To understand the clinical profiles of high-risk patients, how they engage with the health system & if some health spending within this group is potentially preventable. For patients with complex, chronic disease:

- Describe clinical & socio-demographic characteristics
- Explore patterns of healthcare use & clinical outcomes
- Determine factors associated with poor outcomes & high use of heath care resources
- Quantify preventable spending among high users of health care resources

Data Sources: CPCSSN EMR data linked to DAD (in-patient), NACRS (emergency room), physician claims, registry, vital statistics.

Status: data linkage

Older adults with dementia & their use of acute care services in Alberta (PI: Dr. Andrea Gruneir)

Summary: The goal is to reduce the occurrence of unplanned transitions for patients with dementia, through specific objectives:

- Characterize the frequency & types of health care transitions made in a 2-year period;
- Identify risk factors for key transitions (ED visits, hospital admissions, long-term care admissions) & related outcomes (return ED visits, 30-day readmissions);
- Provide findings to the Seniors Health SCN to support intervention and policy planning

Data Sources: CPCSSN EMR data linked to DAD (in-patient), NACRS (emergency room), continuing care

Status: data linkage

Theme 2 – Case Definitions

Case Definition Volume II

PI: Dr. Tyler Williamson; **Team**: Neil, Stephanie, Ashley, Larka
Summary: develop and validate case definitions for: MS, affective disorders, psychotic disorders, ADHD/ADD, stroke, CVD, CHF, epilepsy, Parkinson's disease, community-acquired pneumonia, opioid dependency, diabetic retinopathy. This study will use machine learning techniques to find the best definition in either EMR, admin, or linked EMR+admin databases.
Status: ethics approval

Asthma in Primary Care

PI: Dr. Andrew Cave; **Team:** Anh Pham, Larka
Summary: develop and validate a case definition for adult asthma using EMR data. The case definition can then be used to describe: the natural history of asthma and asthma-like symptoms; practice-level management; effectiveness, side effects, and safety of commonly used medications.

Status: physician review of CPCSSN data to determine cases

Hearing Loss Definition

PI: Dr. Tammy Hopper; **Team:** Rebecca Miyagishima, Charlotte Greville, Larka
Summary: develop and validate a case definition for hearing loss in older adults; determine prevalence in primary care in the context of comorbid diabetes and dementia.

Status: data analysis

Theme 3 – Upcoming Projects

Alpha-1 Antitrypsin Deficiency (AATD) Screening

PI: Dr. Andrew Cave; **Team:** Neil, Larka, Stephanie, Natalia Stavila

Summary: AATD is a genetic disorder predisposing people to respiratory and hepatic disease; about 1-5% of patients diagnosed with chronic obstructive pulmonary disease (COPD) are estimated to have AATD.

Method: Educational intervention to increase primary care provider awareness & knowledge of AATD in the COPD population, aimed at improving detection & management

1. Identify patients eligible for AATD testing:
   - Developed COPD before age 65
   - Have COPD and never smoked
2. CPCSSN will send list of these patients to Sentinels, identified only by EMR ID
3. Sentinels can initiate screening by requesting serum levels of alpha-1 antitrypsin, an inexpensive biochemical assay covered by all provincial fee schedules

Theme 4 – Data Management

Data Linkage Process/Clinic Mapping File

EMR data linkage projects are becoming increasingly important for understanding more about the healthcare system and patient outcomes.

Current process:

1. CPCSSN creates EMR mapping file (CPCSSN ID, EMR ID) for patients of consenting providers who meet study criteria
2. Clinics create and submit clinic mapping file (PHN, EMR ID, DOB, sex, postal code) for patients of consenting providers

Challenges:

- Clinics and staff are very busy
- The AHS secure link for transmitting patient lists only open for 7 days
- AHS Analytics does not currently have a process for collecting and storing these files

Possible solution:

1. With sentinel permission, CPCSSN creates password-protected, encrypted clinic mapping file during routine bi-annual extractions
2. File is automatically generated and sent to AHS **without** CPCSSN accessing the information
3. A research agreement has been drafted to ensure AHS Analytics has dedicated server space for these files and adheres to strict privacy and data use procedures

Theme 4 – Data Management

Analytics, Research and Computing Hub (ARCH)

Director: Dr. Tyler Williamson

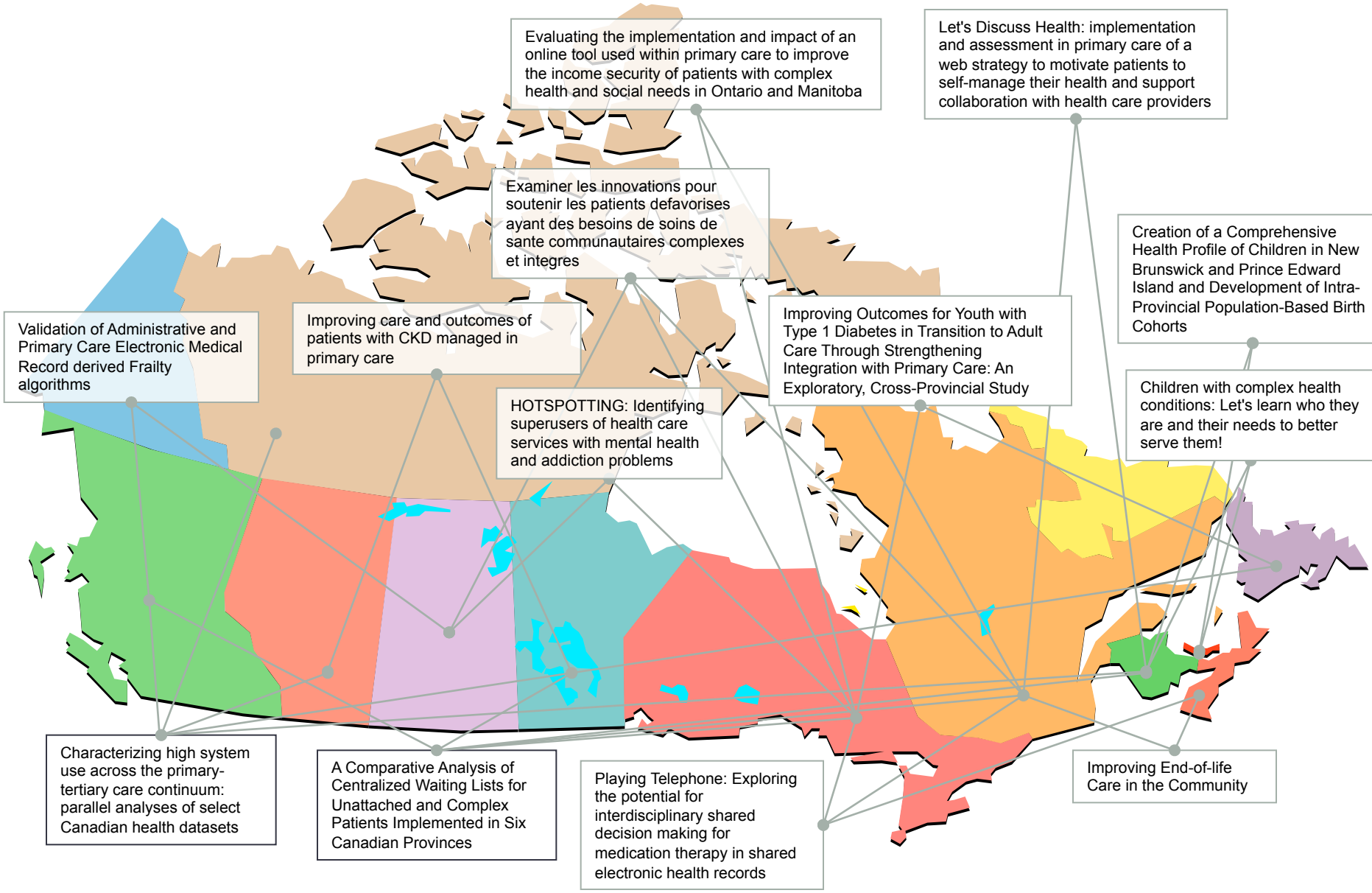
Team: Cord Lethebe, Sylvia Hao, Colin Weaver, Bria Mele, CPCSSN Data Managers (Larka, Mike, Brian, Matt), Stephanie, Neil, Cliff

Summary: ARCH provides high quality data analytics in Alberta, as well as leadership, expertise and support related to analyses based on primary care EMR data, primarily through its close partnership with CPCSSN in Alberta.

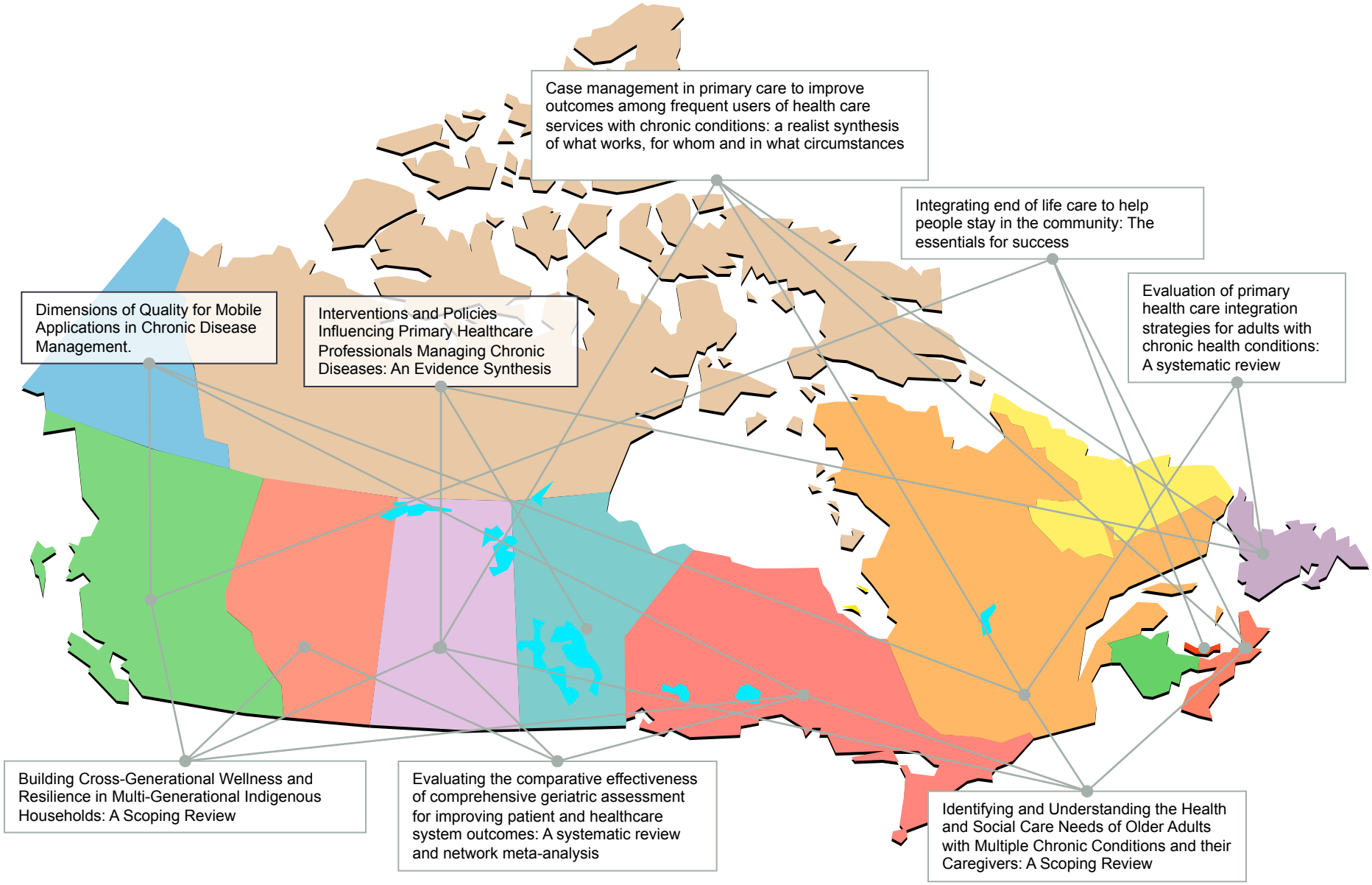
Current Status:

- Exploring a common data model for CPCSSN data (OHDSI)
- Machine learning techniques for developing case definitions
- EMR data quality assessment & improvement

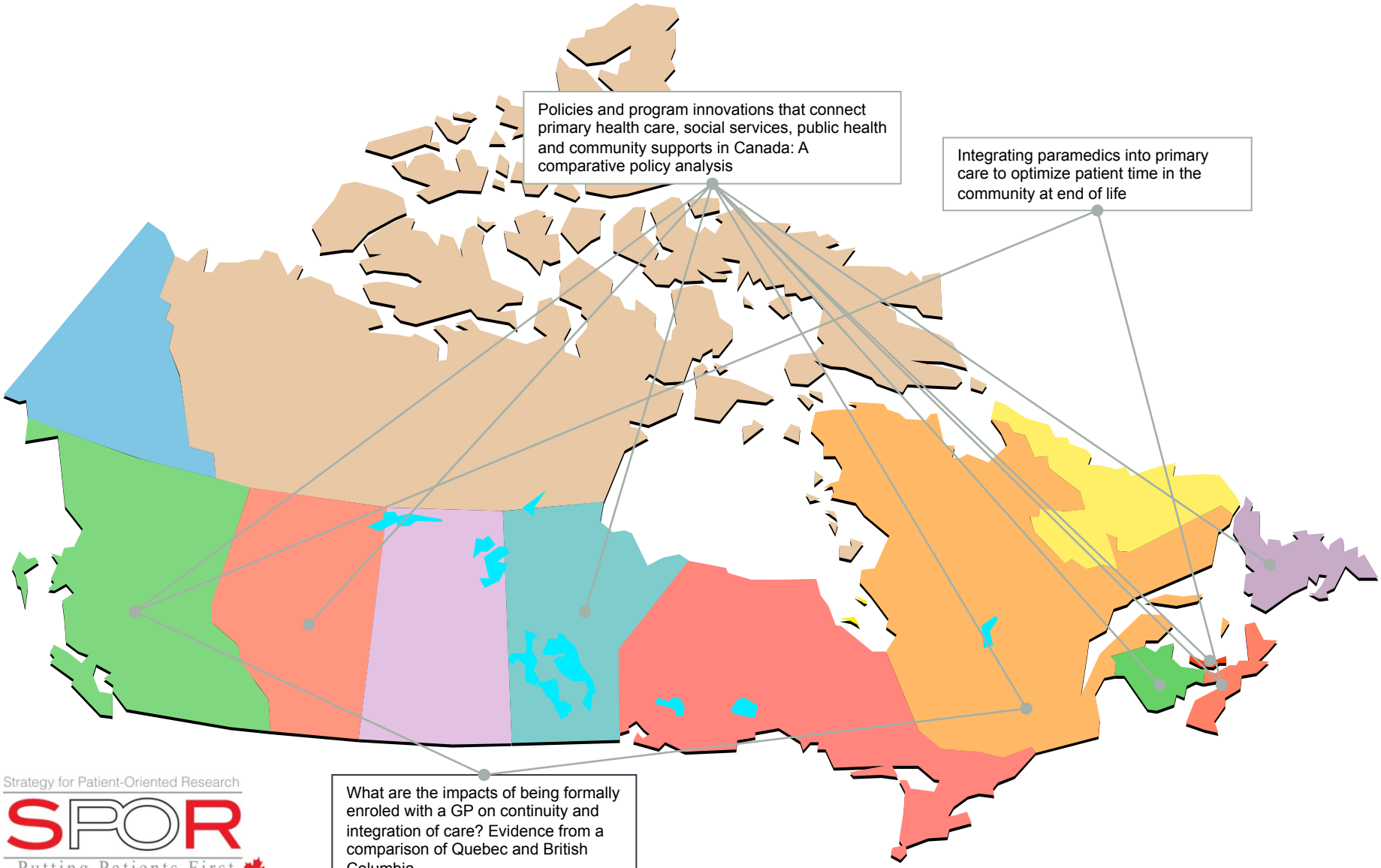
PIHCI Network – Quick Strike Projects



PIHCI Network – Knowledge Syntheses



PIHCI Network – Comparative Policy Analyses



Strategy for Patient-Oriented Research
SPOR
Putting Patients First

Alberta SPOR PIHCIN

Pan-Canadian Inter-Jurisdictional Funding

2018 Knowledge Synthesis Competition

- $25,000 for one year

2018 Comparative Program and Policy Analysis Competition

- $62,500/year for two years

Both competitions:

- Require non-federal matching funds on a 1:1 basis
- Must respond to network priorities
- Each application must include at least two (provincial/territory) networks
- Due: March 6, 2018

Alberta SPOR PIHCIN

Families Panel

- 13 Families Panel members to date
- Collaboration with the Alberta Patient Engagement SPOR SUPPORT Unit Platform
- Join project teams as investigators
- Participate in AB SPOR PIHCIN Leadership meetings
- Provide patient and caregiver feedback for project teams

Alberta SPOR PIHCIN

Programmatic Grant Review Process

1. Project teams submitted a common network letter of intent
2. The letter of intent is reviewed discussed by the AB SPOR PIHCIN Families Panel
3. Tripartite Leads and Co-applicants review each letter of intent with Families Panel Feedback
4. Applications that have an aggregated average from reviewers of 3.5/5.0 or higher receive a letter of support
5. All letters of support indicate the resulting rank

Discussion

Current Project Updates & Alberta SPOR PIHCIN

Newsletter **(can be a screen shot of the most recent newsletter)**

- March 2017 & September 2017 issues
- A collaboration between
  - AB SPOR PIHCIN
  - CPCSSN-AB
  - SAPCReN
  - NAPCReN
  - PTC
  - EnACt
- Distributed through network website, CPCSSN sentinel reports

New Project Ideas

Next Meeting

- Look for us at ASA and CAHSPR
- Next Annual Dinner with be November 2018
- As always, if there are any questions please reach out to a member of our team

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