



Improving the quality of cardiovascular care for all Canadians

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Canadian Cardiovascular Society

Leadership. Knowledge. Community.

Executive summary

Over 2 million Canadians are living with heart disease, placing a heavy toll on quality of life, and adding approximately \$30B per year in health care costs. It is the leading cause of premature death among women in Canada. As Canadians age, the need for heart care will increase, yet Canada has no national system to monitor and report on the effectiveness, efficiency, safety, or patient-level outcomes of cardiovascular care that is crucial to enabling appropriate resource allocation and targeted improvements.

Countries that have implemented national reporting systems to monitor the quality of care have proven it promotes continuous improvements. We do this for some diseases in Canada, such as cancer, where treatment-related costs, cases, and deaths have been avoided. The increasing burden of disease, climbing health care costs, and successes in other contexts illustrate an investment in a national reporting system for cardiovascular care quality is necessary and overdue.

The CCS requests \$2.5 million per year for three years (\$7.5M total) to sustain, scale, and spread national reporting on the quality of cardiovascular care across Canada. This system will highlight pockets of excellence and pinpoint gaps in care across provinces and territories that will enable evidence-based improvements. Importantly, it will ensure accountability for the delivery of accessible, safe, effective and efficient cardiovascular care for all Canadians.

The problem

Heart disease is a leading cause of death and disability,¹ and premature death for women in Canada.² About 2.4 million (1 in 12) Canadian adults aged 20 years and older are living with ischemic heart disease, and another 669,600 (3.6%) Canadian adults aged 40 years and older are living with heart failure.³ It is predicted that the economic burden of heart disease will reach \$28.3 billion annually by 2020.⁴ Further, disparities among geographically, culturally, and socially marginalized groups threaten the sustainability of our health care system and impact the economy.⁵ For patients with heart disease:

- The quality of care varies across Canada; the *city and province* in which you receive treatment can result in up to a three-fold difference in cardiac mortality.⁶
- The *elderly population* is most likely to benefit from receiving recommended therapies and procedures, but often least likely to receive the care they need.⁷
- *Indigenous Peoples* (First Nations, Inuit and Métis) have higher heart disease rates compared to the general Canadian population and are more likely to die as a result.⁸
- Substantial sex differences exist in treatment and outcomes; *women* who suffered a heart attack are 30% more likely to die than men, and the disparity is greater in younger women.⁹
- Individuals of lower *sociodemographic status* are less likely to receive cardiac surgery following a heart attack, and more likely to be readmitted to hospital.¹⁰

The strain on the Canadian health care system will intensify as risk factors for heart disease become more prevalent,¹ seniors make up a larger proportion of the population,¹¹ and heart attacks and other effects of cardiovascular disease are exacerbated by climate change.¹² As the number of Canadians with heart disease increases, placing more demand on health services, it is more important than ever for provinces and territories to invest in health services that are appropriate, efficient, and effective.

The solution

The call to monitor and report on the quality of cardiovascular care in Canada is not new. In 2009, the federally-funded *Canadian Heart Health Strategy and Action Plan* called for national systems to monitor, report on, and improve the quality of cardiovascular care.¹³ With initial support from the Public Health Agency of Canada (PHAC) and the Canadian Institutes of Health Research (CIHR), the expert volunteer members of the CCS were tapped to build the system's infrastructure by developing data definitions and quality indicators. The CCS also undertook phase II of the work by using existing national data to develop and disseminate proof-of-concept comparative reports^{14, 15, 16} that are fundamental to improving care quality.

These reports allow care providers and health decision-makers “...to compare the impact of different treatments; assess the cost-effectiveness of investments in new pharmaceuticals, tests and procedures; and develop more effective prevention programs and therapies” (p. 81).¹³ Examples of indicators the CCS is now able to report on nationally include: access, wait times, rehospitalizations, and lengths of stay.

Without this information, cardiovascular specialists and healthcare decision-makers are left to work in information vacuums. They seek to offer high quality care at the best cost but have no way to validate regional assumptions about access, effectiveness, efficiency, or safety, and cannot see where promising practices exist. National reports are especially important for the five provinces with only one cardiovascular care centre who have no other centres to compare with.

Sustaining, scaling and spreading the CCS national quality reporting system is also fundamental to upholding the *Canada Health Act*. By investing in cardiovascular quality reporting, the federal government will be positioned to hold provinces and centres accountable for health care system performance. In a time of increasing demands for care and scarcity of resources, this investment cannot wait.

The evidence

The effectiveness of this approach has been shown in other contexts. Like the cardiovascular reporting system, the Canadian Partnership Against Cancer (CPAC) has built a surveillance system to improve the delivery of cancer services and patient experiences across the country. Since 2007, CPAC estimates approximately 74,000 cancer cases, over 51,000 deaths, and \$5 billion in cancer-related treatment costs have been avoided.¹⁷ The national benchmarking programs (the comparative assessment of activities and outcomes in a continuous process) in Australia, Sweden, the United Kingdom, and the United States have resulted in improvements in quality of care and reductions in inefficiencies.¹⁸ In addition, our cardiovascular national reporting system aligns with the national Choosing Wisely Canada campaign which serves to reduce overuse of health care resources.¹⁹ The synergy between the CCS Quality Project and Choosing Wisely, as it relates to cardiovascular care, serves to advance the mandate of both initiatives.

This evidence reinforces the value of and need for an investment in a national reporting system on the quality of cardiovascular care. Not only will there be an impact on our ability to make evidence-informed improvements to care pathways, but it will also allow the federal government to hold provinces and territories accountable for allocating scarce resources wisely.

The goal

The CCS requests \$2.5 million per year for three years (\$7.5M total) to sustain and fully scale a national quality reporting system across up to 12 primary domains of cardiovascular

care. In this time, the CCS will continue to collaborate with pan-Canadian health organization (PCHO) partners including CIHI and CADTH. The CCS currently collaborates with these organizations on the proof-of-concept reports. The ultimate aim is to transfer responsibility of the fully developed national quality reporting system to the most appropriate and properly resourced PCHO by 2023. A breakdown of the project deliverables and budget can be found in **Appendix A**.

Our support

Since project funding for phase I of the Quality Project from the PHAC ceased in 2015, the CCS has sought federal funding to advance this initiative through ongoing advocacy efforts. Between 2016-2019, the CCS has:

- liaised extensively with parliamentarians and bureaucrats, and has found strong support for federal funding;
- acquired over 100 letters of support that have been sent to the federal Ministers of Health and Finance by provincial cardiac care agencies, PCHO partners, and cardiac care program chiefs and specialists; and
- received recommendations to fund this national reporting system (CCS Quality Project) from this committee in its [2017](#) and [2018](#) reports.

With continued interest and encouragement from CCS members, we continue to seek support from decision-makers who have influence over the federal budget.

The impact

Canada would see several socio-economic benefits from activating a national quality reporting system including:

- Improved quality of care and outcomes for patients;
- Reduced health disparities;
- Increased accountability and patient confidence in the health system;
- Efficient, effective, and equitable allocation of scarce resources; and
- Establishment of a culture of continuous quality improvement.

The CCS community of cardiologists, surgeons, and scientists request an investment of \$2.5 million per year for three years (\$7.5M total) in federal funding for the cardiovascular national quality reporting system. This investment will provide a valuable tool for provinces and territories to systematically improve the quality of cardiovascular care and patient outcomes. It will also enable the federal government to hold jurisdictions accountable for ensuring health care transfers achieve effective, efficient, and equitable heart care for Canadians.

About Us

The Canadian Cardiovascular Society (CCS) is the national, non-profit professional organization that represents more than 2,200 cardiologists, cardiac surgeons, and scientists across Canada. Established in 1947, the CCS supports heart care specialists by setting national standards, sharing knowledge and informing policy. For more information, visit www.ccs.ca.

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Appendix A

DELIVERABLE	IMPACT	RESOURCES	BUDGET	
<p>National Quality Indicator Reporting: Focus on high disease burden, high prevalence, high risk, high cost:</p> <p>Reporting on 60 quality indicators in domains of:</p> <p>Heart Failure</p> <ul style="list-style-type: none"> Aortic Stenosis Percutaneous Coronary Intervention (PCI) Atrial Fibrillation Cardiac Rehabilitation <p>Structural Heart Disease</p> <ul style="list-style-type: none"> Valve replacement (TAVI) Cardiac Surgery <p>Development of expanded dataset for comprehensive national cardiac care quality reporting.</p>	<ul style="list-style-type: none"> CCS/CIHI National Cardiac Care quality reports provide cardiovascular specialists, cardiac care teams, regional and provincial cardiac/health services with comparative, site-specific reports to highlight leading practices and areas for improvement. Quality indicator reports are generated through methodology that aggregates and maps existing data from multiple national and provincial datasets into a valid and reliable comparative report. CCS, CADTH and CPSI have access to critical, novel information to inform their work. <p>Sample report: 2019 National Quality Report: TAVI.</p>	<ul style="list-style-type: none"> Project Leadership (Director) Volunteer Expert Working Groups (60 CCS members: Cardiologists and Cardiac Surgeons) Stakeholder/Partner Liaison (CIHI, CFHI, CPSI, Heart & Stroke, Federal and Provincial Governments, Provincial Cardiac Care centres, Methodological expertise Data collection and analysis Report writer Program Evaluation CCS Governance and fiduciary oversight (CEO, Board, CFO) 	<p>1.0 FTE</p> <p>60 members</p> <p>30 Stakeholders</p> <p>1.0 FTE</p> <p>1.5 FTE</p> <p>1.0 FTE</p> <p>1.0 FTE</p> <p>0.1 x 4</p>	<p>\$150,000</p> <p>\$0</p> <p>\$0</p> <p>\$125,000</p> <p>\$155,000</p> <p>\$100,000</p> <p>\$100,000</p> <p>\$50,000</p>

<p>Knowledge Translation Tools and Change Management Support</p> <ul style="list-style-type: none"> • Interactive online data resource • Educational materials <ul style="list-style-type: none"> ○ Webinars ○ Quality improvement tools ○ Print resources ○ Case studies featuring best practices 	<p>Individual practitioners and cardiac care teams across provinces have the tools, resources and supports need to inform areas for improvement and change management to adopt/evolve toward best in class care. Improvements in outcomes can be tracked over time through ongoing quality reporting</p>	<p>Knowledge translation expertise/ tool development Program Liaison to pan-Canadian sites/teams Site-specific capacity for data entry/reporting Communications Graphic Design Website development/maintenance Translation Printing</p>	<p>FTE 1.0 FTE 0.1 FTE/10 prov 1,5 FTE FTE FTE 0.5 FTE</p>	<p>\$210,000 \$90,000 \$300,000 \$150,000 \$75,000 \$75,000 \$40,000 \$40,000</p>
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<p>Program Supports and Administration:</p> <ul style="list-style-type: none"> • In-person Working Group technical sessions to further develop datasets, indicators, and reporting strategy. • In-depth consultations with provincial stakeholders to support knowledge translations and quality improvement activities. • Efficient central office project coordination 		<ul style="list-style-type: none"> • Travel costs for 10 x working groups x 2 meetings/year (detailed breakdown available) + working meetings with CIHI and CFHI collaboratives. • Provincial cardiac care services consultations (detailed breakdown available) • Meeting costs (rooms, av, meals) • Finance Services • Administrative support • Technology support • Office rental, supplies 	<p>10 sites 30/year</p> <p>0.3 FTE 0.5 1.0 FTE</p>	<p>\$450,000</p> <p>\$60,000 \$50,000</p> <p>\$30,000 \$30,000 \$80,000 \$140,000</p>
Estimated Total Annual Budget				\$2,500,000