

Accelerating Health System Transformation through Research to Achieve the Quadruple Aim and Health Equity

Accélérer la transformation du système de santé
grâce à la recherche pour atteindre le quadruple
objectif et l'équité en santé



INVITED PAPER

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ABSTRACT

The Canadian Institutes of Health Research – Institute of Health Services and Policy Research's (IHSPR's) Strategic Plan 2021–2026: Accelerate Health Care System Transformation through Research to Achieve the Quadruple Aim and Health Equity for All (CIHR IHSPR 2021) outlines the Institute's key priority areas for investment and activity over the next five years. IHSPR used an evidence-informed strategic planning process that was pan-Canadian in scope and designed to elicit the health services and policy research priorities of decision makers, providers, researchers, patients, communities and the public. This paper outlines IHSPR's four key strategic priorities for supporting and optimizing research in transforming Canada's healthcare delivery systems over the next five years.

RÉSUMÉ

Le Plan stratégique 2021–2026 de l'Institut des services et des politiques de la santé (ISPS) des Instituts de recherche en santé du Canada : Accélérer la transformation du système de soins de santé par la recherche pour atteindre les quatre objectifs et l'équité en santé pour tous (CIHR IHSPR 2021) décrit les domaines d'investissement prioritaires de l'Institut et les activités prévues pour les cinq prochaines années. L'ISPS a eu recours à un processus de planification stratégique fondé sur les données probantes, de portée pancanadienne et conçu pour déterminer les priorités de recherche sur les services et les politiques de santé à l'intention des décideurs, des fournisseurs, des chercheurs, des patients, des collectivités et de la population. Ce document décrit les quatre priorités stratégiques de l'ISPS qui visent à soutenir et à optimiser la recherche dans la transformation des systèmes de soins de santé canadiens pour les cinq prochaines années.

Background

The Canadian Institutes of Health Research – Institute of Health Services and Policy Research's (CIHR IHSPR's) *Strategic Plan 2021–2026: Accelerate Health Care System Transformation through Research to Achieve the Quadruple Aim and Health Equity for All* (CIHR IHSPR 2021), outlines the Institute's key priority areas for investment and activity

over the next five years. Using an evidence-informed strategic planning process that was pan-Canadian in scope and designed to elicit the health services and policy research (HSPR) priorities of decision makers, providers, researchers, patients and the public, IHSPR's resulting strategic plan identifies four key strategic priorities:

1. accelerate the discovery of innovations that transform healthcare delivery systems to achieve the Quadruple Aim and improve health equity for all;
2. modernize the healthcare system with digital health solutions and data science;
3. foster the integration of evidence into health services and policy decisions for improved healthcare system performance and outcomes; and
4. strengthen capacity for solution-oriented research and evidence-informed healthcare system transformation.

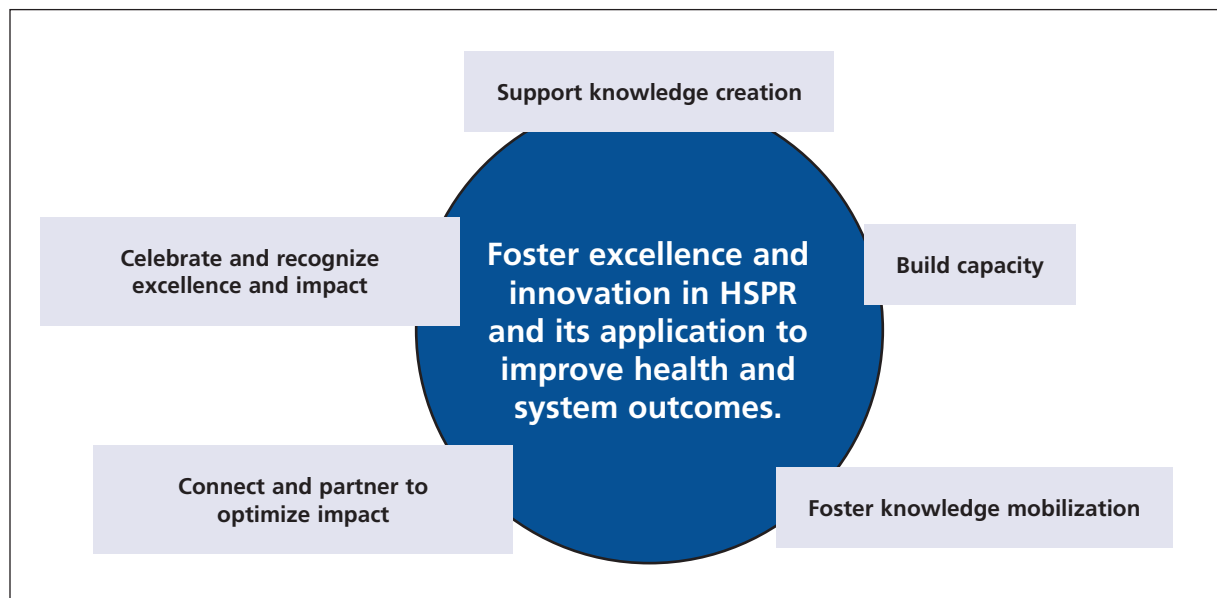
IHSPR entitled the plan *Accelerate Health Care System Transformation through Research to Achieve the Quadruple Aim and Health Equity for All* (CIHR IHSPR 2021) to reflect the need to address the structural, functional and environmental challenges of a healthcare system that was designed 40 to 50 years ago but must deliver accessible, high-quality, equitable, sustainable, coordinated and integrated care in the 21st century. The plan is anchored to the Quadruple Aim and puts health equity at the centre of these aims to signal IHSPR's commitment to ensuring that all research, improvement and transformation efforts are done with the intention of improving health equity (Nundy et al. 2022). The strategic plan was developed throughout the context of the COVID-19 pandemic, which exposed fault lines, racism and discrimination in Canada's healthcare delivery systems and magnified long-standing systemic socio-economic and ethnoracial inequities in all facets of society, including in access to and outcomes of care. This context informed IHSPR's strategic plan and its commitment to equity; to supporting research that advances equitable healthcare services and policies and seeks to understand the equity implications of the policies that determine how health services are funded, organized and delivered;

and to supporting a more diverse and inclusive health services and policy research workforce. The ultimate goal of IHSPR's strategic plan is to support the generation of timely, relevant, equitable and impactful HSPR that can be mobilized to improve the healthcare system and the overall health and well-being of all Canadians.

The Current Context of Canada's Healthcare Systems

An increasing trend in healthcare spending in Canada (CIHI 2021a), financial pressure on provincial and federal budgets (with a significant increase in costs due to the COVID-19 pandemic [The Conference Board of Canada 2020]) and consistent suboptimal performance and outcomes – relative to comparable Commonwealth Fund (Osborn et al. 2017) and Organisation for Economic Co-operation and Development countries (OECD 2019) – have created an impetus for transformational change in how Canadian healthcare services are financed, organized, managed and delivered. The COVID-19 pandemic has accelerated this transformation imperative with its profound impact on people, societies and healthcare systems worldwide. By exposing persistent and systemic problems in our healthcare delivery systems (e.g., the gendered, racialized workforce in long-term care; socio-economic disparities in access to prevention and care; insufficient surge capacity to respond to emergencies) and, in some cases, accelerating the uptake of promising innovations (e.g., virtual care) but with inequitable reach (e.g., by geography and socio-economic status), the COVID-19 pandemic has put a spotlight on the necessity to re-evaluate and transform care delivery in Canada to create resilient, inclusive, equitable healthcare systems (CIHI 2021b; McMahon et al. 2021).

The role of HSPR in generating leading-edge evidence to inform healthcare system

Figure 1. IHSPR's core functions

transformation is clear: research investments must be made in areas of high need where there are gaps in evidence and where there is potential to have the greatest positive impact on the health and well-being of the population and the performance of the health system. The evolution of learning health systems across Canada presents a valuable opportunity to align research investments with the priorities and needs of the healthcare system; to strengthen relationships among researchers, communities and leaders in the healthcare system; and to position HSPR as the innovation engine of Canada's healthcare system to achieve the Quadruple Aim and health equity for all.

HSPR in Canada and CIHR IHSPR

HSPR is the field of scientific investigation that generates evidence on how to create systems, policies and organizational structures and invest in programs, services and technologies that maximize health and healthcare system outcomes. Multiple disciplines, professions, sectors and methodologies are harnessed to creatively address healthcare system challenges and high-priority questions.

IHSPR is one of the 13 Institutes at CIHR, Canada's federal health research funding agency. IHSPR is dedicated to supporting innovative research, capacity building and knowledge mobilization initiatives designed to improve the way healthcare services are organized, regulated, managed, financed, paid for, used and delivered, in the interest of improving the health and quality of life of all Canadians.

IHSPR's core work can be organized into five key domains (Figure 1): (1) supporting HSPR knowledge creation, (2) building and strengthening the capacity of the HSPR workforce, (3) fostering knowledge mobilization of HSPR into policy and practice, (4) collaborating and partnering to optimize HSPR impact and (5) celebrating and recognizing the excellence and contributions of the HSPR community.

IHSPR's Values and Commitments

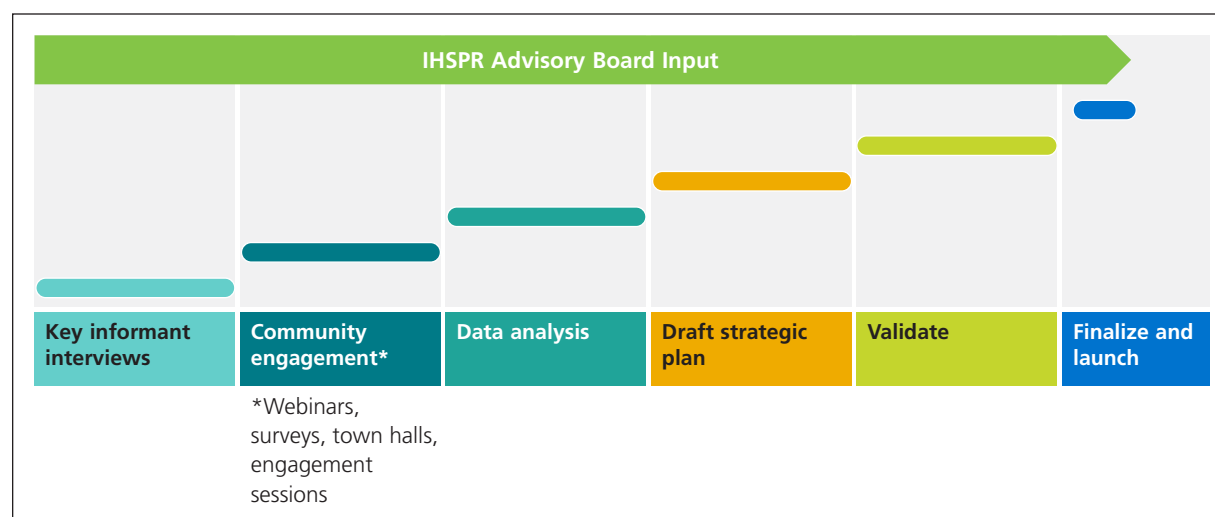
IHSPR supports and will work to uphold the values and commitments articulated in the *Strategic Plan 2021–2026* (CIHR IHSPR 2021). Additionally, IHSPR commits to the following:

- *Excellence, innovation and impact:* supporting excellent, innovative and impactful HSPR that improves the overall health system and health of Canadians, with the ultimate goal of achieving the Quadruple Aim and health equity for all. IHSPR will promote an open science approach to ensure that research and evidence supported by the Institute is accessible in a timely manner to all stakeholders to help accelerate and enable health system transformation.
 - *Collaboration for collective impact:* engaging and collaborating with partners within Canada and other countries to support rigorous research and knowledge mobilization activities that achieve measurable impact on health and healthcare system outcomes.
 - *Equity, diversity and inclusion:* supporting the principles of equity (fairness), diversity (representation) and inclusion (valued participation), including sex and gender considerations and the needs of people and populations across the life course in all activities undertaken by the Institute, and working to support CIHR's strategic priority of *pursuing health equity through research*.
 - *Indigenous Peoples' health:* supporting CIHR's priority of *accelerating the self-determination of Indigenous Peoples in health research*, the *Institute of Indigenous Peoples' Health Strategic Plan 2019–2024* (CIHR IIPH 2019), as well as the *Action Plan: Building a Healthier Future for First Nations, Inuit and Métis Peoples* (CIHR 2016).
 - *Environmental sustainability:* taking steps to understand the strategies and actions that can be applied to the Institute's and health systems' activities to prevent, mitigate and respond to the risk to health posed by climate change and other environmental impacts.
 - *Continuous learning and improvement:* being a learning organization that continuously monitors and evaluates its programs and activities and uses the results to iterate, adjust and improve. IHSPR strives to be forward thinking, nimble and adaptable as the health research ecosystem and healthcare systems evolve.
- IHSPR's Approach to Priority Setting**
- IHSPR identified strategic directions for HSPR through an evidence-informed, multi-pronged, community-engaged and iterative process conducted between May 2019 and January 2021 (Figure 2). Our approach was pan-Canadian with respect to scope of engagement and drew on multiple lines of evidence including the following:
- an environmental scan of HSPR priorities in Canada and other countries;
 - analysis of historical HSPR funding investments and impacts;
 - semi-structured interviews with individuals from research-based, policy-making, decision-making, clinical, Indigenous and patient-based communities;
 - community engagement via Canadian and international conferences, university town halls, patient round tables, online engagement sessions and a community survey;
 - strategic-partnership round tables;
 - meetings with federal and provincial/territorial departments of health;
 - a rapid review of COVID-19 priorities for HSPR (McMahon et al. 2020); and
 - engagement with the IHSPR Institute Advisory Board (IAB) throughout the process.
- Altogether, more than 2,300 individuals provided input to inform IHSPR's strategic plan.

IHSPR analyzed the input and data to identify common themes, refined the themes into draft priorities for investment and strategies for action and met with its IAB to discuss and finalize the plan. The resulting priorities and actions were shared with the HSPR

community for validation in an open town hall virtual forum in June 2021. Consistent with our strategy development process, our strategy implementation approach will be highly consultative and partnered.

Figure 2. IHSPR's strategic planning process



IHSPR's Strategic Priorities

Strategic Priority 1: Accelerating the discovery of innovations that transform healthcare delivery systems to achieve the Quadruple Aim and improve health equity for all

The context

Canadian Medicare has long been regarded as a hallmark of Canadian culture and identity. But today, the healthcare systems that have developed within and around this legislative framework are often seen as focused on hospitals and physicians, siloed across sectors and centred on illness and treatment instead of wellness and prevention. In addition, the COVID-19 pandemic has raised awareness that healthcare systems are outdated and need to be more resilient, adaptable and better prepared to withstand pressing challenges,

including future pandemics or emergencies (such as those presented by climate change).

Amid these gaps and challenges, however, there are examples of excellence and innovation that can be found across jurisdictions. This includes team-based primary healthcare with a focus on the social determinants of health, an increased focus on patient and population health outcomes, implementation of digital and virtual care technologies to improve access to care in rural and remote regions, standardized care pathways that improve health outcomes and quality of care while reducing costs and patient and community engagement that informs all levels of decision making. The COVID-19 pandemic has accelerated the adoption of certain innovations that were in the early stages of implementation before the pandemic, such as virtual care (Bhatia et al. 2020; Webster 2020). The pandemic also prompted

heightened attention to certain sectors and challenges such as the long-term care (LTC) sector and the development of new national LTC standards (The Governor General of Canada 2020).

Modernizing Canadian healthcare is critically needed to ensure that pockets of excellence become standard practice across the country and create meaningful improvements for people, communities and populations. This will require research investment and attention to better understand the equity implications of how healthcare services are organized, funded and delivered; why implementation and innovation flourish in some areas but not others; the key enablers and barriers to implementation; how to contextualize promising innovations for local adaptation and uptake; and the ingredients to successful and equitable sustainability of excellence. Transformation is required to ensure delivery systems are oriented toward, and have the mechanisms in place to achieve, the Quadruple Aim of improved patient experience, better population health, improved provider experience and better value, as well as improved health equity for all. These delivery systems must be resilient, accountable and prepared to deliver consistent, high-quality outcomes, including in times of crisis. HSPR will play a vital role in providing the evidence needed to evaluate current approaches, re-envision a future state for Canadian healthcare and inform the modernization of contemporary delivery systems.

Goal

The goal of the first priority is to support and invest in research that leads to better population health and increased value, while improving health equity and the healthcare experience for patients, families and healthcare providers.

Objectives

The objectives of the first priority are as follows:

1. Generate evidence about innovations in how to organize, finance, manage and deliver healthcare that achieves the Quadruple Aim, improves equity and is accountable to patients and the public. Prioritized areas for attention include the following:
 - a. integration of care (including integrated delivery systems and continuity of care);
 - b. primary, home and community-based care;
 - c. long-term care (including nursing home care and care provided in retirement homes and assisted living facilities); and
 - d. the healthcare workforce (including funding and remuneration, training and support, scopes of practice, interdisciplinary collaboration and data systems for planning).
2. Catalyze new research at the intersection of health services and policy and population health that integrates upstream prevention within healthcare delivery settings/approaches to improve health, health equity and well-being, and addresses the social determinants of health.

Strategies to achieve the first priority

Strategies to achieve the first priority include the following:

1. Support large-scale implementation science teams designed to generate cutting-edge research, mobilize knowledge into action, accelerate healthcare system transformation and drive better outcomes.

2. Support cross-jurisdictional research and comparative policy analyses that generate the evidence needed to build high-performing, equitable healthcare systems and services.
3. Embed a health equity lens within research programs to contribute to an equitable HSPR funding system and an equitable healthcare delivery system, including attention to sex and gender; racism; intersectionality; Indigenous Peoples and colonization; income inequality; global health; and rural, remote and northern communities.
4. Increase public awareness about the power of HSPR to address key issues confronting healthcare in Canada. Create opportunities for: patients and the public; Indigenous Peoples and communities; and decision makers, healthcare providers and researchers to work together in generating and applying relevant, high-impact HSPR.
5. Contribute to CIHR's framework for action on global health research to ensure that HSPR priorities, partners and perspectives are incorporated.

Expected impact

In five years, new research on transforming healthcare delivery systems has been generated and mobilized to achieve the Quadruple Aim and address health equity, and HSPR is embraced as the innovation engine of healthcare systems.

Strategic Priority 2: Modernizing the healthcare system with digital health solutions and data science

The context

Throughout the healthcare system, rapid digitization is occurring in most hospitals, doctors' offices, community clinics, pharmacies and

diagnostic services. Still, this landscape is characterized by fragmented data systems and platforms; limited interoperability; data islands; regulatory barriers; lack of integration of clinical care and patient-generated data into data systems; challenges with data ownership; concerns with privacy, safety and cybersecurity; minimal provider, patient and public engagement; and critical gaps in data (e.g., lack of race and ethnicity data, lack of measures about equity and racism). Canada has international advantages, including a single payer healthcare system, population-based administrative data, world-leading researchers in big data and artificial intelligence and highly regarded data-related organizations, which it should leverage to seize the digital and data opportunity.

A strong digital health infrastructure underpinning the healthcare system is needed to accelerate system transformation to meet the needs of Canada's diverse population. This was exemplified during the COVID-19 pandemic, when almost all non-urgent care across the country moved to virtual or telemedicine visits, modernizing the healthcare system within days out of necessity. It is now time to continue this transformation and bring all aspects of healthcare into the digital economy through safe, secure interoperable systems. By leveraging Canada's data assets, digital health innovations, advanced analytics and expertise of the HSPR community, we can collaborate with partners to support transformative research to underpin expanded and equitable access to care, enhanced care provision to rural and remote communities and historically underrepresented groups, improved continuity of care and, ultimately, improved overall care provided to Canadians.

Goal

The goal of the second priority is to modernize Canada's healthcare systems through

research on digital health innovations and data science that will help to achieve the Quadruple Aim and health equity for all.

Objectives

The objectives of the second priority are as follows:

1. Support research that enhances the design, implementation and evaluation of digital health solutions – including virtual care technologies – that aim to improve health and patient/provider experience outcomes.
2. Encourage and enhance the use of data and data analytics, including artificial intelligence, in various realms of HSPR as a means to improve health outcomes and health equity.
3. Support a strong digital health ecosystem, in partnership with others, which includes leading-edge HSPR and a diverse community of HSPR scholars engaged in informing and creating an improved data ecosystem; enhanced and equitable data access and data linkage; improved predictive modelling; secure digital health services available to all Canadians; and improved digital health literacy.

Strategies to achieve the second priority

Strategies to achieve the second priority include the following:

1. Design innovative digital health research funding programs that support advanced analytics and the implementation and evaluation of digital health approaches (including, but not limited to, virtual care, e-consultations, e-referral, sensors, patient portals and patient-held records and wearables).
2. Create opportunities for researchers, care providers, decision makers and patients from diverse communities to

work together in the digital health space to improve their understanding and use of data and increase their overall digital health literacy.

3. Encourage and promote the use of data sources and platforms by health services and policy researchers, including Strategy for Patient-Oriented Research's (SPOR's) Canadian Data Platform.
4. Work with partners to continue to improve access, linkage and interoperability of data and data systems for HSPR and evidence-informed decision making; support equitable access to data and appropriate data ownership and rights, including within Indigenous communities; and ensure that privacy, safety and ethical and regulatory issues related to data are considered and respected.

Expected impact

In five years, research will inform the creation and implementation of digital health tools that will support timely access to care for Canadians, accelerating progress toward the Quadruple Aim and achieving health equity for all. Digital health literacy will improve across HSPR stakeholders, including researchers, providers, policy makers, decision makers, patients and the public through opportunities to work together and collaborate in the digital health space.

Strategic Priority 3: Integrating evidence into health services and policy decisions for improved healthcare system performance and outcomes

The context

HSPR does not always lend itself to immediate application and impact. Decisions about healthcare, the health system and health policy are being made in an ever-changing environment and often without the

appropriate evidence. This challenge is further compounded when research does not address priority policy or practice questions, meaningfully engage with knowledge users or consider the enablers and barriers present in real-world implementation contexts. To overcome these challenges, HSPR programs and projects should have clear pathways for impact, with the Quadruple Aim and health equity as the ultimate goal (CHSPRA 2018). Clear pathways for impact require a strong emphasis on knowledge mobilization. This includes building trusted and sustained relationships with knowledge users (i.e., an “integrated knowledge translation” approach), which can help foster uptake/implementation and scale and spread. Moving forward, IHSPR will continue to build on funding innovations that aim to bridge the research to impact gap, such as the programs including “Best Brains Exchanges,” “Rewarding Success” and “Partnerships for Health System Improvement.” IHSPR will continue to support the evolution of learning health systems and learning health organizations across Canada through programs such as the Health System Impact Fellowship that align research to healthcare system priorities and build capacity for rapid learning and improvement.

Goal

The goal of the third priority is to develop innovative HSPR funding programs and support impactful knowledge mobilization that accelerate the development of learning health systems across Canada and continually integrate and mobilize relevant, high-quality, timely evidence into programs, practices and policies that advance the Quadruple Aim and health equity for all.

Objective

The objective of the third priority is to develop impact-generating HSPR programs that align with healthcare system and patient/

community priorities, support meaningful engagement of all stakeholders and accelerate the path from evidence to impact through effective knowledge mobilization.

Strategies to achieve the third priority

Strategies to achieve the third priority include the following:

1. Strengthen engagement and collaborative partnerships among researchers and healthcare providers, decision makers and patients/caregivers/family/the public through the design of funding opportunities and knowledge mobilization activities.
2. Accelerate impact through innovative research funding program design: Build upon successful innovative research funding models that include elements of researcher embeddedness, rapid learning, agile implementation, contextualized dissemination, implementation science, scale and spread and alignment with healthcare systems and public priorities.
3. Partner for impact: Collaborate with partners, including provincial funding agencies; federal, provincial and territorial departments of health; Canadian Health Services and Policy Research Alliance (CHSPRA); the Pan-Canadian Health Organizations and the Canadian Association for Health Services and Policy Research; and HSPR organizations in other countries to amplify and optimize the impact and outcomes of strategic research investments and activities.
4. Contribute to the science of science: Develop a research-on-research strategy for IHSPR that informs the creation of high-value, high-impact research programs and supports the HSPR community to plan for impact within their grants. In addition, encourage and support the use of CHSPRA’s impact framework, titled *Making an Impact*:

A Shared Framework for Assessing the Impact of Health Services and Policy Research on Decision-Making (CHSPRA 2018), across the HSPR sector and integrate its use within CIHR IHSPR evaluation and reporting mechanisms.

5. Support evidence-informed decision making by patients, providers and decision makers by designing mechanisms that support the mobilization of research evidence in programs, practice and policy.

Expected impact

In five years, IHSPR's strategic research funding programs and activities will be optimized to foster research impact that improves healthcare system performance, equity and outcomes, and there will be stronger research evidence about the pathways to research impact. Strong partnerships among researchers, providers, decision makers, patients and the public will increase the likelihood that adoptable, sustainable and scalable evidence-informed interventions and policies are implemented in the healthcare system.

Strategic Priority 4: Strengthening capacity for solution-oriented research and evidence-informed healthcare system transformation

The context

The magnitude of challenges confronting healthcare systems is unprecedented. Tackling these challenges with evidence-informed solutions requires a highly trained HSPR workforce with cutting-edge research skills and the professional competencies required to lead, inform and implement change. Emerging and established research leaders must be equipped with a toolkit of research and professional competencies, such as inclusive leadership, change management and implementation (Bornstein et al. 2018; CHSPRA 2015; CAC 2021) and skills to incorporate

equity, diversity and inclusivity in research and practice. Opportunities must be provided for researchers to work hand-in-hand with decision makers, providers, communities and patients to identify and address high-priority evidence needs. Embedded and partnered research funding programs that position researchers at the coalface of policy and decision making will strengthen the capacity of health system organizations to generate and use research to inform decisions and build enduring relationships between academic and health system organizations. In doing so, embedded and partnered research funding programs can serve as a catalyst for evidence-informed healthcare system transformation.

Sophisticated methodological expertise and interdisciplinary, intersectoral collaboration are also critical elements of tackling complex healthcare delivery system challenges with an equity lens. Research funding programs can help to optimize the interdisciplinary richness of the HSPR field and put a focus on equity by bringing together health services researchers with economists, political scientists, lawyers, artificial intelligence scientists, behavioural scientists, other research experts, decision makers, providers and patients from different sectors to co-develop and apply creative solutions to complex challenges.

Goal

The goal of the fourth priority is to enhance capacity to generate solution-oriented research, apply evidence and implement evidence-informed interventions that transform healthcare delivery systems to achieve the Quadruple Aim and health equity for all.

Objective

The objective of the fourth priority is to train and support the HSPR workforce to tackle the complex healthcare system challenges of

the present and the future and to equip this workforce with the capabilities to inform the implementation of solutions that transform healthcare delivery systems to achieve the Quadruple Aim and health equity for all.

Strategies to achieve the fourth priority

Strategies to achieve the fourth priority include the following:

1. Collaborate with university training programs, health system organizations, research funders and CHSPRA to foster modernized training approaches that equip graduate, post-doctoral and early career researchers with an enriched set of core competencies, applied training experiences and mentorship that amplify their capacity to make a positive health and societal impact throughout their careers within and outside of academia.
2. Support embedded research models across multiple career stages that accelerate the generation of timely, responsive evidence and foster learning health system environments that promote rapid learning and continuous improvement.
3. Strengthen capacity for interdisciplinary and intersectoral collaborations – grounded in principles of co-production and commitment to equity – that harness the expertise of the diverse disciplines and sectors that comprise the healthcare ecosystem, to work together to address complex challenges.
4. Develop HSPR talent for cutting-edge science and methodological innovations that generate new insight and catalyze solutions.
5. Contribute to CIHR’s development of a “policy framework ... that will address gaps in training and support across all career stages, transitions, and paths” (CIHR 2021: 15) and ensure its relevance and value to the HSPR community.

Expected impact

In five years,

- a new cadre of PhD graduates will be equipped with the research and professional skills to lead evidence-informed healthcare system transformation;
- an increased number of health system organizations will have embedded research capacity, employ researchers within their organizations and embrace a culture of rapid learning and continuous improvement; and
- health services and policy researchers will be working in partnership with decision makers, providers, patients and the public to address high-priority challenges and accelerate evidence-informed healthcare system transformation.

Partnerships

The challenges confronting healthcare systems in Canada are complex and multifaceted. A collective, partnered approach to address shared priorities and accelerate learning health systems will be essential for making a transformative impact and achieve the Quadruple Aim and health equity for all. IHSPR values its partnerships with organizations and communities in Canada and internationally and commits to working collaboratively to implement this strategy. IHSPR also commits to creating and supporting opportunities for integrated partnerships between researchers and knowledge users within its funding initiatives.

Importantly, IHSPR and the HSPR community must continue to foster key collaborative partnerships, such as the CHSPRA. CHSPRA brings together partner organizations from across the country to work collectively on systemic challenges and invest in high-priority areas of interest.

Our Impact

To position HSPR as the innovation engine of healthcare systems (Tamblyn et al. 2016) that advance toward achieving the Quadruple Aim and health equity, IHSPR will be deliberate in its approach to ensure that the systems' needs and those of patients, caregivers and communities are reflected in all facets of its work to implement this strategic plan. IHSPR uses a "relevance by design" approach in its strategic planning, and to guide its investments in program development, engagement activities, funding opportunities and peer review designs. This approach aims to build linkages between researchers and stakeholders to ensure that the research is relevant to the systems' needs. IHSPR's mission has always been to catalyze the application of robust research findings to policies, practice and programs that support high-quality care for Canadians, and its relevance by design approaches have helped move the dial toward impact over the last two decades of research investment.

IHSPR has made clear commitments to health equity and identified equity, diversity and inclusion as a core value in this strategic plan. The true impact of this plan therefore depends on IHSPR taking concrete steps to operationalize these commitments and take action. Initial actions include:

- an enhanced concept of research excellence that includes advancing equity and social impact;
- designing research funding programs that explicitly include health equity in their objectives to signal that all improvement and transformation efforts must be done with attention to equity and an analysis of the equity implications;
- a focused investment in research at "the intersection of health services and policy and population health that integrates upstream prevention within health care

delivery settings/approaches to improve health, health equity and well-being, and addresses the social determinants of health" (CIHR IHSPR 2021: 11) to address systemic inequities and reduce disparities; and

- advancing the development of equity metrics and key performance indicators that allow for analysis of progress toward health equity and reduction of disparities (Liburd et al. 2020).

IHSPR will also critically examine its funding programs for potential barriers and biases that could introduce or exacerbate inequities in application and success rates and compromise the diversity of the HSPR workforce. We have a lot to do, and it starts with acting on the commitments identified in this plan.

Moving forward, IHSPR will continue to incorporate relevance by design principles within funding programs, ensure that activities are centred on integrated knowledge translation approaches and support effective dissemination and implementation. Attention to equity, diversity and inclusion will underpin these efforts. IHSPR will use CHSPRA's (2018) *Making an Impact* framework as its guiding light and commit to monitoring and assessing its own impact in order to build improved research funding programs that contribute to greater health, system and social impact.

Concluding Remarks

IHSPR's strategic plan outlines the Institute's key priority areas for investment and activity over the next five years. Using an evidence-informed strategic planning process that was pan-Canadian in scope and designed to elicit the priorities of decision makers, providers, researchers, patients and the public, IHSPR prioritized four key strategic priorities:

1. accelerating the discovery of innovations that transform healthcare delivery systems to achieve the Quadruple Aim and improve health equity for all;
2. modernizing the healthcare system with digital health solutions and data science;
3. fostering the integration of evidence into health services and policy decisions for improved healthcare system performance and outcomes; and
4. strengthening capacity for solution-oriented research and evidence-informed healthcare system transformation.

Through implementation of this plan, IHSPR will support the generation of timely, relevant, equitable and impactful research that can be mobilized to improve the healthcare system and the overall health and well-being of Canadians. Importantly, accelerating healthcare system transformation through research to achieve the Quadruple Aim and health equity for all is a lofty goal and not one that IHSPR can achieve alone. IHSPR is one player in an ecosystem of partners that share a commitment to evidence-informed healthcare system transformation, and IHSPR is committed to working with CIHR's institutes and branches, CHSPRA, provincial funding agencies, ministries of health and health systems, health providers, policy and decision makers, patients, the public and other key partners to leverage collective efforts to advance this goal. As a learning organization, IHSPR is committed to the science of science and will study, learn, adapt and improve programs and activities to optimize their value and contribution to the HSPR community and Canada's healthcare systems.

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- Stirling Bryan (chair at the time of writing this strategy report [now retired from the IAB]), professor, School of Population and Public Health, University of British Columbia; senior scientist, Centre for Clinical Epidemiology and Evaluation, Vancouver Coastal Health; professor (part-time), Health Economics Research Unit, University of Aberdeen; president, BC Academic Health Science Network.
- Christina Weise (current chair, vice-chair at the time of writing this strategy report), president and CEO, Weise Insights Ltd.
- Katie Aubrecht, Canada Research Chair in Health Equity and Social Justice; assistant professor, Department of Sociology, St. Francis Xavier University.
- Arlene Bierman, director, Center for Evidence and Practice Improvement, Agency for Healthcare Research and Quality.
- Thomas Beaudry, community coordinator, Engagement and Reconciliation, Agriculture and Resource Development, Province of Manitoba.
- Antoine Groulx, family physician; full professor, Clinical Medicine, Université Laval; general director, Alliance santé Québec; scientific director, Quebec SPOR Unit.
- Alies Maybee, patient partner; co-founder, Patient Advisors Network.
- Tom Noseworthy, professor (Health Policy and Management), Community Health Sciences and O'Brien Institute

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- Marcel Saulnier, associate assistant deputy minister, Strategic Policy Branch, Health Canada.
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The full strategic plan is available on the IHSPR website. Please visit: <https://cihr-irsc.gc.ca/f/52481.html>.

Le plan stratégique complet est disponible sur le site Web de l'ISPS, à <https://cihr-irsc.gc.ca/f/52481.html>.

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