Shared vision for primary care delivery and research in Canada and the United States

Highlights from the cross-border symposium

Robyn Tamblyn PhD David Meyers MD Meredith Kratzmann MA Andrew Bazemore MD MPH Arlene S. Bierman MD MS Andrew B. Bindman MD William Hogg MD MSc MClSc FCFP David Price MD CCFP FCFP Brian H. Rowe MD Denis Roy MD MPH MSc FRCPC Judith Steinberg MD MPH Robert H. Reid MD MPH PhD

For years, the United States (US) and Canada have aimed to improve value in health care. Yet, health care consumes an increasing share of national expenditures,[1] while expected gains in patient experience and population health outcomes have not been realized.

High-performing primary care is considered critical to achieving the triple aim of health reform: better health, improved patient experience, and more affordable costs.[2] Improving primary care and making it responsive to the needs and preferences of patients and families are high priorities for both countries,[3] as systems that emphasize primary care achieve better health outcomes and health equity at lower costs.[4] The past decade has seen numerous initiatives to advance primary care, ranging from local efforts to regional or national experiments.

However, efforts to share knowledge and compare strategies and outcomes are often directed within rather than between countries. This is not surprising because between-country differences in financing and delivery are often considered so substantial as to obviate the relevance of findings in one country for another country. In the US, Americans obtain insurance and care through a complex mix of public and private providers, and a sizable number remain uninsured or underinsured. In contrast, Canadian health insurance is primarily provincial government–based with citizens receiving first-dollar coverage for hospital and physician care. While the American system permits consumers to select competing plans with varying coverage, Canadian benefits are accessible, transferable among provinces, and largely consistent. While these differences often lead to dismissals of transnational comparisons, there are more similarities than differences in the gaps and challenges advanced primary care systems face in meeting patient needs and expectations, as well as optimizing their health.

Our populations share the enviable position of having relatively high overall health status.[5] However, there are large health inequities across the socioeconomic spectrum, such that the socioeconomic health gradient is more pronounced within than between our countries.[5] Moreover, we share similarities regarding key social determinants that contribute to health inequities,[6] including poverty rates,[7] education gaps,[8] unemployment,[9] geographic isolation and distribution,[10] and indicators of racial and ethnic disparities.[11]

The populations in both countries have changing primary care needs that demand more capable, coordinated, and longitudinal systems. Chronic disease is increasingly common, with multimorbidity becoming the norm rather than the exception.[12] Recent cross-national surveys demonstrated similar gaps in primary care delivery.[13] In 2016, 34% to 51% of citizens in both countries reported having difficulties getting same-day or next-day appointments or receiving after-hours care easily, or visiting the emergency department because their primary care providers were not available.[13] In both countries, a considerable proportion of patients presenting to emergency departments are not connected to a primary care provider, either owing to issues of access or preference, especially among certain demographic groups.[14-16] Many patients also reported coordination-of-care gaps regarding the timely transfer of clinical information among their physicians.[13] More than one-third of patients with chronic illness reported not discussing their goals, priorities, or treatment options with their primary care provider in the past year.[17]

Both countries have recognized that the gaps in primary care delivery need to be addressed and that a coordinated research agenda is required to understand which strategies are successful in the provision of care to various populations. For this reason, collaborators from both countries came together to plan an inaugural cross-border symposium focused on primary care.

This symposium brought together more than 150 leaders in primary care delivery to exchange cross-border stories in primary care transformation, develop a binational research agenda to support primary care transformation, and support cross-border learning and collaboration. Stakeholders included not only clinicians but also policy makers, researchers, payers, system designers, and patients. This symposium was committed to collaborating and finding ways to support primary care transformation at practice, policy, and research levels.

Vision for primary care transformation

Consensus emerged among participants about core features for primary care transformation. Transformation

must first be framed around an expanded "quadruple aim" that includes health equity, and around the evidence-based principles of primary care (first contact, continuous, coordinated, comprehensive). Within this framework, there is a need for new models of primary care that are reinvigorated with the "joy of practice," embrace a broader definition of *primary health care* that includes a patient-centred approach and behavioural care, and reflect the interdependence of the health care system and primary care's role within it, as well as linkages to community-based resources and nonmedical health determinants. Furthermore, access to actionable data about both clinical conditions and social determinants of health at the community and individual levels will be needed for success.

To support the vision

Directions for clinical leadership and practice. The most important challenges facing primary care are the imperatives to meet the needs of people with multiple chronic conditions and to address inequities in health and health care. The former was eloquently highlighted by a patient representative who reminded the group that the current delivery system treats patients as "complex patients" instead of as "people with complex health care needs."

A moral challenge on both sides of the border is that health care disparities continue to exist because we tolerate them. It was recognized that while primary care could not be expected to solve all broader community issues, such as food insecurity, social integration, and environmental exposures, it cannot improve health without strategies and models of care that address them.

As health and health care are local phenomena, no single delivery model can be expected to succeed everywhere. Professionals and practices need flexibility in order to identify the outcomes they want to achieve, meet the needs of communities, and design and adapt their practices to achieve these. The key priorities and directions for primary care practice transformation are outlined in **Table 1**.

Directions for policy to support effective primary care. A key theme that emerged for policy makers was the need for a broader perspective on health care. Future investments in primary care systems need to be based on an overarching vision with clear goals, as well as on a policy framework that aligns policies and incentives, including but not limited to payment. While there is no perfect model, there was consensus among members on the key components for effective primary care (**Table 2**).

Table 1. Priorities and directions for primary care practice transformation

PRIORITIES AND DIRECTIONS	AREAS OF FOCUS
Redesign primary care practice to realize the principle of comprehensiveness	• Integrating behavioural health care, including substance abuse, mental health, and behaviour change support, into primary care delivery • Integrating the primary care health system with community-based resources and the public health system • Improving the primary care work force, work flow, information systems, and non-financial incentives to reduce inappropriate referrals to subspecialty care • Enhancing care coordination with subspecialty care system for people with complex conditions • Enhancing information systems, including clinical decision support, virtual consultations, and tele-mentoring to promote evidence-based care • Broadening primary care practices to address the needs of both individuals and the community
Adopt a patient-centred approach in which patients and caregivers are engaged in developing and implementing their care plans, as well as the design, ongoing evaluation, and improvement of primary care practices	• Providing robust patient self-management support and exercising shared decision making to empower patients to meet their personal goals • Developing and using evaluation measures that align with patient goals for care and health • Designing care plans that take into consideration multimorbidity and social context
Reorient primary care to be delivered by primary care teams with diverse skill sets and an expanded range of competencies, and customize teams to the needs of the patient and community	• Engaging primary care practices and systems in continuous learning and ensuring they have the resources, staff, and skills needed to meet the specific needs of each individual patient and family • Using data and meaningful measures to improve care, and addressing broader population health objectives and the social determinants of health • Rekindling the "joy of practice" and ensuring the well-being of professionals and staff is not overlooked
Improve and advance electronic health systems and quality measurement	• Ensuring primary care teams have access to the information and data they need to engage in continuous improvement, provide patient-centred care, and address population health • Enhancing the capacity to use data captured in practice from patients to develop the evidence about what works both clinically and with respect to models of care delivery

Table 2. Policy directions to support effective primary care

POLICY DIRECTIONS	AREAS OF FOCUS
Enable integration of patient-oriented care across primary care, behavioural health, public health, and social services	• Building data collection infrastructure and analysis to support continuous quality and outcome improvement • Planning and training a work force that will support team-based care • Expanding capacity for coordination across systems, including interoperable health records and data linkages
Support a culture shift: from provider-centred to patient-centred care; physician-based to team-based care; disease-focused to health-focused care; and individual-based care only to individual-based and population-based care	• Engaging the community in local solutions through health system governance structures that include community representation • Having meaningful patient and family engagement in redesign and quality improvement • Emphasizing measures of patient experience, engagement, and outcomes • Basing outcome measures on individual goals and preferences, as well as the population served; and basing payment on performance on these measures
Invest in implementation, evaluation, and mechanisms for spread and scale of successful primary care innovations and models	• Evaluating the innovation of implementation projects and their contribution to the overarching policy vision for primary care • Aligning new payment incentives across payers to support scaling up • Funding implementation and coaching to spread learning systems and rapidly bring effective models to scale, such as through practice facilitation, local learning collaboratives, health professionals' training and virtual mentoring, and networked implementation laboratories or incubators like the Centers for Medicare and Medicaid Services in the United States

To build a robust foundation for effective primary care, policy makers need to address prices and value by rebalancing payment for primary and specialty care; invest in practices rather than providers; invest in data collection infrastructure and analysts to support continuous quality and outcome improvement; and develop a richer set of performance metrics that monitor the principal requirements of primary care, as well as equity. In turn, primary care needs to strengthen its governance and accountability for population health, and embrace joint responsibilities for continuous improvement and innovation.

Directions and priorities for primary care research and evaluation. To foster sustainable innovations in primary care, research funders should facilitate partnerships with health system stakeholders in which, for example, the implementation of new models would be funded by the health system, and funders would support their evaluation. Rapid advances could be facilitated by platforms that support health care, research, and practice-based evidence development. Ultimately to have health effect, mechanisms are needed to spread and scale successful innovation.

There are also perceived benefits to cross-agency collaboration among funders to support cross-border research on primary care. To facilitate comparisons of natural experiments within and across health systems, efforts should be directed to a focus on positive variance and attributes associated with better outcomes. Creative ways of comparing primary care innovations included funding implementation incubators, or implementing research laboratories in both countries that mindfully learn from each other. **Table 3** outlines the top 10 priorities identified for primary care research.

Conclusion

The striking differences between the Canadian and US primary health care systems offer an opportunity for transnational knowledge exchange owing in large part to our confronting similar challenges. Primary care thought leaders who gathered at the symposium recognized the imperative to develop sustainable models of high-quality primary health care delivery. Successful models will provide comprehensive, patient- and family-centred care in the context of community. They will integrate behavioural health care and in turn be embedded and coordinated within the larger health care delivery system. New models will also connect primary care with public health and community-based resources to provide whole-person care that addresses both social and medical determinants of health. Primary care must raise its aims to address health disparities and healthy work environments that restore the joy of practice to those who dedicate themselves to providing primary care.

To achieve these goals, our nations need to align health and health care policies to foster the development and spread of these models. Policy models such as the US Center for Medicare and Medicaid Innovation should be expanded in the US and adopted in Canada to develop, evaluate, and scale up effective primary care delivery models.

To stimulate the development of new models, funding partnerships offer an opportunity to advance rapid-cycle, pragmatic primary care research. By learning from one another, Canada and the US can accelerate research and implementation in primary care delivery and ensure that primary care innovations are shared across borders to the benefit of all people.

Dr Tamblyn is Scientific Director of the Institute of Health Services and Policy Research of the Canadian Institutes of Health Research in Montreal, Que. **Dr Meyers**

Table 3. Top 10 priorities for primary care research

RESEARCH PRIORITY	AREAS OF FOCUS
Study new value-added models of health care that include assessment and interventions for social determinants	• Using standardized methods to assess social determinants • Using geographic information system tools that map patient population by deprivation, disease, and possible environmental factors, which will then be incorporated into practice management tools • Understanding the cost-effectiveness of intervening on social determinants of health to inform new payment models and rates • Targeting inequities experienced by some populations (eg, First Nations, low-income communities, minorities, refugees, asylum seekers and other migrants)
Develop better methods of risk stratification and adjustment measures that include measures of deprivation and equity	• Completing better mapping of subpopulations at varying degrees of risk geographically • Determining better ways to target high-risk groups for care management and other intensive interventions and to tailor risk interventions • Exploring better ways to equitably allocate health care dollars based on the complexity of the population served
Elucidate the links between health literacy and inequities and develop interventions to address health literacy	• Identifying effective approaches to the following: engaging patients in shared decision making; addressing health equity and inequities; empowering patients to engage in self-management; and changing behaviour to improve health and disease management
Develop, implement, and evaluate models for primary care management of multiple chronic conditions (eg, intensive primary care)	• Determining what the essential additional resources are for primary care to optimize experiences and outcomes for patients with multiple chronic conditions • Exploring how to provide low-cost home care and link it to primary care • Examining how to sustainably integrate community care, social services, and public health with primary care • Determining how to integrate and coordinate care as individuals transition across care settings (specialty care, acute care, postacute care, etc)
Develop and evaluate methods to identify priorities, goals, and outcomes of relevance to patients with multiple chronic conditions	• Determining how to best identify patient goals and priorities and select and match interventions to optimize these outcomes • Considering how to measure achievement of these outcomes
Identify the conditions needed to create and sustain successfully functioning health care teams to support patient-centred primary care	• Identifying the environmental characteristics, training, funding, and organizational models that are needed to create and sustain patient-centred primary care
Identify how different features of primary care perform, respond to, or are incentivized by different payment models	• Identifying the effect of different methods of activity-based, population-based, and quality- and outcome-based funding on access to and coordination, comprehensiveness, and continuity of care
Identify effective means for patient engagement (eg, patient or family advisory council)	• Co-creating system transformation • Considering the design and delivery of care • Including patient-to-patient mentoring • Addressing social determinants as a collective
Identify effective approaches to providing performance feedback on quality and equity and facilitate changes in practice	• Enabling teams to improve outcomes, identify patient and community knowledge gaps, and advance practice and policy
Develop new methods to produce timely, unbiased evidence in rapidly evolving systems	• Considering some combination of quality improvement strategies and new research methods, natural experiments, and pragmatic trials, as standard randomized controlled trials do not work and 3-5 years is too long • Considering mixed-method approaches to understand model effects and how new models are implemented • Understanding model components and population subsets

is Director of the Center for Primary Care, Prevention, and Clinical Partnership at the Agency for Healthcare Research and Quality in Rockville, Md. **Ms Kratzmann** is Senior Project Officer for Health Services and Policy Research at Toronto Public Health. **Dr Bazemore** is a practising family physician and Director of the Robert Graham Center in Washington, DC. **Dr Bierman** is Director of the Center for Evidence and Practice Improvement at the Agency for Healthcare Research and Quality. **Dr Bindman** is Professor at the Philip R. Lee Institute for Health Policy Studies at the University of California in San Francisco. **Dr Hogg** is Professor in the Department of Family Medicine at the University of Ottawa and Senior Research Advisor at the C.T. Lamont Primary Health Care Research Centre of the Bruyère Research Institute in Ottawa, Ont. **Dr Price** is Professor and Chair of the Department of Family Medicine at McMaster University and Chief of Family Medicine at Hamilton Health Sciences in Ontario. **Dr Rowe** is Scientific Director at the Institute of Circulatory and Respiratory Health of the Canadian Institutes of Health Research in Edmonton, Alta. **Dr Roy** is Acting President of the Canadian Association of Health Services and Policy Research in Edmonton. **Dr Steinberg** is Chief Medical Officer at the Health Resources and Services Administration in Rockville. **Dr Reid** is Chief Scientist at Trillium Health Partners in Mississauga, Ont, and Professor at the Institute for Health Policy, Management and Evaluation at the University of Toronto in Ontario.

Acknowledgment

The findings and conclusions in this article are those of the authors, who are responsible for its content, and do not necessarily represent the views of the Agency for Healthcare Research and Quality. No statement in this article should be construed

as an official position of the Agency for Healthcare Research and Quality or of the US Department of Health and Human Services.

Competing interests
None declared

References

1. World Bank [website]. *Current health expenditure (% of GDP).* Washington, DC: World Bank; 2017. Available from: **https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS.** Accessed 2018 Nov 7.
2. Bodenheimer T, Ghorob A, Willard-Grace R, Grumbach K. The 10 building blocks of high-performing primary care. *Ann Fam Med* 2014;12(2):166-71.
3. Kitson A, Marshall A, Bassett K, Zeitz K. What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. *J Adv Nurs* 2013;69(1):4-15. Epub 2012 Jun 19.
4. Shi L, Starfield B, Politzer R, Regan J. Primary care, self-rated health, and reductions in social disparities in health. *Health Serv Res* 2002;37(3):529-50.
5. Organisation for Economic Co-operation and Development. *Focus on health spending. OECD health statistics 2015.* Washington, DC: Organisation for Economic Co-operation and Development; 2015. Available from: **www.oecd.org/health/health-systems/Focus-Health-Spending-2015.pdf**. Accessed 2018 Nov 1.
6. Marmot M, Friel S, Bell R, Houweling TA, Taylor S; Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. *Lancet* 2008;372(9650):1661-9.
7. Organisation for Economic Co-operation and Development [website]. *Poverty rate.* Washington, DC: Organisation for Economic Co-operation and Development; 2018. Available from: **https://data.oecd.org/inequality/poverty-rate.htm**. Accessed 2018 Nov 1.
8. Organisation for Economic Co-operation and Development [website]. *Population with tertiary education*. Washington, DC: Organisation for Economic Co-operation and Development; 2018. Available from: **https://data.oecd.org/eduatt/population-with-tertiary-education.htm**. Accessed 2018 Nov 1.
9. Organisation for Economic Co-operation and Development [website]. *Unemployment rate.* Washington, DC: Organisation for Economic Co-operation and Development; 2018. Available from: **http://dx.doi.org/10.1787/cbe71f42-en.** Accessed 2018 Nov 1.
10. Socioeconomic Data and Applications Center [website]. *Gridded population of the world (GPW), v3.* New York, NY: Center for International Earth Science Information Network; 2018. Available from: **http://sedac.ciesin.columbia.edu/data/collection/gpw-v3**. Accessed 2018 Nov 1.
11. Quan H, Fong A, De Coster C, Wang J, Musto R, Noseworthy TW, et al. Variation in health services utilization among ethnic populations. *CMAJ* 2006;174(6):787-91.
12. Fortin M, Stewart M, Poitras ME, Almirall J, Maddocks H. A systematic review of prevalence studies on multimorbidity: toward a more uniform methodology. *Ann Fam Med* 2012;10(2):142-51.
13. Canadian Institute for Health Information. *How Canada compares. Results from the Commonwealth Fund's 2016 International Health Policy Survey of adults in 11 countries.* Ottawa, ON: Canadian Institute for Health Information; 2017. Available from: **www.cihi.ca/sites/default/files/document/text-alternative-version-2016-cmwf-en-web.pdf**. Accessed 2018 Nov 1.
14. Han A, Ospina M, Blitz SB, Strome T, Rowe BH. Patients presenting to the emergency department: the use of other health care services and reasons for presentation. *CJEM* 2007;9(6):428-34.
15. Krebs LD, Kirkland SW, Villa-Roel C, Davidson A, Voaklander B, Nikel T, et al. Emergency department use: influence of connection to a family physician on ED use and attempts to avoid presentation. *Healthc Q* 2017;19(4):47-54.
16. Centers for Disease Control and Prevention [website]. *Early release of selected estimates based on data from the 2015 National Health Interview Survey*. Atlanta, GA: Centers for Disease Control and Prevention; 2016. Available from: **www.cdc.gov/nchs/nhis/releases/released201605.htm**. Accessed 2018 Nov 1.
17. Osborn R, Squires D, Doty MM, Sarnak DO, Schneider EC. In new survey of eleven countries, US adults still struggle with access to and affordability of health care. *Health Aff* (Millwood) 2016;35(12):2327-36. Epub 2016 Nov 16.

Hypothesis is a quarterly series in *Canadian Family Physician (CFP)*, coordinated by the Section of Researchers of the College of Family Physicians of Canada. The goal is to explore clinically relevant research concepts for all *CFP* readers. Submissions are invited from researchers and nonresearchers. Ideas or submissions can be submitted online at **mc.manuscriptcentral.com/cfp** or through the *CFP* website **www.cfp.ca** under "Authors and Reviewers."