

The COhort in PRImary Care (COPRI) of Réseau-1 Québec, a study protocol

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CONTEXT

- Most healthcare is provided in primary care settings, yet most research is conducted in specialized contexts^{1,2}
- Real life application of medical knowledge may differ from trial contexts, and family physicians are well positioned to observe this
- A longitudinal observational study design, using the appropriate statistical approach, is ideal to investigate how to improve primary care in a sustainable manner
- Meaningful involvement of stakeholders (clinicians, patient-partners, researchers, and other decision-makers) is key to conduct pertinent research and improve care³

OBJECTIVES/AIMS

1. To create a **collaborative research infrastructure** that will enhance local capacity in primary care research methods
2. To determine **factors associated with higher quality primary care and better health outcomes**
3. To identify areas of primary care that require **improvements** using patient perspectives, administrative data, and clinical data
4. To **support primary care teams** in applying reflective practices for continuous quality improvement
5. To support **clinical and organizational decision-making** to improve primary care services

STUDY DESIGN

- COPRI is a collaborative prospective open cohort study involving the four family medicine departments of Quebec province
- Patient-partners and family physicians engaged in all stages
- Recruitment target for wave 1: 2600 adults followed at one of the 29 participating family medicine clinics
- Multiple research questions on a variety of outcomes will be examined over the years
- Research ethics approval of study sites is in progress

- Data collection will consist of online questionnaire that may be self-administered or completed with research staff member, and electronic medical records data extraction, every 12-18 months
- Data linkage with provincial administrative databases will also be possible to complete or validate the data



Figure 1: Geographic distribution of the participating clinics in COPRI

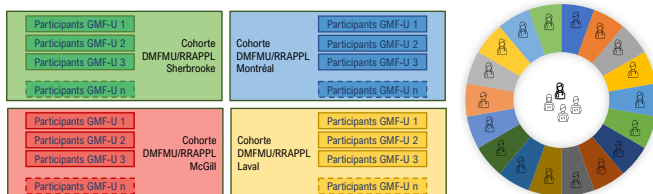


Figure 2: COPRI team structure. There is one team per family medicine department, and each one (circle) is mainly composed of family physicians who will lead the study at their clinical sites, in addition to other experts such as researchers and patient-partners. The COPRI team also has a scientific advisor committee, and a patient-partner advisor committee.

Table 1: Summary of data collected through questionnaires

CATEGORY	LIST OF DATA
Socio-demographic data	Sex at birth, gender identity, sexual orientation, legal relationship status, place of birth, immigration status, ethnicity, language spoken, education, employment, household income, personal income, housing security, food security, postal code (first 3 digits), religion, living situation, children, social support.
General health and beliefs	Past medical diagnosis for physical health, mental health or disability, past pregnancies, health behaviours such as smoking/vaping, alcohol, drugs, physical activity, sleep; self-perception of health, medication taken, vaccines received, allergies, trust and beliefs on medical issues, use of social media, trusted sources of medical information.
Healthcare use and services	Characteristics of provider (language, gender), frequency of family doctor visits/years, preferences and satisfaction with care, specialists involved, trust in healthcare, experiences of discrimination, past experience and interest in participating in research.

Table 2: Summary of data collected through electronic medical records

CATEGORY	LIST OF DATA
Socio-demographic data	Sex at birth, Year of birth, postal code (first 3 digits)
Medical diagnoses, habits and interventions received	Past medical diagnosis for physical health, mental health or disability, past pregnancies, transgender status if available, habits such as smoking, alcohol, drugs, medication taken, vaccines received with dates, allergies
Healthcare use and services	Characteristics of provider (language, gender), frequency of family doctor visits/years
Physical exam and test results	Height, weight, blood pressure measurements, most recent results of laboratory, imaging, pathology tests (cytology and biopsies) or cancer screening tests (colposcopies, colonoscopies). Dates of these tests and measurements.

EXPECTED OUTCOMES

- Building a provincial primary care cohort in family medicine clinics will allow primary care researchers, clinicians, patient-partners and decision makers to work together to investigate specific questions pertinent to primary care and improve healthcare
- It will enable collaborative improvements in care at local level and provincial level and will strengthen primary care research

THE COPRI TEAM

Barnett T, Beauchemin-Nadeau ME, Bériault K, Bosoi MC, Boucher MC, Bouhali T, Brodeur M, Brousseau-Foley M, Charbonneau V, Cohen M, Courville-Le Bouyonne C, Couture Y, Delage B, Del Grande C, de Pokomandy A, Dooley K, Dubé A, Gauthier A, Glaser E, Gonzalez Reyes A, Groulx A, Isabel M, Kaczorowski J, Khanassov V, Kosi Kola Mayamona Y, Laberge M, Langevin S, Lambert L, Larney S, Layani G, Lussier MT, Lussier S, MacLaren L, Morin C, Paquette JS, Picotte ME, Poitras ME, Rhéaume C, Rodrigues I, Schuster T, Sergerie V, Shawanda A, Shoucri MR, Talbot A, Todd K, Trépanier E, Valcourt St-Jean E, Zhang S.

References

1. De Maeseeneer JM, van Driel ML, Green LA, van Weel C. The need for research in primary care. *The Lancet* 2003;362:1314-9.
2. Cameron BJ, Bazemore AW, Morley CP. Lost in translation: NIH funding for family medicine research remains limited. *The Journal of the American Board of Family Medicine* 2016;29:528-30.
3. Canadian Institutes of Health Research (CIHR). CIHR Institute of Health Services and Policy Research Strategic Plan 2015-2019: Health System Transformation Through Research Innovation. Secondary CIHR Institute of Health Services and Policy Research Strategic Plan 2015-2019: Health System Transformation Through Research Innovation. 2016.