THE COLLEGE OF FAMILY PHYSICIANS OF CANADA
LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

# The Seven Wonders of Family Medicine Research

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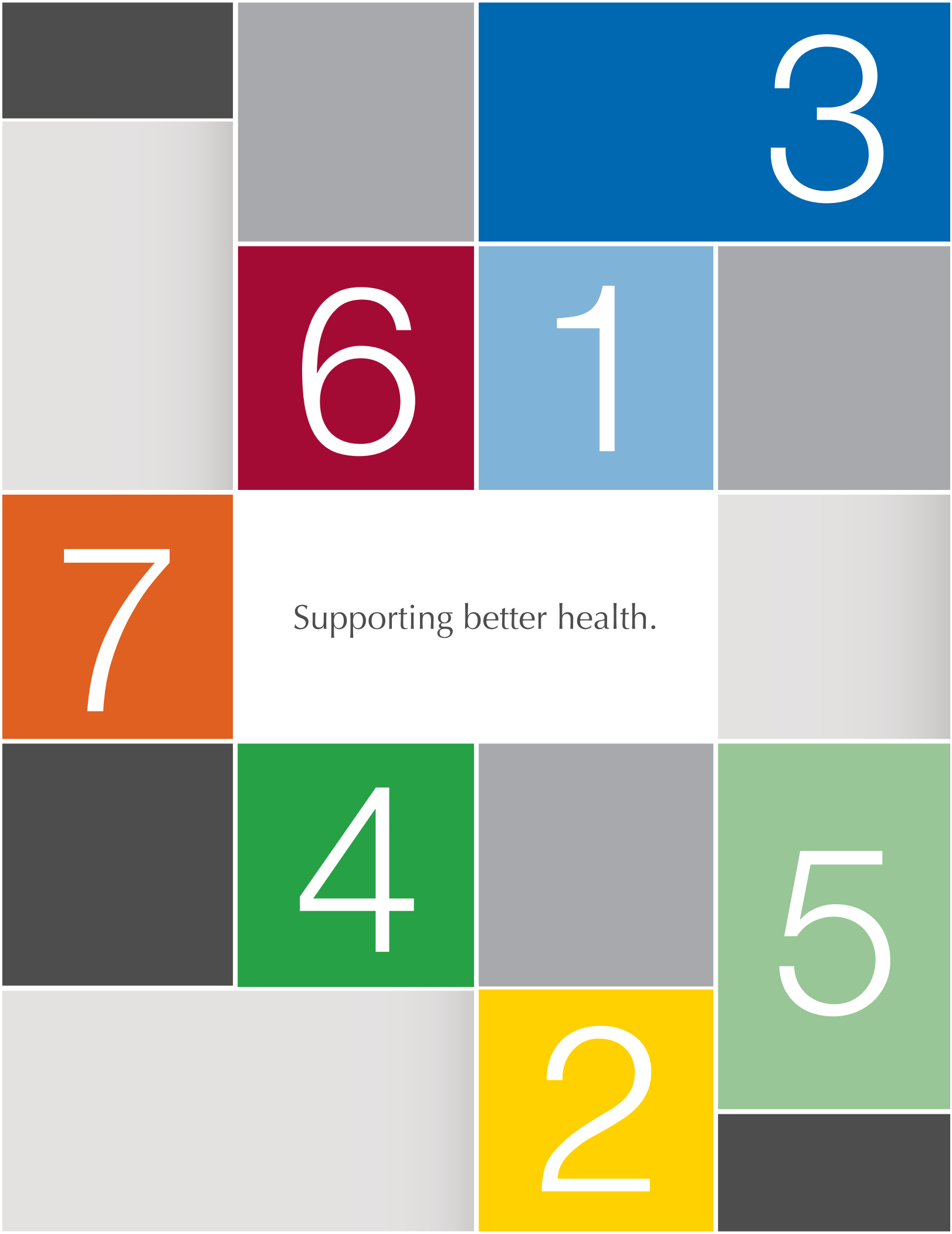
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Supporting better health.
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# THE SEVEN WONDERS OF FAMILY MEDICINE RESEARCH

Family medicine researchers play a significant role in Canada's health care system. They are hard at work testing theories and contributing to the ever-growing body of knowledge of medicine and care.The CFPC has identified seven notable studies carried out by family medicine researchers.

Each of these studies serves to underline a concept that is central to ensuring effective and efficient delivery of care.

Embracing the value of family medicine research and supporting it through recognition and funding ensures that these contributions can continue to support better health and well-being for all Canadians and for the people around the world.

# 01 IMPORTANCE OF FAMILY PHYSICIANS

Canadians value the unique relationships they have with their family doctors. The research on the importance of family doctors shines light on the risks to health and system strains that result when people do not have their own family doctor.

### THE STUDY

Glazier RH, Moineddin R, Agha MM, Zagorski B, Hall R, Manuel DG, et al. The impact of not having a primary care physician among people with chronic conditions. ICES Investigative Report. Toronto: Institute for Clinical Evaluative Studies; 2008.

Available from:
**http://www.ices.on.ca/~/media/Files/Atlases-Reports/2008/The-impact-of-not-having-a-primary-care-physician/Full%20report.ashx**. Accessed Apr 2014.

This study from the Institute for Clinical Evaluative Studies (ICES) shows how important having a family doctor can be in avoiding emergency department visits, thereby reducing health care costs and system demands. It also demonstrates that patients without a regular family doctor experience poorer continuity of care and health outcomes.

### SUMMARY

ICES reported on surveys showing that 90% to 95% of Ontarians with chronic health conditions had a regular medical doctor; these patients experienced few serious barriers to accessing primary care. However, among the remaining minority of people with chronic conditions, those without a family doctor made extra and costly demands on the health care system. These demands included thousands of emergency department visits and thousands of medical non-elective hospital admissions, all potentially avoidable and attributable to not having a regular doctor. Such visits and admissions contributed to the crowding of emergency departments and bed shortages. They were also highly likely to be associated with preventable suffering and sometimes irreversible clinical deterioration.

Studies such as this highlight the importance of ensuring Canadians have a trusted partner in health care—their personal family physician.

# 02 PATIENT-CENTRED CARE

Patient-centred care recognizes that patients play a central role in their health care outcomes. First, patient's own experience of their illness is very important, and second, the patient and physician must be partners, and share responsibility for defining goals and problems, making decisions, and carrying out treatment plans. The patient-centred clinical method was developed at the Department of Family Medicine at the University of Western Ontario, under the leadership of Dr. Ian McWhinney, considered to be the Canadian "father of family medicine."

### THE STUDY

Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, et al. The impact of patient-centered care on outcomes. J Fam Pract 2000;49(9):796-804.

Available from:
**http://www.jfponline.com/index.php?id=22143&tx_ttnews[tt_news]=168778.** Accessed Apr 2014.

This study, published in 2000 by the team of researchers at the University of Western Ontario, was one of the first to demonstrate that the patient-centred clinical method had merit, in that it improved health outcomes.

### SUMMARY

What are the benefits of patient-centered care? To address this question, this study surveyed 315 patients in the care of 39 family physicians. The researchers found that patients who considered their encounters with their family doctors to be patient-centred had better health outcomes. Patient-physician communication influenced patients' health, when patients' perceived that they were full participants in the discussions during their encounters. Further, patients' perceptions about their own health influenced their health outcomes. Patient-centred practice also resulted in fewer diagnostic tests and referrals, when patients felt they were listened to and had achieved "common ground" with their doctors.

Since this study, volumes of research have addressed the benefits of patient-centred care. It is the first pillar of the Patient's Medical Home (PMH), the CFPC's vision for the future of family practice in Canada.

# 03 FAMILY PHYSICIANS TRANSFORMING PRACTICE

Family physicians are active agents in the evolution of medicine. The research that family doctors conduct produces findings that lead to important discipline-wide changes that transform the way health care is delivered in Canada.

## THE STUDY

Klein MC et al. Does Episiotomy Prevent Perineal Trauma and Pelvic Floor Relaxation? First North American Trial of Episiotomy. Inaugural issue: On-Line Journal of Current Clinical Trials. American Association Advancement Science. 1992;1:July 1 (Doc 10).

Dr. Klein is best known for his landmark randomized controlled trial (RCT) of episiotomy that demonstrated that routine episiotomy caused the problems it was supposed to prevent. This work is credited with leading to a dramatic drop in episiotomy and a parallel drop in severe rectal trauma across Canada and beyond.

## SUMMARY

Dr. Klein and his colleagues undertook a randomized controlled trial at three Montreal hospitals to compare the outcomes of the current practice of liberally applied routine episiotomy at birth (control group) with restricting episiotomy use to specific fetal and maternal indications (experimental group). There was no evidence that episiotomy prevented perineal trauma or pelvic floor relaxation. Women who had had a previous birth were significantly more likely to deliver with an intact perineum and less stitches in the restricted group.

# 04 ELECTRONIC MEDICAL RECORDS

The use of electronic tools, such as electronic medical records (eMRs), is becoming increasingly prominent in Canadian health care. With progress comes the realization that the data collected through eMRs can be leveraged for unique analyses of population health that contribute to better understanding of diseases and improved health outcomes for patients.

## THE STUDY

Birtwhistle R, Keshavjee K, Lambert-Lanning A, Godwin M, Greiver M, Manca D, et al. Building a pan-Canadian primary care sentinel surveillance network: initial development and moving forward. J Am Board Fam Med 2009;22(4):412-22.

Available from:
**www.jabfm.org/content/22/4/412.long**
Accessed Apr 2014.

The Canadian Primary Care Sentinel Surveillance Network (CPCSSN) is a key example of family practice–based researchers collaborating to improve our collective knowledge of population health and care delivery in Canada. Developed through support from the Public Health Agency of Canada, CPCSSN is an award-winning nationwide network that collects data at the source using the new information technology tools.

## SUMMARY

Canadian primary care researchers have long recognized that family medicine practices could be a rich source of data for chronic disease research and surveillance—if only they could access it. The development of a nationwide network of networks, linking regional primary care research networks for the study of issues in primary care, had been their dream for many years.

With the opportunity for funding from the Public Health Agency of Canada and the support of the College of Family Physicians of Canada, Dr Rick Birtwhistle and his colleagues developed a project to assess the feasibility of such a network.

The Canadian Primary Care Sentinel Surveillance Network that grew out of this feasibility study collects longitudinal data from family practices across Canada to assess the epidemiology and management within primary care of five chronic diseases: hypertension, diabetes, depression, chronic obstructive pulmonary disease, and osteoarthritis. It also collects data on three neurological conditions: Alzheimer's and related dementias, epilepsy and Parkinson's disease. In the few years since the publication of the phase one research, the network has expanded to eight provinces from four and added more regional networks, with nearly 500 sentinel physicians and over half-a-million patients participating. Since 2008, 200 scientific presentations and publications were created using the data. The information the network gathers is helping physicians better understand chronic disease and improve the care Canadians with chronic disease receive.

# 05 EVIDENCE VERSUS IDEOLOGY

Family medicine research has fostered evidence-based medicine. Its findings have led to better practices, safer patient care, better outcomes, and a more prudent use of health care resources.

## THE STUDY

Godwin M, Lam M, Birtwhistle R, Delva D, Seguin R, Casson I, et al. A primary care pragmatic cluster randomized trial of the use of home blood pressure monitoring on blood pressure levels in hypertensive patients with above target blood pressure. Fam Pract 2010;27(2):135-42.

Available from:
**www.fampra.oxfordjournals.org/content/27/2/135.full.pdf+html**
Accessed Apr 2014.

This well-designed study demonstrated how difficult it is to prove the validity of commonly held beliefs. For example, that blood pressure monitoring at home is superior to blood pressure monitoring in the office.

## SUMMARY

The measurement of blood pressure at home by patients with hypertension is increasingly used to assess and monitor blood pressure. Evidence for its effectiveness in improving blood pressure control is mixed. In this award-winning paper by Dr Marshall Godwin and his colleagues, home monitoring did not improve blood pressure, compared to usual care, at the 12-month follow-up, but there was some evidence it might improve blood pressure monitoring in men.

Further studies are needed to better understand the complexities of the problem of how location can influence the measuring blood pressure control so as to further clarify the role of self-monitoring. This example serves as a reminder that existing beliefs should not continue to guide medical practice if not supported by evidence.

# 06 COMMUNITY ENGAGEMENT AND ABORIGINAL HEALTH

Family medicine research that engages communities as collaborators to develop their own solutions is an effective approach to improve health outcomes. Dr Ann Macaulay's participatory research method is a collaborative approach to creating action-oriented knowledge, and is recognized for its effectiveness in producing real improvements in health in a community.

## THE STUDY

Macaulay AC, Paradis G, Potvin L, Cross EJ, Saad-Haddad C, McComber A, et al. The Kahnawake Schools Diabetes Prevention Project: intervention, evaluation, and baseline results of a diabetes primary prevention program with a native community in Canada. Prev Med 1997;26:779-90.

Available from:
**http://www.neahr.ualberta.ca/en/Publications/ResearchPapers/~/media/acadre/Documents/Publications/lega4e6b39ba20139-thekahnawakeschools.pdf**
Accessed Apr 2014.

Developed in direct response to a community's request, this study is an example of effectively using participatory research to bring about meaningful and sustainable improvements in a community's health.

## SUMMARY

This study showed that implementing an Aboriginal community-based diabetes prevention program was feasible through participatory research that incorporated Aboriginal culture and local expertise. The program in Kahnawake aimed to prevent not only the onset of diabetes but also its risk factors. Its origins lay in the community members' concerns about the perceived increase of obesity among their children, combined with the Mohawk tradition of caring for future generations. The community supported the program through participatory research, to develop a prevention program that focused on elementary school children, their families, and the entire community. The Kahnawake study is an outstanding example of a community-based primary prevention program for non-insulin-dependent diabetes mellitus.

Dr Macaulay and her colleagues, along with the community members of Kahnawake, demonstrated that research using community engagement can be an effective approach to addressing a community's health care issues and enabling positive change.

# 07 ETHICS, PUBLIC HEALTH, AND PRIMARY CARE

Family medicine research has demonstrated that clinical ethics is not an appropriate model for public health ethics, as clinical practice and public health practice differ substantially in their contexts, mandates, and range of activities.

## THE STUDY

Upshur REG. Principles for the justification of public health intervention. Can J Public Health 2002;93(2):101-3.

Available from:
**http://journal.cpha.ca/index.php/cjph/article/view/217/217 .** Accessed Apr 2014.

## SUMMARY

Dr Ross Upshur's research focuses on how the clinical ethics model is different to the public health model. The framework of principalism has been used to assist clinicians on ethical issues, however this does not work for public health practice. Ethical considerations for individual concerns may conflict with concerns for the population. In this thoughtful article, Dr. Upshur proposes a set of four principles— harm, least restrictive or coercive means, reciprocity, and transparency— that focus on the question of when a public health action is justified, but not on screening programs, health promotion programs or public health research. The principles presented in this paper are now colloquially and widely referred to as the "Upshur Principles."

We welcome questions and comments on this document at **healthpolicy@cfpc.ca** or **researchdept@cfpc.ca**


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