# Evaluation of the Partnership for Research and Innovation in the Health System (PRIHS) 2020

## Key Messages and Executive Summary

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## Table of abbreviations

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| AH | Alberta Health |
| AHS | Alberta Health Services |
| AHRIS | Alberta's Health Research and Innovation Strategy |
| AI | Alberta Innovates |
| AIHS | Alberta Innovates Health Solutions |
| AMA | Alberta Medical Association |
| ARCH | Addiction Recovery and Community Health |
| ARIF | Alberta Research and Innovation Framework |
| EAC | Evaluation Advisory Committee |
| ELT | Executive Leadership Team |
| EOI | Expression of interest |
| ERAS | Enhancing Patients' Recovery After Surgery |
| ESC | Evaluation Steering Committee |
| FICare | Family Integrated Care |
| HIIS | Health Innovation Implementation and Scale |
| ICU | Intensive Care Unit |
| IEC | Independent Evaluation Committee |
| IRR | Internal rate on return |
| JEI | Jobs, Economy and Innovation |
| LOI | Letter of intent |
| MRI | Magnetic Resonance Imaging |
| NICU | Neonatal Intensive Care Unit |
| PaCER | Patient and Community Engagement Research |
| PAC | Patient Advisory Committee |
| PRIHS | Partnership for Research and Innovation in the Health System |
| SCN | Strategical Clinical Network |
| SPOR | Strategy for Patient-Oriented Research |

## MAIN MESSAGES

The Partnership for Research and Innovation in the Health System (PRIHS) is a matched (50:50) investment between Alberta Innovates (AI) and Alberta Health Services (AHS). PRIHS pilots evidence-based practices through the funding of health innovation and research projects that will reduce costs to the Alberta healthcare system while improving or maintaining patient outcomes, and makes decisions as to whether these practices should be brought to scale within Alberta. The program targets research projects within AHS' Strategic Clinical Networks (SCNs). Since the launch of the program in 2013, PRIHS has had six iterations.

***Evolution of PRIHS:*** The PRIHS iterations have evolved over time and are mainly based on lessons learned. While the goals of PRIHS continue to align with the broader strategic health priorities of the Alberta Government and AHS due to PRIHS' strong link to the SCNs, there is evidence that PRIHS' goals no longer align with AI's priorities. PRIHS needs to reflect the priorities of both funders of the program. Although the continued evolution of the program based on lessons learned and government priorities are important, a balance between evolving the program and keeping consistency for the applicants should be considered.

***Measurement of impacts:*** While there is evidence that PRIHS is contributing to the achievement of some of its immediate outcomes, some key indicators to measure the success of PRIHS are not being captured. Given the key expected impacts of PRIHS projects are to show value for money while maintaining or improving patient outcomes, value-for-money calculations completed at the end of projects available for this evaluation were sparse. These calculations need to be completed for all available PRIHS projects and stored in a manner accessible for reviews and evaluations. Furthermore, many of the indicators identified to measure the intermediate and longer-term outcomes of PRIHS projects are not being collected. A review of these indicators and the feasibility of collecting the information needs to be reviewed.

Key features of PRIHS projects that can be foreign for researchers are calculating the economic impact of their projects and the implementation science aspect of the projects. Further support regarding these two aspects needs to be provided to researchers by AI and/or AHS during the application stage and the implementation of their projects.

***Project timelines:*** All projects from the first three iterations of PRIHS requested no-cost extensions of one to two years. To help PRIHS projects maintain their initial timelines, continued monitoring of project milestones is needed, as well as increased monitoring of milestones earlier in the project so project adjustments can be made early on to still meet the overall timeline. Furthermore, one of the suggestions to minimize project delays was engaging healthcare providers as early as possible in the process. AI and/or AHS should provide mechanisms for researchers to engage healthcare providers as early in the process as possible and to ensure healthcare providers see personal benefit in the projects.

***Patient researcher involvement:*** While there is evidence of patient involvement in PRIHS and its funded projects, evidence of the need for increased inclusion of patients in the research/projects and PRIHS overall was apparent from the evaluation findings. Greater patient involvement in PRIHS governance and PRIHS projects from the design phase to the end of the project is needed.

## EXECUTIVE SUMMARY

The Partnership for Research and Innovation in the Health System (PRIHS) was launched in 2013 and is a matched (50:50) investment between Alberta Innovates (AI) and Alberta Health Services (AHS). PRIHS pilots evidence-based practices through the funding of health innovation and research projects that will reduce costs to the Alberta healthcare system while improving or maintaining patient outcomes, and makes decisions as to whether these practices should be brought to scale within Alberta. The program targets research projects within AHS' Strategic Clinical Networks (SCNs). Since the launch of the program, PRIHS has had six iterations. Various changes were implemented between the first iteration of PRIHS in 2013-14 and the latest competition that was launched in 2020.

### Methodology

The Evaluation of PRIHS had a formative aspect and reviewed and summarized progress to date. The evaluation covered the period since the implementation of PRIHS in 2013-14 to the present. Therefore, the first six iterations of PRIHS were in scope. The evaluation included four lines of evidence: a document and data review, a literature review and environmental scan, key informant interviews (n = 40), and case studies (n = 3).

Given the strong emphasis on patient-oriented research in Alberta, patients were included in the evaluation research through the creation of the Patient Advisory Committee (PAC). The PAC reviewed and provided comments on data collection instruments and deliverables throughout the evaluation and were presented the findings from the evaluation.

A limitation of this evaluation was the inability to complete interviews with patient researchers involved in PRIHS-funded projects. While efforts were made to interview patients as part of the evaluation, a number of factors prevented them from taking place.

### Findings

#### *PRIHS implementation*

The evolution of the PRIHS iterations over time is viewed as positive by many key informants. Almost all key informants agree that changes to the PRIHS iterations are based on lessons learned from previous iterations, but were unclear about whether changes to the PRIHS iterations reflected changes in government priorities. While documented evidence shows that the goals of PRIHS have aligned with the broader strategic health priorities of the Alberta Government over time, a few key informants indicate that the priorities of Alberta Health (AH) and Jobs, Economy and Innovation (JEI) are not considered in PRIHS iterations, as there is no mechanism currently in place for the priorities to be shared. Additionally, a few key informants agree that PRIHS aligns with AHS priorities given PRIHS' strong link to the SCNs, but some do not agree that PRIHS' goals continue to align with AI's priorities. In 2016, the different AI agencies amalgamated into a single AI corporation and transitioned to JEI from AH, which changed AI's priorities to focus on economic growth and diversification, as well as digital health.

While the evolution of PRIHS' iterations are seen as necessary and positive by key informants, an interest in consistency for the iterations going forward was expressed to ease the application burden on researchers. Evidence indicates that a balance between continued evolution of the

program and limiting changes to the program to provide consistency for the applicants is a necessary consideration for all programs.

### *Impacts of PRIHS projects*

There is evidence that PRIHS is contributing to its immediate outcomes:

- PRIHS is contributing to *building health research capacity in Alberta*, for example, through the individuals receiving training through the funded projects, publications, and engagement activities.
- *SCNs are identifying and approving acceptable research recommendations* as evidenced by about two thirds of PRIHS full applicants being successful, and some evidence and examples of PRIHS projects being identified for scale and spread.
- *SCNs are recommending PRIHS projects that are contributing to value-for-money solutions that maintain or improve health quality* as evidence by 61% of projects indicating that their projects had an impact that resulted in a change to quality of care in at least one of the Health Quality Council of Alberta's dimensions of quality, and a few projects showing value for money and positive economic impacts, although evidence was limited in this regard.

Many of the indicators to collect information following the completion of PRIHS projects are not being collected by the program. Therefore, the indication from many key informants that AHS is prioritizing the implementation of PRIHS research solutions because SCNs are heavily involved in PRIHS projects is only anecdotal.

### *AI, AHS, and SCN enablers*

The key informant and case study interviewees agree that SCNs are a great enabler for their PRIHS projects, partially because they have the necessary networks and connections with physicians, clinicians, nurses, and other frontline healthcare workers. The importance of these connections was highlighted in the literature and other organizations reviewed as part of this evaluation. However, the case study interviewees noted that including a mechanism to engage healthcare providers earlier in the process would be beneficial, and the literature noted the need for healthcare practitioners to see a personal benefit from the practice in order for projects to be successfully implemented, and that incentives can also help with the implementation of a project.

An additional enabler from AI, AHS, and the SCNs suggested by key informant and case study interviewees is more and continued guidance from AI, AHS, SCNs, and others involved to help implement the projects. Additionally, key informant experts suggest that the inclusion of implementation scientists on project teams and providing the researchers with professional development regarding implementation would be key enablers for the program and its projects. This aligns with one of the recommendations from the Independent Evaluation Committee (IEC) to strengthen activities to support the research teams, including the provision of specialized support (e.g., implementation science and economic evaluation).

### *Efficiency of AHS' and AI's program processes*

Key informant and case study interviewees agree that AHS' and AI's program processes are efficient and have continued to improve over time. However, some suggestions were provided to improve the application process, including AI and/or AHS providing more guidance regarding the application form, especially the economic impact part of the application; updating the online application software; streamlining the application process to be more similar to other academic research grant applications; and requiring the applications to identify expected end products and milestones associated with the end products for a more efficient delivery and completion of the projects.

The environmental scan and the literature review highlighted the importance of monitoring funded projects. The recommendation from the IEC to capture and report high-quality evidence from an intervention to effectively support decision-making about scale and spread calls for more in-depth reporting. A few key informants suggested making the reporting less onerous and moving to an online reporting system.

### *Factors that influence project timelines*

All projects from the first three iterations of PRIHS have requested no-cost extensions of one to two years. Reasons for the delays in project timelines were related to access to and the collection of data, the hiring of project staff, the bureaucracy around getting operational and ethics approvals, and engaging clinicians and frontline workers early enough in the project. Suggestions to reduce project delays included using the Strategy for Patient-Oriented Research (SPOR) platforms to increase access to data and implementing more stringent reporting processes that force research teams to indicate their progress towards proposed milestones/timelines early on and throughout the project. The literature review and environmental scan highlighted the importance of project monitoring to increase the likelihood that projects remain within their expected timelines.

### *Recommendations to ensure program success in long-term*

A number of suggestions to ensure program success in the long-term made by key informants, and evident in the case studies, literature review, and environmental scan, are highlighted in this report. Another suggestion confirmed by the same three lines of evidence is increased inclusion of patients in the research/projects and PRIHS. Some key informants suggest that there needs to be a greater connection between the SCNs, the funded PRIHS projects, and the SPOR platforms. Furthermore, the environmental scan showed that consultations or involvement of external stakeholders, including patients, should be used to develop and support the research goals and focus of the organizations/programs and their funded projects.

A final suggestion from a few key informants is to ensure that the metrics to measure the long-term outcomes of PRIHS are being collected.

## Recommendations

*Recommendation 1:* Although there is evidence of PRIHS alignment with AHS priorities, ensure PRIHS reflects the priorities of both funders of the program (i.e., AHS and AI). Determine whether AH and JEI priorities should also be considered as part of PRIHS. If so, set up a mechanism for this (e.g., through the Steering Committee). Ensure that any changes to PRIHS iterations reflect the priorities of the involved parties and that the alignment with these priorities is clearly documented (e.g., in the program guides).

*Recommendation 2:* Ensure completed projects include value-for-money calculations as part of their final reports. Ensure these results are stored in a database and accessible for reviews and evaluations. If projects are discontinued or cannot show value for money at the end of their projects, this should also be reflected in their final reports and the database.

*Recommendation 3:* Review indicators identified to track intermediate and long-term outcomes and examine options to consistently and formally collect the necessary information. If the issue is feasibility, consider revising the indicators to metrics that can effectively be collected and tracked.

*Recommendation 4:* AI and/or AHS should continue to provide support and enhance the assistance provided to applicants regarding the economic impact portion of the application to ensure it is done properly at the application stage, and provide implementation science and economic evaluation support throughout the life of the project. Additional efforts should be made to improve awareness of these supports.

*Recommendation 5:* Ensure applications continue to include key milestones tied to timelines throughout the project. Monitoring of these timelines is required early and often to ensure projects are on track to meet their proposed timelines or so that adjustments to the project can be made early on to still meet the overall timeline of the project. Review of how and when these milestones are being tracked and monitored is recommended.

*Recommendation 6:* AHS and/or AI should provide mechanisms for researchers to engage healthcare providers as early in the process as possible, as well as provide information and advice to research teams to ensure healthcare practitioners are more likely to see a personal benefit from the practice in order for projects to be successfully implemented.

*Recommendation 7:* Have greater patient involvement in PRIHS governance and PRIHS projects at all stages of the projects from start (e.g., during the project proposal/design stage) to end (e.g., project final reporting or dissemination of final project results). Review the different options for greater patient involvement, including greater connection with the SPOR platforms.