

Primary Care: Ensuring A Strong Foundation For Child Health Services

Dr. Patricia Li



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Dr. Patricia Li is a pediatrician who recently received funding to begin work on a project that will evaluate health care reforms in Quebec and discover the best way to improve primary care for children in Canada.



As a starting place, how did you come to focus your work on primary care, specifically for children?

Primary care is pivotal in every child's health. It is the cornerstone of our healthcare system. An extensive body of research supports the positive correlation between having a source of primary care and better overall health. Over a decade ago, government-commissioned reports exposed numerous problems with attributes of primary care in Canada, drawing attention to fragmented and inaccessible care. Recognising the vital need to improve primary care services, the federal government established the Primary Health Transition Fund and later the Health Reform Fund providing millions of dollars to assist provinces and territories in reform efforts.

As I was finishing my master's degree in clinical epidemiology and health care services at the University of Toronto and the Institute for Clinical Evaluative Sciences, publications evaluating reform efforts were starting to come out, with some demonstrating improved outcomes. As I am a general pediatrician and none of these evaluations focused on children, this topic naturally became the focus of my research program.

You involved parents and clinicians, the end-users of your research, in your projects. How

did their perspective change the project, if at all? Did it provide any unique challenges?

Having end-users—in particular, decision- and policy-makers, health administrators, clinicians, parents—on our team has ensured that our projects and objectives stay relevant to the health of children and their families, as well as the health system. In our projects thus far, they have not changed the perspectives of projects as much as they have added perspectives and insights. Our end-users will also be important in helping us disseminate our results to the appropriate audiences, in appropriate formats (i.e. in ways that are accessible and understood by knowledge users). Still, there are challenges in having a bigger and more diverse team, such as being unable to address all the questions and viewpoints raised by every member in a single project – in some cases, they may help fuel another study.

The literature review gathered in support of this project found that there is almost no information relating to the primary care of children in Canada after the reforms were passed. Do you have any hypotheses as to why this is the case?

A lot more focus is put on evaluating and improving the care of adults and the elderly with more costly chronic diseases. There is

more impact on costs when improving the quality of care in the elderly/adult population, which is a large and growing percentage of the population in Canada and around the world. The capacity for health services research is also not as great for children as it is for adults. For instance, there are just not as many researchers focused on child health services as adults. The Canadian Institutes of Health Research (our main federal funding agency) has documented this dearth in child health services research capacity and has made strides to support the development of researchers in this field in the past few years as well as support more studies related to child and maternal health.

Did you experience any significant setbacks to gaining funding?

Apart from having a strong team, I have been fortunate in having successfully obtaining grants from our provincial and federal funding agencies (Fonds de Recherche du Québec – Santé, and Canadian Institutes of Health Research, respectively). The strength in Canada (as in some Nordic countries) is that we have longitudinal data for all publicly-funded health care services and providers. This allows us to study the care of the entire population (using anonymised data), across all health care settings (such as clinics, hospitals, emergency departments, etc.).

Improving Children's Health through Primary Care

Dr. Patricia Li of McGill University is heading a research team whose goal is to improve primary care for children in Canada. Recently, her research efforts has received funding from the Canadian Institutes of Health Research and the Fonds de Recherche du Québec - Santé.

HEALTH CARE REFORMS IN QUEBEC, CANADA

Access to primary care is crucial for all members of society. Primary care services are those related to health promotion and frontline management of injury and illness including prevention, diagnosis and treatment. Primary care interventions may reduce future anxiety by addressing potential health problems early. More importantly, primary care can help avoid tremendous morbidities and costs. These high costs are paid by individuals, but also by society at large.

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In 2000, the Canadian government turned its efforts and attention to improving primary care, investing millions of dollars in primary care reforms through the Primary Health Transition Fund and the Health Reform Fund. Each province and territory allocated these federal health care money into primary care reforms as they saw fit. Reforms across Canada share common features with other international primary care initiatives (such as those in the United States and the Quality Outcomes Framework in the United Kingdom), and aimed to improve primary care accessibility, comprehensiveness, coordination, continuity, as well as quality of care.

While some aspects of the reforms in the province of Quebec are unique, other Canadian provinces are using very similar structures



to implement primary health care. Quebec's new system established entities known as family medicine groups (FMGs) and network clinics that enable physicians or clinics to work together in providing care to a group of patients.

Through the FMGs, access to physicians is now improved by making them more available on-call to patients who are in their given network. In addition, this extends working hours for physicians. The physicians are also often compensated for long-term care of patients with chronic diseases. Continuity of care is also provided since the registered patients are able to access and often see the same group of doctors within the network. This further improves the coordination between patient and doctor and establishes comprehensiveness of care. On the doctors' part, the FMGs are designed to incentivise doctors through pay to provide quality care to patients. Some FMGs have also implemented electronic medical records that make it easier to share patient information among doctors.

In Canada, the state of primary care services for children after the reforms is still not widely

Researcher Profile



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Dr. Patricia Li completed her medical doctorate at McMaster University (Ontario, Canada), paediatrics residency at McGill University (Montreal, Quebec), and master's in epidemiology and health care research at the University of Toronto and the Institute for Clinical Evaluative Sciences (Ontario, Canada). A certified paediatrician, she is also assistant professor in the Department of Pediatrics, Faculty of Medicine at McGill University in Montreal. She is a clinician-scientist funded by a new investigator salary award from the Canadian Institutes of Health Research. Her research interests include the organization and delivery of health care services to children, specifically primary care and common childhood illnesses. Her work has been included in publications, such as the Archives of Paediatrics & Adolescent Medicine, Journal of Pediatrics, Cochrane Reviews, Canadian Family Physician and Surgery.

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studied. The reforms instituted by Canada's provinces have shown some positive outcomes in adults, including reduced emergency department visits and reports of better experiences with health care overall. Dr. Patricia Li's research plan works with doctors to analyse whether FMGs are providing the same benefits to children. They will examine whether primary care reforms have improved the quality of care for children with chronic diseases, such as asthma and diabetes, and if FMGs reduced the disparity in health outcomes for children in different socioeconomic classes. The research team will also look at emergency department visits to see if visitation rates are at all affected by access to primary care as in adults.

In order to assess whether FMGs have affected children's primary care in Canada, the research team must consider many different aspects of health care. When there is a concern, primary care physicians are often the first doctors to see patients and recommend treatment or other specialists, so the research outcomes for this project have the potential to transform health care for the next generation. It is an ambitious goal that needs qualified researchers to be successful. As a paediatrician, Dr. Li's expertise with children's health issues and the involvement of doctors and parents of patients as members of the research team allows the study results to be more accurate and useful.

AN INTEGRATED KNOWLEDGE APPROACH

The study will be conducted using health administrative data in Quebec. Canada has a publicly-funded universal healthcare system, and Quebec (as in other provinces) has population-based data which can be used to link health care utilization across settings (such as emergency departments, hospitals, and outpatient clinics). A cohort of children will be studied from 2010 to 2013. Each child will be assigned to a type of primary care provider (for example, paediatrician vs. FMG vs. non-FMG general practitioner vs. no primary care) and quality of care outcomes will be studied, including emergency department visits and hospitalizations. The research should be complete within the next two years.

The research makes use of an integrated knowledge approach, whereby end-users of the research (such as decision-makers, clinicians, parents/patients) are involved throughout the study. The research team includes people from across multiple disciplines, providing feedback and input to the study to ensure

that the findings will be informative for health care policy and practices. Specifically, the team includes stakeholders who will advise government and health care agencies about the health care needs of children and how to plan future resources. The primary stakeholders in this project are leaders in the department of maternal-child health and health services at the Ministry of Health and Social Services in Quebec.

MAKING A DIFFERENCE IN THE COMMUNITY

As a paediatrician, Dr. Li is part of a group of clinician-researchers dedicated to studies that aid doctors in providing the best care for patients. Together with collaborator Dr. Evelyn Constantin of the Montreal Children's Hospital, Dr. Li is setting up a clinical site in Montreal for a primary care research network in Canada called TARGet Kids! which was co-founded by doctors Catherine Birken, Jonathon Maguire, and Patricia Parkin. It is one of the largest ongoing prospective cohorts of children under six years old in Canada that is recruiting patients and conducting studies within a network of primary care clinics. In Ontario, TARGet Kids! already encompasses over 5,000 children and eight paediatric and family medicine clinics. The clinics recruit children for longitudinal studies to research primary and preventative care practices such as nutrition, physical activity, growth and cardiometabolic disease. TARGet Kids! also involves clinicians and parents as members of the research team.

The work of Dr. Li and her collaborators aim to improve primary health care for children and shed light on the current system in Canada so that the benefits can be used by other health care systems. The researchers hope to see their research improve the well-being of patients and their families. But in the long run, by improving primary care for children, there may also be great benefits to society as well. A healthy start in childhood increases the chance of a healthy, productive adulthood. Quality preventive and primary care also reduces the costs of health care for everyone, and so there are potentially several significant outcomes of this research.