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## Partners involved

Alberta Cancer Foundation

Alberta Innovates Health Solutions

Alzheimer Society of Canada

Canadian Breast Cancer Foundation

Canadian Breast Cancer Research Alliance

Canadian Cancer Society

Canadian Cancer Research Alliance

Canadian Diabetes Association

Canadian Foundation for Healthcare Improvement

Canadian Institutes of Health Research

Cancer Care Ontario

Cystic Fibrosis Canada

Fonds de recherche du Québec - Santé

Heart & Stroke Foundation of Canada

Manitoba Research

Michael Smith Foundation for Health Research

New Brunswick Health Research Foundation

Newfoundland & Labrador Centre for Applied Health Research

Nova Scotia Health Research Foundation

Ontario Institute for Cancer Research

Ontario Ministry of Health & Long-term Care

Parkinson Society Canada

Pediatric Oncology Group of Ontario

Saskatchewan Health Research Foundation

The Arthritis Society

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## Executive Summary

HEALTH SERVICES AND POLICY RESEARCH (HSPR) IN CANADA IS AT AN IMPORTANT INFLECTION POINT.

Canada is a recognized leader internationally in generating and applying impactful health services and policy research, and committing to building capacity and the support that sustains this impact (Figure A).<sup>1</sup>

Building on the steady growth of the community and evolution of the field over the past 20 years, a number of critical partners are now well positioned to collaborate with the research community, health system leaders and other key stakeholders to chart the future for HSPR in Canada. New knowledge. continuous evaluation, and methods of scaling up successful innovation in order to address current and future health and health system challenges are required. The challenges are considerable. They include curbing expanding service costs, improving population health, providing better care for and improving the experience of patients, and optimizing health system performance, to name a few.

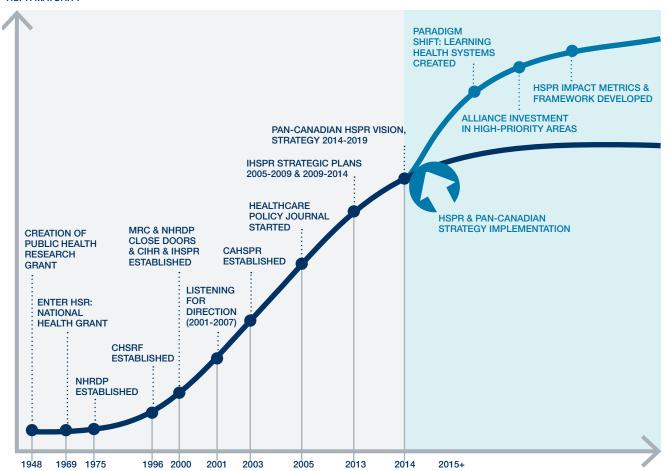
These challenges exist within a broader context of economic uncertainty, fiscal constraint, competing demands from other resource sectors (e.g., education, social services) and growing cost pressures (e.g., new technologies). Health spending in Canada now exceeds \$211 billion and represents 11.2% of gross domestic product<sup>ii</sup>, which is high when compared to other OECD countries.iii These high costs do not translate into better system performance when compared to Commonwealth Fund countries.iv



SPENDING ON HEALTH CARE ACCOUNTS FOR 11.2% OF CANADA'S GROSS DOMESTIC PRODUCT The objective is nothing more than the continuous evolution of a learning health care system that generates research intelligence that promotes a better patient experience, improved health outcomes, and cost-effective care delivery.

**Figure A.** Historical and Future Predicted Evolution of Health Services and Policy Research in Canada

### **HSPR MATURITY**



HISTORIC HSPR EVOLUTION CURVE

PROJECTED GO-FORWARD ALLIANCE HSPR CURVE

Timely generation of relevant HSPR will be required to meet current and emerging health system challenges. Improved partnerships among funders, researchers, policy and decision makers, health professionals, patients and the public will be key to charting Canada's new course.

This inaugural pan-Canadian Vision and Strategy for Health Services and Policy Research is the culmination of a year of collaborative work across 24 organizations. Their leaders gathered together to undertake a comprehensive and foundational analysis of public and voluntary sector HSPR investments and assets across Canada, as well as broad and deep engagement with a range of community stakeholders to identify HSPR priorities for collaborative action.

This process involved the combination of quantitative and qualitative data collection and analysis to shed light on historical HSPR investments, priorities and associated trends, assets, gaps and opportunities for moving forward. Results provided a foundation to base the pan-Canadian Vision and Strategy. The vision, strategic directions and research priorities outlined in this document reflect not only consideration of these results,

but the strategic input received at an April 2014 HSPR Priorities Forum. The Priorities Forum brought together federal and provincial research funders, policy and decision makers, health charities, health care professionals, patient representatives, and researchers to identify the critical elements of a high-performing HSPR enterprise in Canada and priorities for future investment.

This Pan-Canadian Vision and Strategy sets out a vision, a suite of strategic directions and research priorities for Canada's HSPR community, developed by Canada's HSPR and stakeholder community. It establishes a context against which the HSPR community can plan, collaborate and act to optimize HSPR investments, strengthen the HSPR enterprise and position Canada as a leader in the evidence-informed improvement of health and health system outcomes.

## PAN-CANADIAN VISION AND MISSION

The vision and mission statements for Canadian HSPR reflect the themes that are essential to ensuring the adequate balance of production, dissemination and uptake of research in a way that meets the needs of Canadians.

## PAN-CANADIAN STRATEGIC DIRECTIONS FOR HEALTH SERVICE AND POLICY RESEARCH

Under the leadership of the Canadian Institutes of Health Research-Institute of Health Services and Policy Research (CIHR-IHSPR), the National Alliance of Provincial Health Research Organizations (NAPHRO) and health charities, a strategic framework was developed to capture the core functions of a HSPR enterprise. It includes fund research, conduct research, foster the use of research to inform health policy and practice decision-making, train researchers and build capacity (educate) and support the production and use of research.

The strategic framework was used to identify foundational strategic directions to guide pan-Canadian HSPR investment, activity and collaboration over the next five years. These strategic directions (Table A) were developed through extensive engagement and consultation with the HSPR community and stakeholders, including funding agencies, health charities, policy and decision makers, health professionals, HSPR centres, researchers and citizens. They represent the directions required to build and sustain the foundation of a high-performing HSPR enterprise, and apply to any and all targeted research priority areas.

## **PAN-CANADIAN VISION:**

Research intelligence driving health system transformation in Canada.

## **PAN-CANADIAN MISSION:**

Build and sustain an integrated and high-performing pan-Canadian health services and policy research community that adds value to the health of Canadians and health services for Canadians.

## Fund

1. **Fund targeted research in priority areas** that will lead to transformational change and improved health, health services and health system outcomes

## Conduct and Use

- 2. Catalyze the creation of learning health systems: founded on best in class models of collaboration between researchers and policy and clinical leaders; promote partnerships amongst research funders, universities and health policy and delivery organizations to support applied and embedded research; engage the public; foster the conduct of relevant research, innovative experimentation and evaluation of complex interventions (including rapid response evaluations)
- 3. **Foster health research and system innovation** through research investments that catalyze methodological, social, policy, and technological innovation

## Educate

4. Support development of a skilled cadre of health services and policy researchers and decision makers (policy and clinical leaders) with multi-disciplinary capacity across the career continuum, including building new capacity in priority target areas (e.g., mid-career and health professional scientists, embedded researchers, evidence-demanding health system leaders)

## Support

- 5. Develop new metrics that capture the true value and **impact of HSPR** and HSPR investments
- 6. Support **smart analytics and timely access to data**, including novel methods, tools and analytics for health system performance measurement and evaluation that drives continuous improvement
- 7. Encourage alignment of academic incentives with the goal of research impacting health and health system outcomes

## TOP TEN RESEARCH PRIORITIES FOR HEALTH SERVICES AND POLICY RESEARCH

The top 10 research priorities for HSPR investment and activity over the next five years include:

- 1. Change management and scaling up innovation
- 2. Engaging patients/selfmanagement/patient experience
- 3. Integrated models of primary and community-based care
- 4. Health services and policies that meet older adults' needs
- Person-centred models of chronic disease prevention and management
- 6. Health system financing and sustainability
- 7. Linking upstream prevention with care delivery models
- 8. Supporting caregivers
- 9. Funding/remunerating organizations and providers
- Improving access in rural and remote regions

These priorities were informed through a number of inputs. They included a jurisdictional scan of research priorities within Canada and internationally, the foundational analysis of historical pan-Canadian investments in HSPR, and the discussions and voting results from the Priorities Forum and Café Scientifique, which were held with the explicit goal of garnering input on the pan-Canadian vision, strategy and priorities for HSPR.

Remarkably, change management and scaling up innovation, overwhelmingly emerged as the leading priority in all voting and discussion sessions as well as in the jurisdictional priority scan. Research on engaging citizens and patients. self-management and improving the patient experience was the second most frequently identified priority. These priorities also reflect the demographic reality of our aging population. Overall, they speak to the need to push beyond an unfortunate legacy of stand alone "pilot projects" and local innovations. Instead. Canadian health care systems and providers can apply successful endeavors within and across provincial and territorial borders in a systematic and intentional manner that engages patients and improves their experience through delivery of integrated care.

Importantly, Priorities Forum participants recommended streamlining and reframing the research priorities to be outcomeoriented and focused not only on today's health system challenges, but the anticipated challenges of tomorrow, too. These reframed priorities are illustrated in Figure B, with the foundational strategic directions featured in the centre of the diagram to illustrate their relevance and importance to each research priority.

## A CANADIAN HEALTH SERVICES AND POLICY RESEARCH ALLIANCE

A key outcome of the pan-Canadian Vision and Strategy initiative has been the establishment of a Canadian Health Services and Policy Research Alliance (CHSPRA) of partners committed to advancing the vision, strategic directions and

research priorities outlined in this document.

The HSPR community is committed to engaging strategically through partnerships in high-priority areas of joint interest. This will be achieved through an Alliance model that fosters greater coordination, collaboration and strategic investment to optimize outcomes and strengthen Canada's HSPR enterprise. Alliance members can jointly select and pursue initiatives that will have a higher potential for success or impact if done together.

The Priorities Forum identified two initial action items for the Alliance to address. The first action is to support the development of new measures of HSPR that capture its true impact on policy, decision-making and health outcomes. The Priorities Forum recommended building on the work of the Canadian Academy of Health Sciences "Making an Impact" framework<sup>v</sup> and other research impact work that is underway, including NAPHRO's research impact initiative. The second action is to jointly fund a large-scale initiative in high-priority area (e.g., building embedded research capacity). The reframed research priorities outlined in Figure B or the foundational strategic directions outlined in Table A are presented as a starting point for Alliance considerations regarding initial action items.

A Canadian Health Services and Policy Research Alliance will foster greater coordination, collaboration and strategic investment to optimize outcomes and strengthen Canada's health services and policy research enterprise.

**Figure B.** Reframed Health Services and Policy Research Priorities and Foundational Strategic Directions



## 1. Background and Rationale

## Purpose of this Vision and Strategy

The development of a pan-Canadian Vision and Strategy for Health Services and Policy Research serves to align and integrate efforts for the HSPR community as it matures during the next five years. This document reflects the desire within the community to articulate a shared set of goals and priorities within which each individual organization may work in alignment. It also represents the desire to articulate a set of priorities where explicit organizational collaboration is required to advance a particular goal.

Provides an overarching strategic framework for aligning pan-Canadian HSPR plans and efforts

Provides a foundation for specific collaborations

Never before has the need for innovation and relevant health services and policy research been more critical. A new model of change is required that is based on research evidence and applied through collaboration, leadership and participation at every level of our health care system.

## HEALTH AND HEALTH CARE IN CANADA TODAY

The evolution of HSPR reflects the evolution and growing complexity within Canada's federated health care system. Technology, webbased communication and social media have opened a new world of possibility for providers and patients to access information, interact and engage in care. At the same time, these opportunities have transformed patient expectations of their health care system, and patients are rightfully demanding an increased level of participation, flexibility and the timeliness.

Canada's pattern of illness and health care needs have shifted, considerably. This shift includes an epidemiological transition from infectious disease to the chronic diseases associated with aging. By 2040, our population is expected to grow by up to 30 percent and nearly a quarter of us will be over the age of 65, and the number of centenarians could triple or quadruple.

Ensuring respect for our population's diversity also presents unique challenges. They relate to health equity, creating the need for an increased focus on the social determinants of health as key factors in building a consistently high level of health status amongst Canadians.

Since the first Ministers 'fix for a generation', Canada's health care costs have doubled in real terms to well above \$200 billion. Health care now accounts for close to 50 percent of the budget in most

provinces and territories, and health care leaders are scrambling to find ways to achieve sustainability while improving the patient experience, quality of care and the health of the public overall.

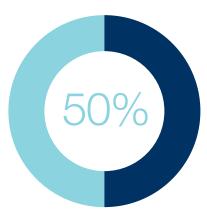
Never before has the need for innovation and relevant HSPR been more critical. A new model of change is required that is based on research evidence and applied through collaboration, leadership and participation at every level of our health care system.

## HEALTH SERVICES AND POLICY RESEARCH IN CANADA TODAY AND A VISION FOR TOMORROW

The HSPR community in Canada has evolved significantly over the past 20 years, as illustrated in Figure 1. The development of organizing and supporting infrastructure such as the CIHR Institute of Health Services and Policy Research (CIHR-IHSPR), the Canadian Foundation for Healthcare Improvement (CFHI-formerly the Canadian Health Services Research Foundation CHSRF), the Canadian Association for Health Services and Policy Research (CAHSPR) and the National Alliance of Provincial Health Research Organizations (NAPHRO), have done much to advance the growth and impact of HSPR in Canada.

As the HSPR community develops in Canada, there is evidence of increasing maturation and an interest among partners and stakeholders. They desire to work in a more aligned and strategic manner in maximizing the impact of

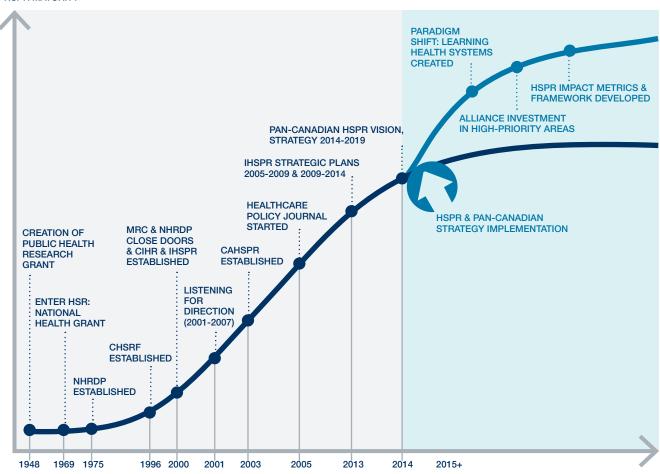
research investments and optimize knowledge creation that contributes to improving the health of Canadians and health services for Canadians. Indeed, the pan-Canadian Vision and Strategy for HSPR initiative has catalyzed the creation of an Alliance of HSPR partners that will work together to strengthen HSPR in Canada and optimize the relevance and impact of HSPR investments. Through collaborative work in highpriority areas like creating learning health systems across the country and developing novel metrics that capture the true impact of HSPR, the Alliance is expected to significantly bolster Canada's HSPR enterprise, as illustrated in Figure 1 with the upward shift of the HSPR evolutionary curve.



PERCENTAGE OF THE TOTAL BUDGET IN MOST PROVINCES AND TERRITORIES SPENT ON HEALTH CARE

Figure 1. Historical and Future Predicted Evolution of Health Services and Policy Research in Canada

### **HSPR MATURITY**





Through collaborative work in high-priority areas like creating learning health systems across the country and developing novel metrics that capture the true impact of health services and policy research, the Alliance is expected to significantly bolster Canada's HSPR enterprise.

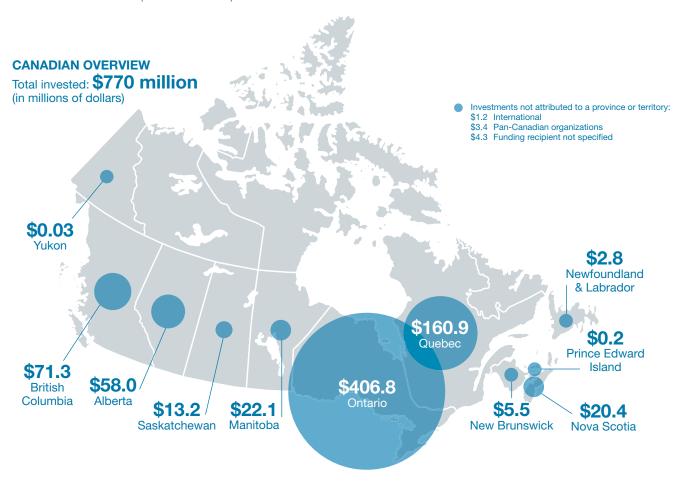
## **INVESTMENT IN HEALTH SERVICES AND POLICY RESEARCH IN CANADA:** THE PAST FIVE YEARS

A foundational analysis of investments in HSPR between 2007/08 and 2011/12 of 27 federal and provincial health research funding agencies and health charities was conducted (see Appendix for a list of participating organizations). The results are summarized in a comprehensive

report and visual asset map that allow for country-wide and provinceby-province comparisons of HSPR investments, assets and resources in priority research areas (e.g., access to care, drug policy, quality and safety), funding mechanisms (e.g., trainee and salary awards, knowledge translation grants), and academic institutions (e.g., top-funded institutions), and are available at www.cihr-irsc. gc.ca/e/47945.html.

Overall, the analysis revealed that there has been substantial public and voluntary sector investment in HSPR in Canada.1 Between 2007/08 and 2011/12, a total of \$770M was invested across the country, with the larger provinces of Ontario, Quebec, British Columbia and Alberta attracting the largest investments (see Figure 2). Federal and provincial funders accounted for the largest share of this investment (with approximately equal investment, as shown in Figure 3).

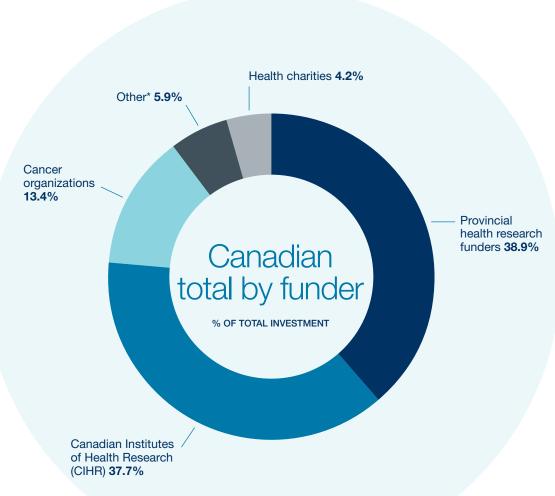
Figure 2. Total Health Services and Policy Research Investment across Canada (2007/8 to 2011/12)



Note: Investments include all provincial and external sources of funding received by the province during the time period. No data were received for Northwest Territories and Nunavut.

<sup>1</sup> The scope of this work precluded an analysis of private spending in HSPR

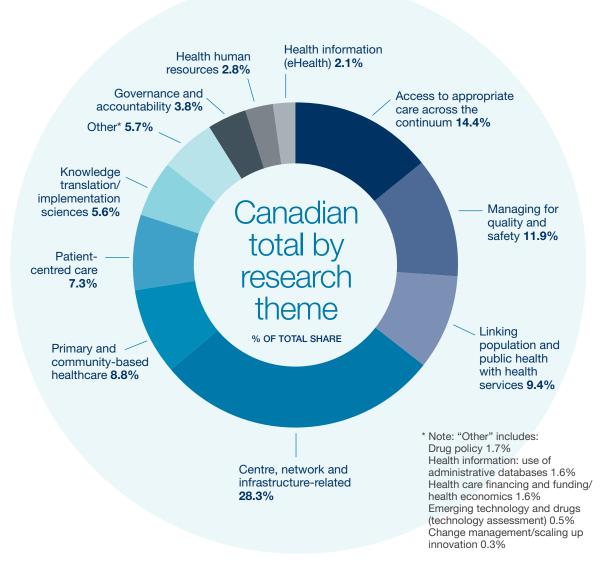
Figure 3. Canadian Total by Funder (2007/08 to 2011/12)



\* Note: "Other" includes Canada Foundation for Innovation, Canada Research Chairs, Canadian Foundation for Healthcare Improvement, British Columbia Ministry of Health

It is against this backdrop that the pan-Canadian Vision and Strategy for Health Services and Policy Research was developed.

Figure 4. Total Health Services and Policy Research Investment by Research Theme (2007/08 to 2011/12)



The top funded HSPR themes over the period of analysis (Figure 4) reflect the priorities that have dominated health care agendas over the past 10 years with "access to appropriate care across the continuum" as the top funded theme nationally and one that appears in the top three research themes in all provinces and territories included in the analysis.

The top funded five themes are (% of total share):

- Access to Appropriate Care across the Continuum (14.4%)
- Managing for Quality and Safety (11.9%)
- Linking Population and Public Health with Health Services (9.4%)
- Primary and Community-Based Healthcare (8.8%)
- Patient-Centred Care (7.3%)

The bottom funded three themes are:

- Health Care Financing and Funding (1.6%)
- **Emerging Technologies and** Drugs (technology assessment) (0.5%)
- Change Management/Scaling up Innovation (0.3%)

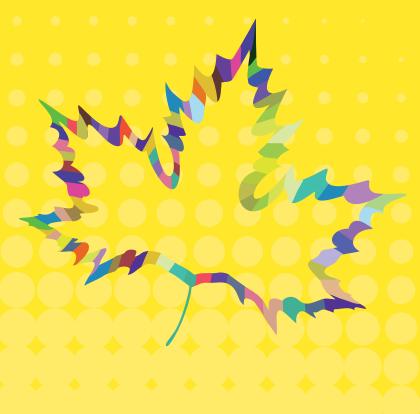
## 2. Pan-Canadian Vision and Mission

## **PAN-CANADIAN VISION:**

Research intelligence driving health system transformation in Canada

## **PAN-CANADIAN MISSION:**

Build and sustain an integrated and high-performing pan-Canadian health services and policy research community that adds value to the health of Canadians and health services for Canadians.



# 3. Pan-Canadian Strategic Framework and Directions

## Strategic Framework

Under the leadership of the Canadian Institutes of Health Research-Institute of Health Services and Policy Research (CIHR-IHSPR), the National Alliance of Provincial Health Research Organizations, and health charities, a strategic framework has been developed (Figure 5) that captures the core functions of the health services and policy research enterprise: fund research, conduct research, foster the use of research to inform health policy and practice decision-making, train researchers and build capacity (educate) and support the production and use of research.

The strategic framework was used to identify pan-Canadian strategic directions to guide HSPR investment, activity and collaboration over the next five years. These strategic directions were developed through the extensive engagement and consultation with the HSPR community and stakeholders described in the Appendix.

Overall, seven directions were finalized. These represent the directional areas for strategic pursuit (the "what") but do not specify the mechanism (the "how") to fund, conduct, use, educate and support in order to maximize the investment in priority research areas (See section 5).

Figure 5. Strategic Framework Characterizing Current and Desired Future State of Health Services and Policy Research in Canada

## **CURRENT STATE FUTURE STATE** Fragmented · Strategic alignment of national and **Fund** Limited ability to translate provincial funders on priority system/policy research into reform processes issues needing research investment · Learning health systems, innovative Concentrated in key centres research, and scaling up innovations Conduct with relationship based Balance of national centres and regional networks capacity • Emerging integration between · Best in class models of collaboration researcher and policy/decision between researchers and policy/decision maker with innovative partner Use makers programs • More embedded research careers in health Embedded research roles in service sector organizations organizations and ministries • Increased awareness and Optimized educational pathway with growth of health policy and multiple career trajectories well understood services schools Educate by students and delivery structures Limited articulation of Supporting capacity along the career career paths and visibility in continuum undergraduate levels · Pockets of data available, Timely/ready access to data difficulty in sharing within and Impact framework that captures and allows among jurisdictions Support the showcasing of true value of HSPR Growth of support organizations National enabling capacity for "big data" but still emerging and lacking with collaboration among national centres strength

Given the complex challenges facing health care policy and decision makers today and in future, a better understanding of how best to organize, finance and deliver health services is essential to reform.

## STRATEGIC DIRECTIONS

Seven strategic directions for HSPR investment, activity and collaboration are outlined in accordance with the strategic framework (Figure 5). These directions are not intended to represent an exhaustive list of all actions that are required to support a high-performing HSPR enterprise; rather, the directions are those that are pan-Canadian in scope and that may be best achieved through collaborative action or investment.

## **Fund**

 Fund targeted research in priority areas that will lead to transformational change and improved health, health services and health system outcomes

HSPR funding is guite modest compared to investment in biomedical or clinical research. While Canada has been a thought leader in HSPR historically, we need to double our efforts from an investment perspective to foster evidence-informed transformational change in health care. It is critical that HSPR investment across funders and other stakeholders be aligned to provide optimal synergy and maximum impact with a common set of priorities. Making strategic choices and collaborating on investments are key foci for the future of HSPR in Canada.

## **Conduct and Use**

## 2. Catalyze the creation of learning health systems

These systems will be founded on:

- Best in class models of collaboration between researchers, and health system leaders (including policy and clinical leaders)
- The promotion of partnerships amongst research funders, universities and health policy and delivery organizations to support applied and embedded research
- Engaging the public
- Fostering the conduct of relevant research, innovative experimentation and evaluation of complex interventions (including rapid response evaluations)
- 3. Fostering health research and system innovation through research investments that catalyze methodological, social, policy, and technological innovation

The lack of a pan-Canadian strategy for HSPR has meant that, to date, approaches to optimizing its conduct and use have been somewhat fragmented and oftentimes uncoordinated. This strategy calls for the development of a more formalized and collaborative infrastructure to the conduct and use of HSPR across Canada, including catalyzing a culture of learning health care systems.

Equally important to optimizing the conduct and use of HSPR in Canada is focusing efforts on change management and the scaling up and spread of successful innovations, which, to date, has received historically low levels of investment in Canada (Figure 4).

This direction is consistent with the most recent international review of the CIHR (2011). It recommended that in a complex environment with many agencies and some overlap in roles and responsibilities, greater coordination is needed, as is more emphasis on the integration of rigorous research into the evaluation of healthcare policies and programs.viii While the activity of developing health care reform policy and transforming service delivery is distinct from generating the related research, the embedding of a culture of learning, adapting and changing that is informed by best evidence is a direction for the future that is embraced by members of the HSPR community.ix

## **Educate**

4. Support development of a skilled cadre of health services and policy researchers and decision makers (policy and clinical leaders). They should possess multi-disciplinary capacity across the career continuum and build new capacity in priority target areas (e.g., mid-career and health professional scientists, embedded researchers, evidence-demanding health system leaders)

The HSPR community in Canada comprises a rich and diverse cadre of researchers and knowledge users with a broad range of disciplinary, methodological and professional backgrounds. Education, training and capacity building initiatives to support a high-performing HSPR community must include a mechanism to recognize this diversity and evidently, the variety of possible career paths (e.g. academic, administrative, leadership, care delivery). Trainees will need early exposure to the multidisciplinary world in which they will be contributing.

When developing capacity initiatives, the critical role that knowledge users play in the HSPR enterprise and the importance of building capacity to translate evidence in clinical and policy settings must be considered. The foundational analysis, consultations and forums that informed this strategy identified gaps in the cadre of Canada's HSPR talent, including mid-career scientists, health professional scientists and embedded researchers. Filling these gaps will require new collaborations and partnerships across a variety of sectors (including universities, health care policy and delivery organizations, and funders).

## Support

- 5. Develop new metrics that capture the true value and impact of HSPR and HSPR investments
- Support smart analytics and timely access to data, including novel methods, tools

and analytics for health system performance measurement and evaluation that drives continuous improvement

Encourage alignment of academic incentives with the goal of research impacting health and health system outcomes

Importantly, this strategy includes determining the impact of HSPR on health, health care and system performance, beyond traditional bibliometric measures. New and important metrics are needed that build on the work of the Canadian Academy of Health Sciences "Making an Impact" framework and other research impact work that is underway, including NAPHRO's research impact initiative. A key direction of this strategy, related to improving our ability to measure impact and demonstrate value, is the need to align academic incentives with the goal of improving health and health system outcomes. Current structures for academic recognition and research productivity reflect a historical value structure that is only beginning to recognize and reward applied research and integrated knowledge translation efforts. They are critical to transformative HSPR research and its adoption in policy and practice.

Support for smart analytics and timely access to data will be critical for the research community's efforts to measure, compare, monitor and improve health system performance. Supporting the development and expansion of novel methods, tools

(e.g., data platforms) and analytic capacity will be essential to success.

The HSPR community has a significant opportunity to develop and have impact through the Strategy for Patient-Oriented Research (SPOR)x. Its purpose is to address data access through the development of regional data platforms within its SUPPORT units, advanced expertise in data analytics, and a distributed approach to data analysis. At this time, timely access to data for HSPR purposes varies across Canada. A pan-Canadian policy and privacy framework to improve and align efforts will be beneficial. Optimizing alignment and synergy between SPOR and this pan-Canadian Vision and Strategy for HSPR is essential.

## 4. Pan-Canadian Health Services and Policy Research Priorities

In addition to identifying pan-Canadian strategic directions necessary to support a highperforming HSPR enterprise, a number of priority research areas for collaborative action and investment were established. These priorities point to areas that are top of mind across the country and among a variety of stakeholders, including policy and decision makers, health care professionals, research funders. health charities, national health care associations and foundations. researchers, and the public. Moreover, these priorities are those for which a pan-Canadian approach, collaborative action and joint investment were identified as key ingredients to success.

The Appendix outlines the stages that informed the priority-setting process. The foundational analysis and environmental scan were used to create a list of 13 potential priorities (Figure 6) to generate the community's input and consideration through the webinars, Priorities Forum and Café Scientifique. Across each mechanism of engagement, there was strong concordance on the top priorities identified (Table 1).

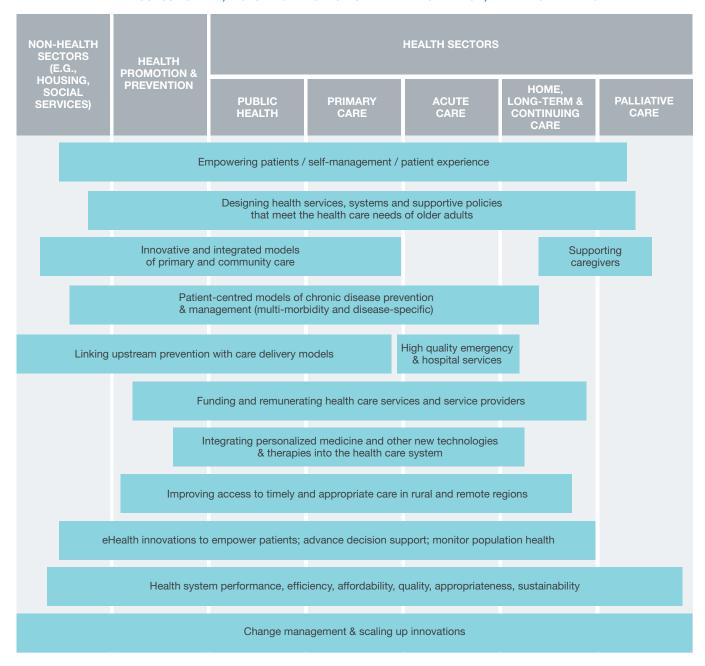


The priority-identification process was informed through a number of stages including an environmental scan of current HSPR priorities, a series of community webinars, a Priorities Forum, and a Café Scientifique for the public.



Figure 6. Current Health Services and Policy Research Priority Areas

## CROSS CUTTERS: ENSURING QUALIFIED HEALTH HUMAN RESOURCES WORKING AT FULL SCOPES OF PRACTICE; TIMELY ACCESS TO DATA, INCLUDING ELECTRONIC HEALTH INFORMATION; PATIENT-CENTRED CARE



## OVERALL, THE TOP 10 RESEARCH PRIORITIES IDENTIFIED FOR HSPR INVESTMENT AND ACTIVITY OVER THE NEXT FIVE YEARS INCLUDE:

## 1. Change management and scaling up innovation

 Scaling up health service innovations to benefit people and improve decision making at the policy, clinical and administrative levels to foster program and policy development in a sustainable fashionxi

## 2. Engaging patients/selfmanagement/patient experience

Engaging patients in the design of health services, soliciting their preference, supporting their choices to improve the quality of their care experience

## 3. Integrated models of primary and community-based care

· Creating better multidisciplinary integration of primary, home and community services to sustain patients' independence and functional status in the community

## 4. Health services and policies that meet older adults' needs

- Reorienting health services to meet the needs of a growing seniors population with a focus on:
  - Increasing functional mobility, self-maintenance and effective nutritional status
  - Reducing falls, incontinence and polypharmacy
  - Understanding cognitive deterioration, managing depression and multiple chronic conditions

## 5. Person-centred models of chronic disease prevention and management

Ensuring effective communication and shared decision-making with patients which increases shared understanding, support, trust, activation and informed choice in the context of preventing and managing multiple morbidities

## 6. Health system financing and sustainability

 Developing models for financing and funding health care services that incentivize value and outcomes while minimizing unintended consequences in a costeffective and sustainable manner

## 7. Linking upstream prevention with care delivery models

 Linking multi-sector integration of upstream prevention strategies and interventions with care delivery models to improve both population and patient health outcomes

## 8. Supporting caregivers

· Developing policies, programs and supports for caregivers that promote health and wellbeing

## 9. Funding/remunerating organizations and providers

 Developing models for funding and remunerating health care organizations and providers across the continuum of care. Incentivize behaviour change, valuebased care, and improving health and health system outcomes (e.g., cost, access, equity, efficiency)

## 10. Improving access in rural and remote regions

Ensuring all Canadians, regardless of geographic location, have equitable and timely access to care, including through the use of technological innovations (e.g., tele-health, telemonitoring)

**Table 1.** Comparison of Webinars, Forum and Café Voting Results: Health Services and Policy Research Priorities

Priority area		Vote in webinars	Vote in forum	Vote in Café Scientifique
1	Change management and scaling up innovation	1-2	1	1
2	Engaging patients/self-management/patient experience	1-2	2	8
3	Integrated models of primary and community-based care	3	3	3
4	Health services and policies that meet older adults' needs	6-8	4	4
5	Person-centred models of chronic disease prevention and management	6-8	5	2
6	Health system financing and sustainability	4	6	6
7	Linking upstream prevention with care delivery models	9	7	5



Historically, change management has received little research investment (1.6% of total investments between 2007/08 and 2011/12) yet was identified across all surveyed communities as a top go-forward research priority.

Notably, change management and scaling up innovation, overwhelmingly emerged as the leading priority in all voting and discussion sessions as well as in the jurisdictional priority scan. Research on engaging citizens and patients, self-management, and improving the patient experience was the second most frequently identified priority in the webinars and Priorities Forum. The priority regarding integrated models of primary and communitybased care was also highly ranked by Priorities Forum participants and the public.

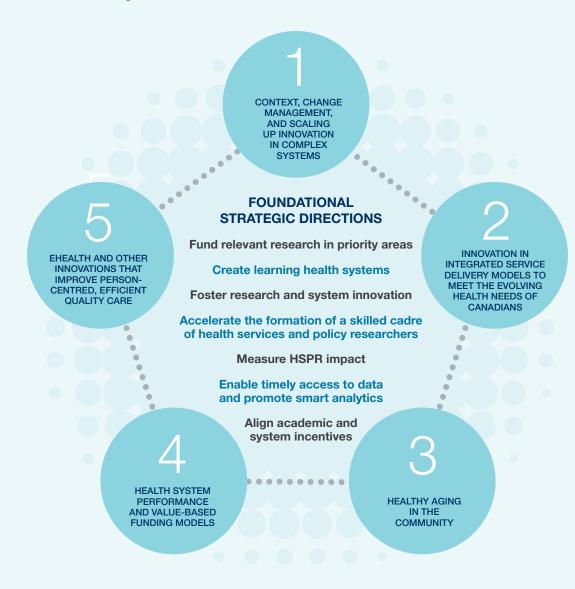
Interestingly, however, the Café Scientifique, which was held to garner public input on the priorities, did not identify "engaging patients/self-management/ patient experience" as one of the top priorities. Patient and citizen engagement was assumed to be an essential element of all priorities. "Linking upstream prevention with care delivery models" and "eHealth innovations to improve care", instead, was identified to be among the top priorities. Although the Café Scientifique engaged only 110 members of the public, their voting preferences were similar to the 2012 Ipsos Reid survey of the Canadian public who identified improving access, health needs of aging Canadians, chronic disease, home and community care, long-term and palliative care, and the patients' role in maintaining their own health among the public's top six research priorities.xii

Overall, the top priorities speak to the need to push beyond an unfortunate legacy of stand alone "pilot projects" and local innovations. Instead, Canadian health care systems and providers can apply successful endeavors within and across provincial and territorial borders in a systematic and intentional manner that engages patients and improves their experience through the delivery of person-centred and integrated care. These priorities also reflect the demographic reality of our aging population and increasing prevalence and complexity of chronic disease.

Priorities Forum participants felt that the list of potential HSPR priorities for future collaborative investment was informed by current health system and research priorities, and that when prioritizing for the future it is important to reflect on anticipated health system challenges and, of these, which challenges require research evidence.

Participants recommended streamlining and reframing the top priorities as health and health system outcomes for which research investment (along with, for example, investment in research capacity and research infrastructure) would be needed to achieve success. The reframed priorities, including the foundational strategic directions that cut across each priority, are illustrated in Figure 7.

Figure 7. Reframed Health Services and Policy Research Priorities and Foundational Strategic Directions



# 5. Moving Forward— A Canadian Health Services and Policy Research Alliance

A Canadian Alliance: Statement of Purpose and Early Collaborative Initiatives

While this Strategy outlines a shared vision, a set of directions, and priorities for HSPR in Canada, commitment to share in its implementation is essential to advancement.

Coming together is a beginning, staying together is progress, working together is success.

- Henry Ford

Through collaborative action, the Alliance will accelerate scientific innovation and discovery and maximize the impact of health services and policy research on health systems, services, health and wellbeing.

One of the important achievements of this initiative is not only a collaboratively developed pan-Canadian vision for HSPR, but also a commitment to work together in a new and more strategic fashion, through an Alliance model. A Canadian HSPR Alliance of partners will serve as the coordinating voice for HSPR in Canada to pursue a focused agenda to advance this Strategy.

The Alliance will need to be comprised of champions from the diverse range of organizations that participated in the development of this pan-Canadian vision and strategy. It will oversee the implementation of the vision and strategy, and assess its impact through a unifying framework guiding HSPR investment and evaluation in Canada. Through collaborative action, the Alliance will accelerate scientific innovation and discovery and maximize the impact of HSPR on health systems, services, health and wellbeing.

Within the Alliance, members are considered as peers with separate and autonomous organizational mandates but remain united through a shared vision and commitment. They will work together to support an innovative, high-performing and impactful HSPR enterprise. As members, they may select and pursue initiatives that have a higher potential for success or impact if done together. Although the Alliance is in very nascent stages at the present time, it is anticipated that members may select some and not other initiatives to join based on

the mandates of their respective organizations.

Participants at the Priorities Forum were presented with a suite of seven potential options for an Alliance's initial collaborative efforts. Based on voting results, the top two options identified for initial Alliance action include: developing novel metrics and a common framework for measuring HSPR impact, and jointly investing in a large-scale initiative. Initial meetings with a working group of Alliance champions that volunteered at the close of the Priorities Forum to spearhead the Alliance confirm that these two options are likely to be the first of a number of initiatives pursued by the Alliance. Details on voting options and results are available upon request.

1. Develop a framework and indicators for measuring impact of HSPR (building on existing frameworks and indicators)

HSPR represents an investment in developing new knowledge to inform improvements in patient experience, health outcomes and health services delivery in Canada. It is important to understand the return on these investments (ROI) in order to better direct and maximize investments going forward. Today, we are not equipped with the tools to assess the ROI for the millions that are invested. The Canadian Academy of Health Sciences (CAHS) published an independent assessment of best practices for evaluating ROI in research, including a framework for evaluation that has now been

broadly adopted nationally and internationally." The framework demonstrates how research activity informs decision making, eventually resulting in changes in health, economic and social prosperity. The framework also shows how research impacts feedback upstream, potentially influencing the diffusion and impacts of other research, and creating inputs for future research. Further development and implementation of this framework to assess HSPR investment is the highest-ranking priority for the Alliance moving forward.

## 2. Jointly fund a large-scale initiative in a high-priority area

The second priority for the Alliance is joint funding of major initiatives in areas identified as high priority and requiring collaborative activity and coordinated investment. As a starting point, the Alliance may wish to consider the seven foundational strategic directions and five research priorities featured in this strategy. Building embedded research capacity has been identified a possibility for an initial joint initiative. The development of related impact measures would be a mechanism to evaluate the impact of the jointly funded major initiative.

## 6. Conclusion

## Health services and policy research in Canada has had a rapid evolution in the last 20 years (Figure 1).

More recently, a growing recognition and respect for HSPR has developed in the broader context of health research in this country. Like other advanced nations, we are faced with fiscal and quality challenges in care delivery and, among other specific challenges, the need to reorganize health services to meet the needs of an aging population. Tackling these countrywide challenges from a research perspective will require a sharper focus on shared priorities to enjoin the HSPR community with health service managers, policy makers, healthcare professionals and citizens/patients.

Health services and policy researchers are not charged with managing our system. Instead, they provide vital methodological, technical and evaluative evidence to inform systems, policy and delivery organizations on optimal approaches, tools and techniques for instrumenting our delivery system, understanding its performance and for transforming care into an effective, efficient and personcentered journey. Their objectives can be considered as nothing more than a continuous evolution of a learning health care system that generates research intelligence that promotes a better patient experience, improved health outcomes, and cost-effective care delivery.

The process of mapping Canada's HSPR assets and the communitywide deliberation on research priorities this past year was a highly valuable effort. Clearly, a new era of productive and collaborative research activity is on the horizon and within reach, joining together the key stakeholders through the SPOR and other inter-jurisdictional, interagency collaborative initiatives. With a common view on both funding and priorities to improve the value and impact of HSPR, we believe our community will be well poised to generate evidence-informed solutions to the challenges facing current and future delivery systems in Canada.

This Strategy will be followed by a series of plans that will bring life and specificity to the directions and priorities outlined here. A Canadian HSPR Alliance is coming to fruition. The Alliance will develop its initial work plan and inaugural initiatives in line with the strategic directions and priorities outlined in this Strategy.

In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed.

- Charles Darwin

## **Appendix**

Methodology—the development of the Pan-Canadian Vision and Strategy involved four phases.

Figure 8: Project Process

PHASE	PHASE 2	PHASE 3	PHASE 4
ASSET MAP	PRELIMINARY STRATEGIC ANALYSIS	PAN-CANADIAN VISION & STRATEGY	CANADIAN ALLIANCE
Collected and catalogued data from 27 funders on HSPR investment 2007/8-2011/12  Enhanced with review by project regional informants  Validated data with leads in each jurisdiction	Conducted 56 key informant interviews to gather input  Received survey responses from over 400 research and policy/decision makers to further refine input for discussion  Analyzed and reviewed with partners and IHSPR board	Conducted scan of health services and policy research priorities in Canada and abroad to inform draft priorities and strategy  Garnered community input on draft strategy through webinars and project advisory committee  Hosted April 1 Priorities Forum and Café Scientifique  Presented draft vision & strategy at CAHSPR conference  Finalize & launch strategy	Establish an alliance of HSPR partners committed to working together and with the community to action the strategy

For the first time, health services and policy research funding data from multiple organizations and jurisdictions was collected, analyzed and reported in Canada.

## PHASE 1

The first phase entailed a strategic analysis of Canada's public and voluntary sector investments, assets and resources in HSPR between 2007/08 and 2011/12. For the first time HSPR funding

data from multiple organizations and jurisdictions was collected, analyzed and reported in Canada. Partner organizations that contributed data included federal and provincial health research funders, health charities, the Canadian Foundation for Healthcare Improvement (formerly the Canadian Health Services Research Foundation), and a limited number of ministries of health. HSPR investments from private industry

(including think tanks) were outside the scope of the present analysis.

A common data abstraction template was developed collaboratively with partner organizations, and resulting data were analyzed by a number of variables including funding source, province, priority research area, funding mechanism (e.g., trainee and salary awards), and academic institution.

Results are available in both a comprehensive report and a complementary asset map. It provides a visual portrait of Canada's total investments in HSPR, priority research areas, people and knowledge translation, and allows for province-by-province analyses and breakdowns by academic and health service institution. The report and asset map represent an important first step in our understanding of the HSPR enterprise in Canada and, more specifically, the HSPR funding landscape, and provide a valuable tool for future planning (http://www. cihr-irsc.gc.ca/e/47945.html).

## PHASE 2

Quantitative data from Phase 1 were enriched through semistructured key informant interviews with over 50 HSPR leaders from across the country, including a mix of researchers from various career stages and policy and clinical leaders, and a survey of the HSPR community that received over 400 responses. The interviews and survey were intended to generate an understanding of the community's perspective on its strengths, opportunities, challenges and weaknesses, as well as how to foster capacity and training and optimize research impact.

## PHASE 3

The results of the first two phases informed Phase 3—the development of the pan-Canadian Vision and Strategy for Health Services and Policy Research. The Vision and Strategy provide the basis for moving into the next phase of maturity of the HSPR community (the light blue curve in figure 1)—which entails greater strategic collaboration among partners to strengthen Canada's HSPR enterprise and maximize the impact of research investments.

In addition to Phases 1 and 2, the pan-Canadian Vision and Strategy was informed by other processes. A comprehensive environmental scan of HSPR priorities in Canada and internationally was conducted, and, a series of community webinars was shown where participants voted and commented on a draft vision, strategic directions and research priorities for collaborative investment.

The resulting draft vision and strategy were shared for deliberation and validation at an invitational Priorities Forum on April 1st, 2014. This Forum brought together 118 leaders from across the country who represented the partner organizations from Phase 1 (federal and provincial health research funders and health charities), departments of health (federal, provincial, territorial), policy and clinical leaders, HSPR data centres and platforms (including SPOR SUPPORT Units), national health care associations and foundations, researchers and citizens. The specific objectives of the Forum were to:

- Gain consensus on a pan-Canadian vision for health services and policy research
- Identify pan-Canadian health services and policy research priorities for collaborative action over the next five years
- Catalyze new partnerships and collaborations that will optimize health services and policy research investments in Canada
- Establish an Alliance of partners committed to developing the groundwork for implementing the resulting pan-Canadian vision and strategy for health services and policy research

Participants helped to refine the vision and focus the strategic directions. Importantly, they identified a need to streamline and reframe the research priorities as expected health and health system outcomes (i.e., strategy before tactic) that could be achieved through investment in, for example, targeted priority areas combined with investments in capacity and training, research infrastructure (e.g., access to data, learning health systems), and change management and scaling up innovation.

The Forum concluded with a commitment among participants to work together to launch a HSPR Alliance that builds on the strengths and assets of our individual organizations to achieve collective impact that is greater than could be achieved working in isolation. The Alliance will carry forward the pan-Canadian Vision and Strategy to bring greater collaboration, coordination and transformative impact to Canada's HSPR enterprise.

The input of citizens and patients on top priority areas for HSPR investment was sought by including patient representatives in the Priorities Forum as well as through a Café Scientifique that was hosted immediately following the Priorities Forum at the Gladstone Hotel, a popular Toronto pub. Seventy-five members of the public attended the Café and an additional 42 participated via live streaming and shared their input through an online survey. Interestingly, the public's top identified priorities are fairly consistent with those that were identified through a 2012 lpsos Reid survey of the public that was conducted on behalf of CIHR (see section 4 for Café voting results and a comparison with the Ipsos Reid results).

## **Feedback from the Priorities**

Forum and Café were used to develop the final version of the pan-Canadian Vision and Strategy for HSPR document. It was shared for review and validation with Priorities Forum participants, the broader HSPR community at the May 2014 conference of the Canadian Association for Health Services and Policy Research (CAHSPR), and the emerging Canadian Health Services and Policy Research Alliance.

## PHASE 4

Phase 4 emerged from the Priorities Forum and entails the establishment of an Alliance of HSPR partners committed to working together and with the community to implement the pan-Canadian Vision and Strategy (see Section 5 for more details about the Alliance).

Seventy-five members of the public attended the Café and an additional 42 participated via live streaming and shared their input through an online survey.

Partner organizations that contributed data for the Asset Map (Phase 1 of the Initiative)

## **ORGANIZATION NAME**

- 1. Canadian Institutes of Health Research
- 2. Canada Foundation for Innovation (web source)
- 3. Canada Research Chairs (web source)
- Networks of Centres of Excellence of Canada (web source)
- 5. Canadian Foundation for Healthcare Improvement (formerly the Canadian Health Services Research Foundation)

## **NAPHRO PARTNERS**

- 6. Alberta Innovates -**Health Solutions**
- 7. Fonds de recherche du Québec - Santé
- 8. Manitoba Health Research Council
- 9. Michael Smith Foundation for Health Research - BC
- 10. New Brunswick Health Research Foundation
- 11. Newfoundland and Labrador Centre for Applied Health Research
- 12. Nova Scotia Health Research Foundation
- 13. Ontario Ministry of Health and Long-Term Care
- 14. Saskatchewan Health Research Foundation

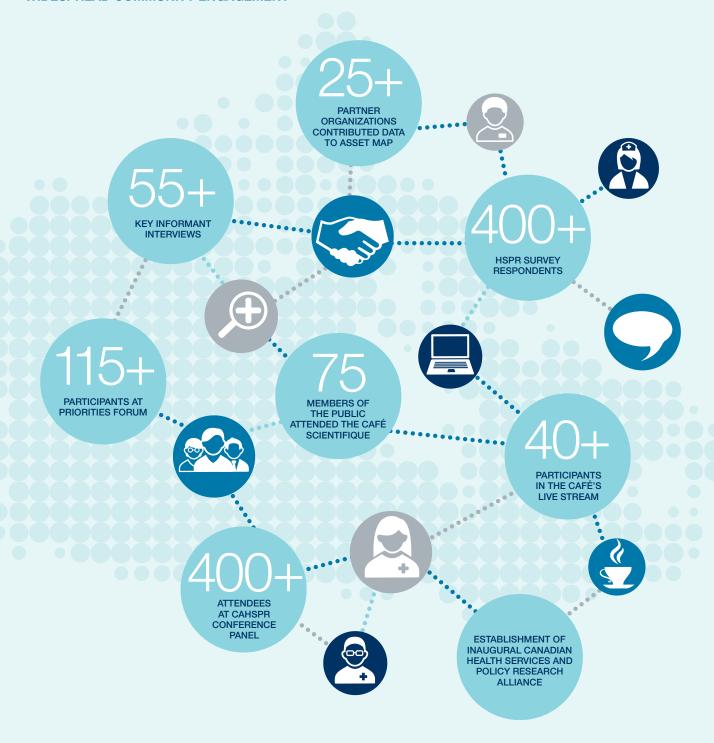
## **HEALTH CHARITIES**

- 15. Heart & Stroke Foundation of Canada
- 16. Canadian Diabetes Association
- 17. Alzheimer Society of Canada
- 18. Parkinson Society Canada
- 19. The Arthritis Society
- 20. Cystic Fibrosis Canada

## CANADIAN CANCER RESEARCH **ALLIANCE - CCRA**

- 21. Canadian Cancer Society
- 22. Alberta Cancer Foundation
- 23. Canadian Breast Cancer Foundation
- 24. Canadian Breast Cancer Research Alliance
- 25. Cancer Care Ontario
- 26. Ontario Institute for Cancer Research
- 27. Pediatric Oncology Group of Ontario

## STRATEGIC PLANNING: WIDESPREAD COMMUNITY ENGAGEMENT



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