Bringing Together Research and Quality Improvement: The Saskatchewan Approach

Conjonction de la recherche et de l'amélioration de la qualité : l'approche de la Saskatchewan

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Abstract

Improving health and health services requires both better knowledge (a key function of research) and better action to adapt and use what is already known (quality improvement). However, organizational and cultural divides between academic research institutions and health system organizations too often result in missed opportunities to integrate research and improvement. The Saskatchewan Health Quality Council's experience and relationships, from linking research, quality improvement and patient engagement in its leadership of the province's healthcare quality improvement journey, provided core support and leadership in the development of Saskatchewan's Strategy for Patient-Oriented Research SUPPORT Unit. The vision is for the SUPPORT Unit to integrate research and quality improvement into a continuous learning health system.

Résumé

L'amélioration de la santé et des services de santé exige à la fois une meilleure connaissance (la fonction primaire de la recherche) et une meilleure action pour adapter et utiliser ce que l'on sait déjà (amélioration de la qualité). Cependant, les clivages organisationnels et culturels entre les instituts de recherche universitaires et les organismes du système de santé sont trop souvent responsables de rendez-vous manqués entre la recherche et l'amélioration. L'expérience et les relations du Saskatchewan Health Quality Council (pour l'établissement de liens entre la recherche, l'amélioration de la qualité et l'engagement du patient en vue d'orienter le processus d'amélioration de la qualité des soins de santé de la province) ont fourni un soutien et un leadership essentiels au développement de l'unité SOUTIEN de la Stratégie de recherche axée sur le patient de la Saskatchewan. L'objectif que poursuit l'unité SOUTIEN est d'intégrer la recherche et l'amélioration de la qualité à un système de santé apprenant.

KEY MESSAGES

- 1. Linking research and improvement science is foundational to establishing a learning health system; one that learns from its own experience and from research in order to continually improve the value it provides.
- 2. Health services and academic research each have their own purposes and cultures that can be difficult to bridge. The CIHR Strategy for Patient-Oriented Research provided an opportunity for Saskatchewan's universities and health system to find a common focus on advancing patient and family participation and leadership in research and health services quality improvement.
- 3. There is diversity in skills and mindsets needed for patients' engagement in research or quality improvement teams. Rather than perpetuate a divide between research and quality improvement in its work to promote patient participation, Saskatchewan's SPOR SUPPORT Unit promotes alignment in patient engagement processes to make the patient/family experience of participation in improvement or research as easy and satisfying as possible.

esearch and quality improvement science both have their own purposes, traditions, methodologies and institutional support structures, and there is considerable variety within these elements of research and quality improvement. However, both health research and quality improvement have a common fundamental aim to contribute to optimizing people's health and well-being and improving the quality of services in support of that aim. Broadly speaking, improving health and services requires both better knowledge (research) and better action to adapt and use what is known (quality improvement). Bringing these functions together to create active, mutual learning cycles, which tap the experience and expertise of health service users, service providers, researchers and people skilled in facilitating quality improvement, has been labelled a "learning health system" (Greene et al. 2012; IOM 2007). Creating the conditions for a learning health system in Saskatchewan was the motivation for the approach taken in establishing Saskatchewan's patient-oriented research SUPPORT Unit, with co-funding from the Canadian Institutes of Health Research's (CIHR) Strategy for Patient-Oriented Research (SPOR).1

As a key element of SPOR, CIHR partnered with provinces and territories across the country to establish SUPPORT Units to provide infrastructure, expertise and support for patient-and community-engaged research to help improve people's health and health services. A unique feature of Saskatchewan's SPOR SUPPORT Unit is the active partnership of the provincial Health Quality Council (HQC), with academic and health system organizations and the provincial government, to provide funding, space and personnel to the operations of the unit (SCPOR 2016). This was a strategic investment of both resources and expertise by HQC – drawing on its mandate and history of research, training and facilitation of healthcare quality improvement – to foster the multi-stakeholder partnership needed to develop a learning health system.

Context for the Saskatchewan Approach: A Provincial, Patient-Centred Quality Improvement Journey

Over nearly two decades, the Province of Saskatchewan has been on a journey to establish a quality-focused culture within its health system. A key recommendation of the 2001 provincial Fyke Commission on the sustainability of publicly funded healthcare was that a quality council be established to provide focus and leadership in this quest (Fyke 2001). In late 2002, the HQC was launched in Saskatchewan, with a mandate including research and education, to promote the improvement of quality in healthcare (Government of Saskatchewan 2002).

Over the last 15 years, HQC has led collaborative efforts with health system organizations to build quality improvement capacity and capability among administrators, leaders, clinicians and quality improvement support staff (HQC 2018). Over that period, nearly 5% of the 40,000-strong health system workforce has had significant practice-based education in the theory and application of quality improvement methods. Additionally, at least half of the workforce has been exposed to quality improvement concepts through brief awareness and orientation courses. These investments in capacity and capability have provided the impetus for thousands of local improvement projects and several province-wide improvement initiatives.

Research has also been a key element of the Saskatchewan quality improvement journey. From very early on, HQC was provided with ongoing, privileged access to a wide range of privacy-protected health system data. These data were used in the measurement and analysis of healthcare quality. HQC also led collaborations with healthcare providers and organizations in Saskatchewan to conduct surveys of patient experience in multiple healthcare sectors. HQC conducted research to identify and describe quality gaps ("opportunities for improvement"), develop quality measurement, synthesize global evidence on effective interventions and evaluate improvement interventions in the Saskatchewan context. HQC has also collaborated with a variety of researchers, provincially, nationally and internationally, on dozens of projects linked to quality improvement initiatives in areas such as hospital ward nursing care, chronic disease management, medication safety, stroke care, cancer care, patient flow, long-term care and primary care.

Early in its quality improvement journey, Saskatchewan began to adopt and implement patient- and family-centred care (PFCC) principles and approaches as core to its improvement efforts. This patient orientation was spurred by what we learned from high-performing health systems - notably the Southcentral Foundation in Alaska, where the concept of patients and communities as health system "customers/ owners" is central to their Alaska Native-owned health system (Southcentral Foundation 2018). The Patient First Review, conducted by the Saskatchewan provincial government in 2009, formally set the entire health system on a course of patient- and family-centred improvement (Dagnone 2009). To further advance patient-centred improvement efforts in Saskatchewan, the province focused on learning and applying Lean management and improvement methodology across the health system, starting in 2012. Lean emphasizes a strong focus on increasing value from the perspective of the customer, that is, the health service users in the case of the health/healthcare system. HQC provided central support to this provincial health system initiative.

A provincial patient- and family-centred care forum was created as a partnership between health system organizations and patient and family advisors (PFAs) to exchange innovative ideas, knowledge and experiences in adopting PFCC. This included establishing processes and policies that supported the involvement of PFAs in quality improvement events. In 2014, HQC began to provide leadership and administrative support to advancing PFCC in the province, and the forum was reorganized and formalized as the Patient- and Family-Centred Care Guiding Coalition (Fancott et al. 2016). The membership then included PFAs from regional health authorities and one executive sponsor and one staff lead from each of the 18 health system partner organizations. From 2015 through 2017, there were over 2,500 opportunities for PFAs to participate in quality improvement events, advisory committees and other engagements with Saskatchewan's health organizations.

The coalition developed numerous resources and PFCC strategies and policies, which were shared across the health system organizations in the province. These include:

- Recruitment materials to support the engagement of patients and families across the province
- Orientation and training to support the learning needs of PFAs
- Education for staff on PFCC and effective patient engagement
- Policies and processes to enable meaningful participation (i.e., honoraria and expense reimbursement policy and
- Reporting templates, which enabled monitoring of basic metrics around the number of patient families engaged in each organization and associated costs

This collaborative work by health system organizations, facilitated and coordinated by HQC, helped to create an

"engagement-capable environment" in the health sector across Saskatchewan.

The confluence of the ongoing, provincial health system improvement journey, the CIHR strategy to promote patientoriented research and an initiative to renew the College of Medicine at the University of Saskatchewan set the context for linking patient-engaged improvement to patient-engaged research in Saskatchewan. HQC, with relationships and expertise developed through its training/education, coordination, research and patient engagement in the health system quality journey, was able to provide leadership in the partnering of universities, healthcare organizations and patients in research that can inform and be informed by the quality improvement efforts in the province. This linkage of research and improvement science is foundational to the establishment of a learning health system, where the development of new knowledge is integrally connected to the people and mechanisms by which that knowledge will be used to achieve better results in health and healthcare.

Operationalizing the SPOR SUPPORT Unit in Saskatchewan

SPOR SUPPORT Units are required to provide a set of core supportive functions, including data and data services, patient engagement, knowledge translation, research methodology, training and capacity building and consultation services. In Saskatchewan, our SUPPORT Unit, the Saskatchewan Centre for Patient-Oriented Research (SCPOR), also added a dedicated function to support the engagement of Indigenous communities and to provide expertise in research methodology that is respectful of Indigenous culture. The services for these various functions are provided by SCPOR platforms hosted by some of our academic and health system organizations: the University of Saskatchewan hosts the Knowledge Translation, Methodology and Training Platforms, and each of the Saskatchewan universities provides traineeships and has methodologists to contribute to these functions; the Indigenous Engagement and Expertise Platform is hosted by a research unit affiliated with the University of Regina; the Data and Data Services Platform is led and resourced by HQC and eHealth Saskatchewan, with contributions from the province's Ministry of Health and the participation of the Saskatchewan Health Authority; and the Patient Engagement and Empowerment Platform is hosted by HQC.

The SCPOR Patient Engagement and Empowerment Platform seeks to identify roles for patients to engage in health research. In alignment with the SPOR Patient Engagement Framework, patients are actively recruited to engage in SCPOR governance, priority setting, research and knowledge translation (CIHR 2014). The platform is hosted by HQC to build upon the structures and processes for patient partnership in healthcare improvement that were developed by health system organizations

and PFAs through the PFCC Guiding Coalition and provincial quality improvement initiatives. We developed a continuum of engagement opportunities for PFAs, as outlined in the SPOR Patient Engagement Framework (CIHR 2014) and built complementary mechanisms to support engagement in patient-oriented research and for other opportunities to improve healthcare.

There was wide variation among researchers of understanding of patient-oriented/patient-engaged research.

Coordinating Patient Engagement for Research and Quality Improvement: Benefits and Opportunities for Shared Learning

Leveraging the existing PFCC infrastructure has been beneficial as it has increased the speed at which we are able to recruit and onboard patients and families to participate in the governance and priority-setting committees of SCPOR. We were able to recruit PFAs for research teams via HQC's membership in the Saskatchewan Patient & Family Advisor Network Facebook group and through our established relationships with partner organizations in the health system. These networks enabled access to a large number of PFAs from across the province to support the research teams' needs. Tapping the existing health system PFA network was especially helpful in recruiting experienced PFAs to join the SCPOR Patient and Family Advisory Council. For example, Dale Hall was a patient advisor for several years with the Five Hills Health Region in southern Saskatchewan. He collaborated with staff on quality improvement and facility design events. In 2016, he became a member of the SCPOR Patient and Family Advisory Council. His previous experience as a PFA in the health system proved helpful in his contributions to the co-design of content for patients and families on the SCPOR website and in evaluating the patient advisor experience. He also drew on his advisor experiences to help develop PFA role descriptions to support patient advisor recruitment.

Operationally, there have been many benefits and efficiencies gained from having the Patient Engagement and Empowerment Platform housed at HQC; however, there have also been some learning opportunities in our early work in patient engagement in research. Most importantly, platform staff needed to build relationships with staff and researchers from academic institutions. There was wide variation among researchers of understanding of patient-oriented/patient-engaged research. Some researchers had extensive experience with engaging patients or communities as partners in their research teams, whereas others had never engaged patients or families. It was vital for SCPOR Patient Engagement and Empowerment staff to first learn and understand the experience and norms researchers had with respect to patient engagement, after which the staff offered

training on the best practices in patient engagement promoted nationally through SPOR patient-oriented research training curricula for PFAs and research teams. The training provides an opportunity to develop common understanding and shared meaning of patient engagement and patient-oriented research. A positive impact has been demonstrated in the ongoing evaluation feedback received concerning the training session. For example:

The training provided by the Patient Engagement Platform helped us to recognize that we were engaging patients at a consultative level. Going forward, we have amended our plans to be more collaborative and empowering in our patient engagement approach. (Researcher, University of Regina)

We also learned that researchers who have been engaging patients for many years had developed processes to support PFA engagement, such as orientation, honoraria and expense reimbursement. This led to variation in practice, which meant that patients working on more than one team would be asked to follow different processes. This was confusing for PFAs. Therefore, SCPOR platform staff provided information and support to orient researchers from the academic organizations to the practices and processes used to support PFA engagement in health system improvement teams and committees. Researchers then had the choice to continue to work with the processes they had developed or have the Patient Engagement and Empowerment Platform provide these services for them in the context of projects supported by SCPOR. This flexible approach was necessary to avoid unnecessary burden for patients and researchers.

Going forward, SCPOR's goal is to continue to promote alignment in patient engagement processes across the health system and academic organizations to make the patient/family experience of participation in improvement or research as easy and satisfying as possible. Patients and families have clearly told us that it is burdensome to register with multiple organizations to signal their interest in contributing their expertise, to attend multiple different orientations with overlapping content and to have to learn varied administrative processes to process expense and honoraria claims. They have also expressed an interest in the development of a PFA peer support community that enables them to share experience with each other and encourage each other in their engagements with health system improvement and research.

Although the efficiencies and benefits for PFAs of coordinating patient engagement processes for research and quality improvement have been evident, there are challenges concerning differences in the roles that PFAs play in research contexts compared to quality improvement contexts. Anecdotal evidence indicates that some academic researchers may be

concerned that PFAs, whose advisory experience has been in quality improvement, may have become overly embedded in the assumptions and mindsets of the health system. Similarly, some healthcare providers or administrators have expressed concern that PFAs who have only had experience as advisors to research teams may not understand the constraints and complexities involved in making changes in healthcare. This helps us recognize that the roles and expectations of PFAs in research and quality improvement are not always identical, so it is important that they are well oriented to and supported in making their best contribution in those different contexts. The training and orientation for PFAs – as well as the researchers and health system personnel they will work with - must help bridge these two worlds. In Saskatchewan, we have purposefully brought support for these different kinds of patient engagement together in the design of our SCPOR Patient Engagement and Empowerment Platform.

A Vision for the Future

Improving services that help people get better and stay well is the reason we have invested in connecting the capabilities of research and quality improvement in Saskatchewan. Improvement requires both new thinking and knowledge as well as the ability to change structures and behaviours in ways that use better knowledge. The expertise and experience of patients, researchers, service providers and administrators are all needed, yet too often these groups are divided by professional, organizational or power barriers and are unable to effectively contribute their various capabilities toward shared learning and the common good. We envision a future where universities, health services organizations and providers, government, patients and other people work together in an ecosystem that supports innovation, learning and improvement. Within such an ecosystem, all the stakeholders would work together on issues where improvement would make meaningful differences to the lives of patients and people, changes would be planned and integrated with the realities of budgets and human resources and solutions would be developed and evaluated based on good science. Given the organizational and other divides that need to be overcome, organizations such as HQC in Saskatchewan, with expertise and relationships across those divides, can be helpful in establishing such an ecosystem. HQ

1. Support for People and Patient-Oriented Research and Trials (SUPPORT) Units are a key element in the CIHR Strategy for Patient-Oriented Research (SPOR). They provide specialized research resources, policy knowledge and patient perspectives to pursue patient-oriented research and help lead reforms in response to locally driven healthcare needs. More information on SPOR and SUPPORT Units is available at http://www.cihr-irsc.gc.ca/e/41204.html.

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