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DU CANADA

Current State of Quantitative Data Available for Examining the Work of Family Physicians in Canada: An Outcomes of Training Project evidence summary

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Organizational contributors:

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Canadian Institute for Health Information

Canadian Medical Association

Canadian Medical Protective Association

Canadian Post-MD Education Registry

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College of Physicians and Surgeons of Alberta

College of Physicians and Surgeons of British Columbia

College of Physicians and Surgeons of New Brunswick

College of Physicians and Surgeons of Newfoundland and Labrador

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College of Physicians and Surgeons of Ontario

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Health Data Nova Scotia

Health and Social Services, Insured Health & Hearing Services

Manitoba Centre for Health Policy

Maritime Resident Doctors

Newfoundland and Labrador Centre for Health Information

Population Data BC

Professional Association of Residents of Newfoundland and Labrador

Professional Association of Residents of Ontario

Professional Association of Resident Physicians of Alberta

Resident Doctors of Canada

Resident Doctors of BC

Resident Doctors of Saskatchewan

Royal College of Physicians and Surgeons of Canada

Background

One of the key goals of family medicine residency training is to produce the right mix, number, and distribution of family physicians for Canada. The College of Family Physicians of Canada (CFPC), in collaboration with stakeholders, aims to carry out this vision, leveraging its social accountability role. A key component of the Outcomes of Training Project was to explore what data exist describing where family physicians are practising, how many have been produced over time, and what they are doing in relation to scope of practice. To understand the impact of educational change related to the Triple C Competency-Based Curriculum, key indicators of mix (scope of practice of family medicine graduates), number of graduates, and distribution (location of practice) are important considerations in evaluating the influence of residency education on learners and, more broadly, the influence of early-career graduates and their contributions to the health care system.

With this in mind, the existing databases were reviewed across Canada to determine what indicators, descriptors, and data are used and collected in relation to family physicians. The state of national and provincial/territorial data sources on family physicians was measured against the CFPC's Family Medicine Professional Profile (FMPP).¹ The FMPP was created in response to a call for a better description of what is meant by comprehensive family medicine. The position statement "communicates the collective contributions, capabilities, and commitments of family physicians to the people of Canada" through a clear articulation of the primary responsibilities of family physicians, working together with other health care providers in work settings and arrangements to provide accessible, high-quality, comprehensive, and continuous care.¹ More than a list of tasks, the FMPP provides a description of the approach to the care family physicians provide based on the Four Principles of Family Medicine and generalist values, with a commitment to the collective delivery of broad-scope generalist practice.

Objective

Based on the descriptors embedded in the FMPP (**Figure 1**), this study identifies and describes provincial and national data sources that exist as potential sources of information.

Methods

To identify data sources that could provide information on the number, distribution, and mix (scope of comprehensive practice) of family physicians in Canada, a search was conducted using keyword search terms to identify key reports and publications. These included combinations of "family medicine" **or** "family physicians" **or** "primary care" **and** "data" **or** "data sources" **and** "Canada." Of the 114 reports and publications reviewed, 67 assisted with the identification of potential data sources with relevant information. Data elements in relation to the FMPP were abstracted for each data source. Key informant interviews were then conducted to augment the findings, data gaps, limitations, and feasibility of accessing data.²

Findings

Twenty-five data sources with relevant data on family physician characteristics, geography, and the agreed-upon FMPP descriptors were identified (**Figure 2**). There were three main types of data: 10 national and 12 provincial/territorial databases with self-reported data (forms, questionnaires); two national administrative databases; and one national database with electronic medical record patient and population-level data.

The major finding of this study was that no single database exists that provides all the desired information describing the characteristics or demographics of family physicians, what they do (related to the FMPP), and where they practise (geography). Moreover, even if we were able to combine available databases, major data gaps would still exist.

Figure 1. The collective primary responsibilities of family physicians in the Family Medicine Professional Profile

- 1. Comprehensive medical care for all people, ages, life stages, and presentations. This care includes all clinical domains, both acute and chronic, and all stages, from preventive to palliative care. Family physicians work across care settings and regulatory environments, including:**
 - Primary care
 - Emergency care
 - Home and long-term care
 - Hospital care
 - Maternal and newborn care
 - 2. Leadership** at all levels for accessible, high-quality, comprehensive, and continuous first-contact health care that responds to local conditions, and for research that advances an understanding of this care.
 - 3. Advocacy** for access to culturally safe, affordable, high-quality, and comprehensive health care, along with the social conditions that promote health. This requires outreach and engagement, such as working with community partners and including patients experiencing hardship and/or barriers to care.
 - 4. Scholarship (teaching/quality improvement (QI)/research)** as reflected in practice-based QI activities, an evidence-informed approach to care, and in the roles of teacher and mentor. Family physicians advance the knowledge of the discipline through a continuum of research activities.
-

Overall, the Canadian Medical Association Workforce Survey, the CFPC's Family Medicine Engagement Management System, the CFPC's Patient's Medical Home Assessment Tool, the Canadian Medical Protective Association database, and the provincial and territorial medical regulatory authority databases have the most information related to family physician characteristics, their geographic distribution, and the FMPP domains. Although the medical regulatory authorities collect information on physician characteristics, their geographical locations, and professional attributes, there is significant variation in what is collected and the descriptors used.

Accessing data

To use existing databases, it is important for the CFPC, workforce planners, and researchers to know the degree to which the data are accessible. This study found that aggregate-level data from the Canadian Post-MD Education Registry, Canadian Medical Association surveys, the National Physician Survey, the National Physician Database, the Canadian Medical Protective

Association database, and all the medical regulatory authorities' databases are accessible upon request, with record-level data requiring approvals and data-sharing or legal agreements. Aggregate and/or record-level data from the CFPC's membership database, Family Medicine Longitudinal Surveys, Canadian Primary Care Sentinel Surveillance Network, and Scott's Medical Database require approvals and data-sharing or legal agreements. Therefore, acquiring access to databases that are outside the purview of the CFPC may require time, personnel/expertise resources, and financial resources. Data from the Patient's Medical Home Self-Assessment Tool are not available for external use.

There is potential for linkages between data sources since most organizations are using Medical Identification Number for Canada (MINC) identifiers, which are administered by the Medical Council of Canada and the Federation of Medical Regulatory Authorities of Canada. A MINC is a unique identifier assigned to each individual entering the Canadian medical education or practice system. MINC data can be shared only with organizations

Figure 2. Relevant data sources

Administrative Data (2)

National

- Canadian Institute for Health Information (CIHI):
 - National Physician Database (NPDB)
 - Scott’s Medical Database (SMDB)

Self-Reported Data (22)

National

- The Canadian Post-MD Education Registry (CAPER)
- Canadian Medical Association (CMA):
 - Physician Workforce Survey (WFS)
 - National Physician Health Survey (NPHS)
- National Physician Survey (NPS)
- College of Family Physicians of Canada (CFPC):
 - Family Medicine Longitudinal Survey (FMLS)
 - Family Medicine Engagement Management System (CMEMS)
 - Membership Database
 - Patient’s Medical Home (PMH) Assessment Tool
- Corporate Provider Database (CPDB)
- Canadian Medical Protective Association (CMPA) Membership Database

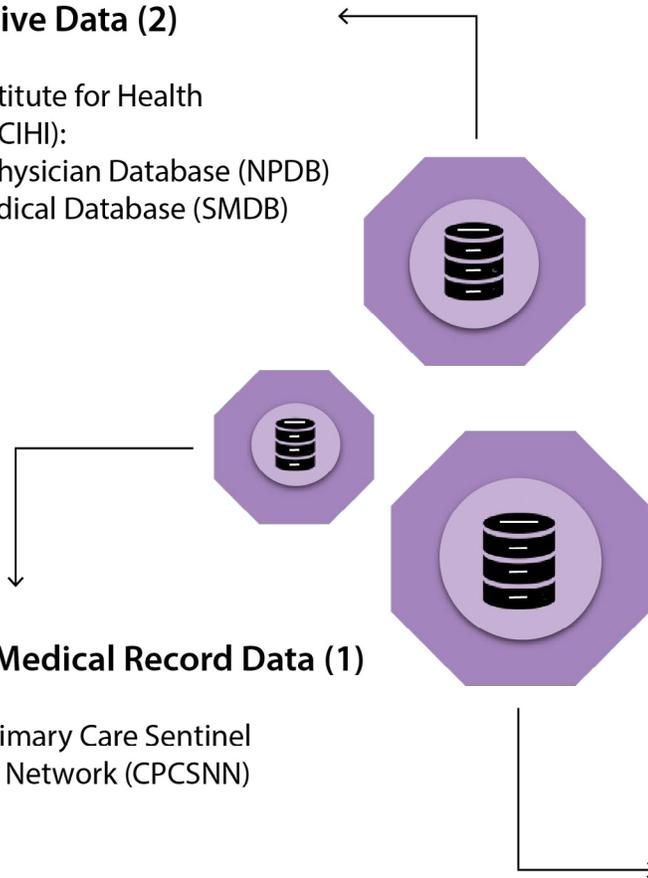
Provincial/Territorial

- Medical regulatory authorities' databases (12)

Electronic Medical Record Data (1)

National

- Canadian Primary Care Sentinel Surveillance Network (CPCSSN)



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that are licensed users in Canada. However, the CFPC has yet to undertake a process to explore the opportunities for and limitations of data linkage. The CFPC’s Family Medicine Longitudinal Survey data and Scott’s Medical Database can be linked using probabilistic linkage (i.e., name, date of birth/age, and sex) and the CFPC’s membership database can be linked using medical regulatory authority registration numbers, but the National Physician Database, National Physician Survey, Patient’s Medical Home Self-Assessment Tool, and Canadian Primary Care Sentinel Surveillance Network cannot be linked.

Discussion

The results of this study indicate that data gaps exist describing the work of family physicians. As the certifying body of family physicians in Canada, the CFPC defines the principles, values, competencies, and scope of work related to the discipline and its Patient’s Medical Home vision highlights the best approach to enable family physicians to practise what they have been trained to do. Without a national data dictionary built on consensus by national organizations and a collective willingness and commitment to collect

information about family physicians, it will be challenging to create a narrative about what family physicians do, where they practise, and whether CFPC-led educational mandates, activities, and advocacy are making a difference.

One of the major issues facing the discipline right now is the lack of evidence-informed decision making by policy-makers who influence the number of family physicians the country has, the kind of remuneration offered, and the practice models that support their work, which ultimately affects the kind of training provided. With the federal government committed more than ever to ensuring that everyone in Canada has access to a family physician or primary care team, it is critical that the CFPC advocates for better data that not only describe the number and distribution of family physicians in Canada but also highlight the need to capture the scope of comprehensive care offered individually and by teams—data that will make all the difference to the future of family medicine.

Conclusion

This review demonstrates the lack of available data that exist in relation to the measurement of the domains in the FMPP. Tracking family physicians temporally, comparing similarities and differences across provinces and territories, and using these data to evaluate the future of family medicine is challenging without good data. Moving forward, the CFPC will explore opportunities for collaboration and advocacy to obtain the data needed to support decisions that are essential to the discipline, especially those related to workforce planning. If the College does not pursue acquiring access to data from other sources, the CFPC may need to develop strategies to obtain the necessary information from its own members, who represent most family physicians in Canada.

As part of the implementation of the Outcomes of Training Project, it will be crucial to evaluate the impact of the recommendations and determine whether the CFPC's educational recommendations will help achieve the desired number, distribution, and scope of comprehensive practice of family physicians working in teams. To highlight the value of family physicians in the health care system, accurate data are urgently needed.

Further information

To read the full report—*Preparing Our Future Family Physicians: An educational prescription for strengthening health care in changing times*—and related evidence and scholarship, please visit <https://www.cfpc.ca/futurefp>.

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