# Health services research: a special *CMAJ* focus

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Canada spends over $240 billion annually (more than 10% of our gross domestic product) on health. Yet no one is going to get the right health interventions at the right time if the services that provide them are poorly organized. Our health care system is based on our health professionals, the facilities that house them, and the processes through which we deliver care. It is critical, then, that the components of this system — guided by health policies — are produced and allocated optimally. Only by so doing can our nation ensure that its enormous investment yields a highly efficient health care system that effectively meets the needs of the society it serves.

As a general medical journal, *CMAJ* publishes on a wide range of topics. In this issue, we launch a new initiative on health services, one of the journal's special areas of focus (alongside mental health, vulnerable populations and sepsis). Health services research is defined as "research with the goal of improving the efficiency and effectiveness of health professionals and the health care system, through changes to practice and policy."[1] It encompasses many activities — from research into human resources and system planning to health policy evaluation and technology assessment. Collaboration with disciplines beyond the health sphere, such as behavioural science, business administration, informatics and political science, is the norm.

Studying health services often relies on large volumes of administrative and clinical data. The collection of health-related statistics in Canada stems from the Census and Statistics Act of 1847, which mandated the collection of vital statistics. The act was later amended to allow the federal government to collect, analyze and publish statistics from hospitals and other health institutions.[2] The Hospital Medical Records Institute was established in 1963 to help with administering provincial and federal hospital insurance plans, and in 1994 was transferred to the Canadian Institute for Health Information to form the founding Discharge Abstract Database. In parallel, provincial efforts to amass central repositories of administrative and clinical health care data have resulted in world-renowned health services research initiatives, such as Population Data British Columbia, the Manitoba Centre for Health Policy, the Institute for Clinical Evaluative Sciences in Ontario, and the data infrastructure of the Régie de l'assurance maladie du Québec.

The ability to explore large volumes of data about our health care systems and the patients we serve has enabled considerable insights into critical issues: how different models of primary care influence patient outcomes after hospital discharge; the economic effects associated with self-monitoring of blood glucose in type 2 diabetes; and how delays in performing urgent surgery modify the hospital stay. Such studies exemplify the wide range and importance of health services research and its relevance to health policy decisions that affect millions of Canadians.

An action at one level in our political or health systems may affect the delivery of health care on many levels, for good or harm. Health services research and analysis help us discover what works and what doesn't, but also why. It exposes the unintended consequences of well-intentioned policies and allows us — on an ongoing basis — to refine our efforts to improve the health of Canadians.

Canada has been recognized as an international leader in health services research, given our rich health care data sets and cadre of highly skilled researchers.[3] As this field continues to evolve, we envision strong collaborations with complementary research areas (knowledge translation, economics and computer science) to enhance its relevance, application and efficiency. Good relationships between researchers and health policy-makers will ensure adoption of research findings into health policy. More efficient ways of storing, linking and analyzing data using emerging approaches, such as cloud-based solutions and machine learning, will enable more rapid, fulsome insights into health care system performance and optimization.

*CMAJ* intends to position itself at the forefront of these developments. In keeping with the journal's mission and vision, we look forward to publishing articles that answer important questions about our health services and, as always, to sharing knowledge that matters to health.

## References

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