

## LETTERS

### Canada's future health care system

Mamdani and Laupacis describe multiple sources of health care data that are increasingly available for observational studies, including those involving advanced analytics to facilitate point-of-care decision-making.<sup>1</sup> We add primary care electronic medical record (EMR) data to the sources of data that are vital for transforming the Canadian health system.<sup>2</sup> There are at least 300 primary care interactions for every inpatient admission to an academic health sciences centre, representing an important longitudinal source of information about the health of Canadians in our communities.<sup>3</sup> These data could be used to improve clinical practice, accelerate research and provide information relevant to strategic decisions by policy-makers. Many of the building blocks for this type of transformation already exist in Canada. For example, there are large primary care databases that securely aggregate de-identified records across settings, such as the University of Toronto Practice-Based Research Network (containing the primary care records of more than 500 000 people), which contributes to the Canadian Primary Care Sentinel Surveillance Network (containing records of more than 1.5 million Canadians).<sup>4,5</sup>

Primary care EMRs may also be used for experimental studies to determine the real-world comparative effectiveness of interventions. This will require novel approaches to recruitment and data collection. Registry-based randomized controlled trials, in which existing patient registries or databases are used to identify patients for inclusion in a study or for outcome ascertainment, will be a key feature of these new approaches to health research.<sup>6</sup>

To foster social licence, we will need governance processes over the data that

are more transparent and inclusive of the public's perspective on appropriate flows and uses of the data, including conditions for use of these data. It is time for an informed public discourse on this issue — one that includes active engagement of patients, data custodians, regulators and other stakeholders.

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