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Impact of primary health care reforms in Quebec Health Care System: a systematic literature review protocol

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ABSTRACT

Introduction During the last decade the Quebec Public Health Care System (QPHCS) had an important transformation in primary care planning activity. The increase of the service demand together with a significant reduction of supply in primary care may be at risk of reducing access to health care services, with a negative impact on costs and health outcomes. The aims of this systematic literature review are to map and aggregate existing literature and evidence on the primary care provided in Quebec, showing the benefits and limitations associated with the health policies developed in the last two decades, and highlighting areas of improvement.

Methods and analysis PubMed, EMBASE, Web of Science and CINAHL will be searched for articles and government reports between January 2000 and January 2022 using a prespecified search strategy. This protocol adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis for Protocols and has been registered with PROSPERO. A wide range of electronic databases and grey literature sources will be systematically searched using predefined keywords. The review will include any study design, with the exclusion of protocols, with a focus on the analysis of health care policies, outcomes, costs and management of the primary health care services, published in either English or French languages. Two authors will independently screen titles, abstracts, full-text articles and select studies meeting the inclusion criteria. A customised data extraction form will be used to extract data from the included studies. Results will be presented in tabular format developed iteratively by the research team.

Ethics and dissemination Research ethics approval is not required as exclusively secondary data will be used. Review findings will synthesise the characteristics and the impact of the reforms of QPHCS of the last two decades. Findings will therefore be disseminated in peer-reviewed journals, conference presentations and through discussions with stakeholders.

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STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This systematic review protocol follows the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols guidelines.
⇒ The search algorithm was developed by an experienced librarian and customised to four large databases, including any type of grey literature.
⇒ The certainty of the evidence of this systematic review may be limited by the limited number of studies available and the possible low quality of the individual studies.
⇒ We aim to create the most comprehensive systematic review providing a comprehensive view and analysis of the primary care in Quebec Public Health are System and its impact on costs, outcomes, accessibility, equity and health organisation.
⇒ The systematic literature review will consider only studies published from 2000 onwards and those published in French and English languages.

BACKGROUND

Primary health care services represent an important element in public health care systems. As reported by the WHO 'Primary Health Care (PHC) is a whole-of-society approach to health that aims at ensuring the highest possible level of health and well-being and their equitable distribution by focusing on people's needs and as early as possible along the continuum from health promotion and disease prevention to treatment, rehabilitation and palliative care, and as close as feasible to people's everyday environment'.[1] PHC is the most inclusive, equitable, cost-effective and efficient approach to enhance people's physical and mental health, as well as social well-being. A strong primary health care presents lower health costs, better population health, higher patient satisfaction, fewer inappropriate and unnecessary hospital admissions, better rates of screening and early detection of chronic diseases, better patient follow-up for patients, a better management of patients with multimorbidity and finally greater socioeconomic equity.[2–8]

The PHC services include the general practitioners (GP) or family physicians, who represent generally the first point of contact

of individuals with the healthcare system, and focus care on the individual within the community, delivering services across the entire spectrum of care (eg, mental health, preventive medicine, respiratory diseases). They play an important role in health promotion and illness prevention, coordinating care with other specialties and health professionals and advocating on behalf of their patients with respect to the care and services they need in all parts of the health care system. The importance of GPs for patients is highlighted in the international literature.[9–14] The physician's personal commitment to the patient is one of the most important determinants of the patient's sense of safety, and it has a large impact on the patient's decision to consult a specialist or to access an emergency department (ED).[15]

Canada has a decentralised and universal publicly funded health care system with the funding and administrations of health care primarily managed by the 13 provinces and territories and the entire country. Each province has its own insurance plan and each province receives money and assistance from the federal government on a per-capita basis. Each system is managed publicly and it is accessible to any citizen (universally). Each provincial government is responsible for the management, organisation and delivery of health care services for Canadians. The insurance plans developed by each province must meet the standards of the Canadian Health Act to access federal funds.

Two reforms were introduced in the early 2000s (Family Medicine Group in 2003 and Bill 20 in 2015) aimed at maximising medical and financial resource use in order to improve the patient access in primary care.[16 17] However, actually the accessibility to primary care for patients still represents a public health issue in Québec (online supplemental material S1). In addition, since the beginning of the COVID-19 pandemics, the accessibility to primary health care worsened.[18] This problem was already reported previously[19–22] and it still represent a challenge for the government.[23 24]

The aim of this work consists in studying, through this systematic literature review, the last two decades of the Quebec Public Health Care System (QPHCS) primary care and the impact of the reforms developed on health organisation, costs, health outcomes, accessibility, equity and services, considering health care system perspective.

METHODS AND ANALYSIS

This protocol has been prepared using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Protocols guidelines,[25] as shown in PRISMA-P checklist (online supplemental material S2). Important amendments made to the protocol will be documented and published alongside the results of the systematic review.

Research question

This systematic literature review will synthesise the scientific literature on interventions that have been developed in QPHCS, focusing on primary care and GPs activities, together with a collection of the evidence for assessing health outcomes, costs, equity and accessibility for Quebec adult population.

Eligibility criteria

The criteria for the study selection will be based on studies that will explicitly analyse the impact of any policy implementation or activity provided where GPs or family doctors are included, together with the information about corresponding health outcomes, costs, accessibility or performance on system organisation.

Study design/characteristics

Target studies will include meta-analysis, systematic review, randomised controlled trial, cohort study (prospective observational study), case-control study, cross-sectional study, case reports, series, quasi-experimental design, difference in difference analysis, natural experiments, regression discontinuity design that show the impact of GP activities on health outcomes, costs, accessibility, health organisation and management, services in QPHCS. We will also consider summary papers, government and public health reports and other analyses to identify relevant primary papers. Study protocols will not be considered in this systematic literature review.

Information sources

A research of academic databases including: PubMed, EMBASE, Web of Science and Cumulative Index to Nursing and Allied Health Literature (CINAHL) will be performed by an author experienced in conducting systematic reviews (FB). The search will look for potentially relevant articles using predefined strategies (online supplemental material S3). A manual search of the reference lists of the studies will be performed in order to check for any additional possible relevant articles. The manual search will be based on backward snowballing search that will involve search of the reference list of the articles selected and identified. In addition, for some of the relevant journals a hand search will be performed to ensure a saturation of the literature. Grey literature will be included in order to explore all the available documentation published. Studies will be excluded if they do not investigate on QPHCS.

Search strategy

The search strategy (table 1) will be reviewed by the first (PL) and the second (J-DL) author, together with the supervision of the third author who is a medical librarian able to provide the support and the guidance on search terms and strategies (FB). The search strategy will combine MeSH (Medical Subject Headings) terms and free text words such as (Primary Health Care OR Primary Care OR Primary Healthcare OR Family Physicians OR Family Practitioner OR General Practitioners OR General Practice AND Health Services Needs and Demand OR Health Services Accessibility OR Delivery of Health Care OR Health Care Reform OR Health Policy OR

Table 1 Inclusion and exclusion criteria

PICOTS strategy	Inclusion criteria	Exclusion criteria
P—population	Primary health care reform/setting/practice/activities in Quebec.	Infants and adolescents treated in Quebec province and adults treated outside Quebec province.
I—intervention	Any health care treatment and activity performed by primary care organisations and GPs that are affected from PHC reforms.	Any individual activity in primary care that is not related to PHC reforms.
C—comparison	No comparator.	
O—outcomes	Health outcomes (eg, QALYs), costs, equity and accessibility.	
T—timing	Studies from 2000 onwards.	Studies published before year 2000.
S—study design	Meta-analysis, systematic review, randomised controlled trial, cohort study (prospective observational study), case-control study, cross-sectional study, case reports and series, quasi-experimental design, difference in difference analysis, natural experiments, regression discontinuity design.	Protocols.

GP, General Practitioner; PHC, Primary Health Care; QALYs, Quality Adjusted Life Years.

Appointments and Schedules OR Mass Screening/organization and administration OR Outcome and Process Assessment, Health Care OR Quality Indicators, Health Care OR Waiting Lists OR Health Policy OR Healthcare Policy OR National Policy OR Healthcare Delivery OR delivery of care OR Health access OR Healthcare access OR Health Care Reform OR primary care demand OR Health demand OR care demand AND Quebec). The search strategy will have filters limiting studies to 2000 onwards, and studies published in English or French. The time limitation is chosen as by the early 2000s, the Family Medicine Groups were introduced as a new primary care model. The literature review searches will be updated at the end of the search process. In addition, using the Population, Intervention, Comparison, Outcome, Timing and Study design strategy,[26 27] we elaborated the guiding question of this review to ensure the systematic search of available literature: 'What is the impact of last two decades of primary health care reforms for GP activities on health outcomes, costs, equity and accessibility for Quebec adult population?'.

Screening, data collection and extraction

The abstracts and full-text articles retrieved from the search strategy will be undertaken using Covidence (www.covidence.org),[28] an online systematic review tool recommended by the Cochrane Collaboration, and duplicates will be removed. Two authors (PL and J-DL) will independently assess titles and abstracts of records, and exclude articles that will not meet eligibility criteria. Disagreements between the selected papers made by the two authors will be resolved by discussion or by a third author SAK, J-BG, AC, MR or ET). Four authors will independently extract and record data from included studies using a predefined data extraction form (PL, J-DL, J-BG and MR).

The authors will pilot the data extraction form with a sample of a limited number of papers (10) and amendments will be made as necessary. After the evaluation of piloting, the data extraction will be developed and completed. The data extraction form will include the information reported in the online supplemental material S4. Other additional information will be included during the review process. If additional information will be required from the studies, study authors will be contacted. At the end of data extraction, four authors (PL, J-DL, J-BG and MR) will resolve any discrepancies that will be present by applying a consensus-based decision, or if necessary, discussion with a fifth author (AC).

Data synthesis will be undertaken through a narrative approach, providing detailed written commentary on the data extracted previously. This will help in the understanding of the impact of GPs activity to the delivery of care and the related issues. In addition, summary tables will be used to present data in a structured format. We will use a convergent synthesis design to synthesise qualitative, quantitative and mixed-method results.[29] Thus, using a thematic synthesis procedure, we will synthesise the evidence from the selected studies.

Quality assessment

Two independent authors (PL and J-DL) will assess the methodological quality of eligible studies. Two independent authors will score the selected studies and disagreements will be resolved by a third author (SAK, J-BG, AC, MR or ET). For quality assessment we will use the Mixed Methods Appraisal Tool (MMAT), which is a critical appraisal tool that is designed for the appraisal stage of systematic mixed studies reviews that include qualitative, quantitative and mixed methods studies. It enables the appraisal of five categories of methodologies such as qualitative research, randomised controlled trials, non-randomised studies, quantitative descriptive studies, and mixed methods studies (online supplemental material S5).[30]

Cumulative evidence

We will use the MMAT approach to assess the certainty of the evidence for each study, and will present the data results on the MMAT rating tables.

Discussion

To our knowledge, this systematic review will be the first to synthesise the available evidence on the impact of the last two decades' reforms on primary health care organisations in Quebec evaluating several dimensions (eg, costs, health outcomes, services accessibility, equity). The results of this review will also inform policymakers and leaders of Quebec public health. Our results may highlight gaps in knowledge and guide future research concerned with the primary health care organisation in Quebec.

Patient and public involvement

Patients were not directly involved in the design of this study. As this is a protocol for a systematic literature review and no participant recruitment will take place, their involvement in the recruitment and dissemination of findings to participants was not applicable.

ETHICS AND DISSEMINATION

This study does not require the ethical review as it is a systematic literature review. The objective is submitting this work and its future development to a peer-reviewed journal and presenting the main findings at Quebec government, national and international meetings and conferences.

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Contributors PL and J-DL led the design, search strategy and conceptualisation of this work and drafted the protocol. FB performed the search strategy and provided the corresponding results. PL, J-DL, SAK, MR, ET, AC and J-BG were involved in the conceptualisation of the review design, inclusion and exclusion criteria and provided feedback on the methodology and the manuscript. PL, MR, ET, AC, J-BG and J-DL were involved in data extraction forms. All authors provided feedback on the manuscript and approval to the publishing of this protocol manuscript.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

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