Position statement on continuous quality improvement (CQI)

Recommendations for excellence | March 2024

An approach carried out with user partners from beginning to end

CQI

SUMMARY

03. Abbreviations

04. Acknowledgments

05. Foreword

06. Message from the scientific director

07. Summary

11. Continuous quality improvement (CQI)

- 12. Context
- 16. Defining CQI
- 25. CQI in Quebec
- 28. CQI impacts

30. CQI recommendations

- 31. Implementing CQI initiatives
- 34. Perspectives and skills of stakeholders in CQI
- 37. Partership in CQI
- 41. Roles of decision-makers and government authorities in CQI
- 43. Acces and use of data and indicators in CQI

46. Conclusion

47. References and appendices

ABREVIATIONS

AFMG	Academic family medicine groups
AQS	Académie Qualité Santé
CFPC	College of family physicians of Canada
CIHI	Canadian institute for health information
CLACQ	Comité local d'amélioration continue de la qualité
CIUSSS de l'Estrie-CHUS	Centre intégré universitaire de santé et de services sociaux de l'Estrie-Centre hospitalier universitaire de Sherbrooke
CKD	Chronic kidney disease
CMQ	Collège des médecins du Québec
COMPAS	Collective for best practices and improvement in primary care services
COPD	Chronic obstructive pulmonary disease
CPCSSN	Canadian primary care sentinel surveillance network
CPIN	Canadien primary care information network
CQI	Continuous quality improvement
CQIA	Continuous quality improvement agents
CSBE	Commissaire à la santé et au bien-être
DQEPP	Direction de la qualité, de l'éthique, de la performance et du partenariat
EMR	Electronic medical records
FMG	Family medicine groups
FMOQ	Fédération des médecins omnipraticiens du Québec
HSO	Health standards organisation
INESSS	Institut national d'excellence en santé et services sociaux
ISO	International organization for standardisation
ISQ	Institut de la statistique du Québec
LHS	Learning health system
MND	Major neurocognitive disorders
MSSS	Ministère de la Santé et des Services Sociaux
OEQ	Ordre des ergothérapeutes du Québec
OIIQ	Ordre des infirmières et infirmiers du Québec
OPPQ	Ordre professionnel de la physiothérapie du Québec
ORAA	Outil réflexif sur l'accès adapté
PACQ	Programme d'amélioration continue de la qualité
PREMS	Patients-reported experience measures
PROMS	Patients-reported outcomes measures
RAMQ	Régie de l'assurance maladie du Québec
RCQIA	Regional continuous quality improvement agents
ROSEH	Rapport de votre offre de services en établissement et hors établissement
RUISSS	Réseaux universitaires intégrés en santé et services sociaux
SPOR	Strategy for patient-oriented research
WHO	World Health Organization

UNITÉ DE **SOUTIEN**
SSA | QUÉBEC
Ensemble pour un système de santé qui apprend

ACKNOWLEDGMENTS

We would like to extend our warmest thanks to the people involved in the development of this Position Statement for their outstanding contributions, as well as to the Ministère de la Santé et des Services sociaux for its financial support.

The Position Statement was drafted thanks to the contributions of some fifty individuals. These people worked mainly in the health and social services network, or were closely linked to it, and came from union, university, government and paragovernmental circles, among others. They were users or their representatives, health and social services professionals, members of the Unité de soutien SSA Québec, managers, decision-makers, organizations, orders and associations, and members of research teams. In these discussions, the people consulted expressed their vision of continuous quality improvement and how Quebec could stand out in this field.

Writing and editing (in alphabetical order)

Christian Chabot
Myra Drolet
Karine Gagnon
Johannie Laliberté-Gagné
Mylène Lévesque
Mireille Plouffe Malette
Marie-Dominique Poirier
Directed by Antoine Groulx

To cite this document

Groulx, A. (dir)., Chabot, C., Drolet, M., Gagnon, K., Laliberté-Gagné, J., Lévesque, M., Plouffe Malette, M. and Poirier, M-D. (2024). Position statement on continuous quality improvement (CQI). Recommendations towards exemplarity. Ministère de la Santé et des Services sociaux. https://ssaquebec.ca/nouvelles/enonce-de-position-sur-lamelioration-continue-de-la-qualite-acq/

ssaquebec.ca/en

FOREWORD

Many of the terms used in the Position Statement have been grouped together to ensure a common understanding and to avoid making the overall text too cumbersome to read.

This is the case for the word **users**, which is highlighted in this Statement and commonly used in the Quebec health and social services network, including patients, caregivers, families and citizens. The Unité de soutien SSA Québec, for its part, uses the term patients to inclusively encompass these terms.

Stakeholders include, but are not limited to, users or their representatives, members of research teams, professional staff in health and social service settings, managers, decision-makers, professional staff of the Unité de soutien SSA Québec, organizations, orders and associations, as well as professional staff outside Quebec with knowledge and skills in continuous quality improvement.

Finally, the recommendations issued on continuous quality improvement are grouped according to the terminology commonly found in government publications corresponding to the following levels :

Strategic: the important overarching decisions of a government; the long-term planning and vision of authorities according to pre-established objectives. The strategic level refers to the people who represent the Quebec government, for example, the ministries.

Tactical: the implementation of tasks to be accomplished in order to carry out strategic planning and process implementation. The tactical level includes research institutes, university faculties and health and social service organizations.

Operational: the execution of processes and tasks. The operational level involves the management of day-to-day activities, management teams and the field (health and social care).

MESSAGE FROM THE SCIENTIFIC DIRECTOR

The publication of this **Position Statement on Continuous Quality Improvement (CQI)** is a major step towards Quebec's learning health system. While the idea of continuous improvement may seem obvious, putting it into practice in a huge health and social services network is a challenge. The Unité de soutien au système de santé apprenant (SSA) Québec is contributing to this collective effort, as part of the mandate given to it by the Ministère de la Santé et des Services sociaux (MSSS), to structure and deploy CQI in the province's local healthcare and service environments.

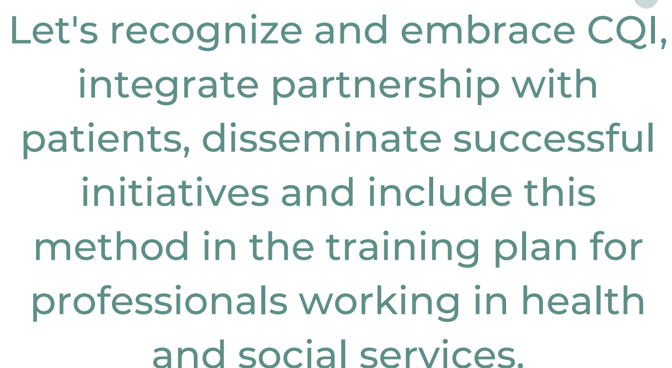
The quest for quality fosters effective, safe, adapted and integrated care and services. It is a key element in the public healthcare system performance. To put quality at the heart of our network, we must equip and support local communities to continually improve practices in the field.

The Position Statement on CQI highlights the key role of data in CQI, to motivate its meaning and maximize its value. Let us recognize and embrace CQI, integrate partnership with patients, disseminate successful initiatives and include this method in the training plan for professionals working in health and social services.

Our entire network has a vested interest in systematizing the support and the facilitation of the transformation of clinical and organizational practices, as we are already doing on the front line with our Continuous Quality Improvement (CQI) agents.

How do you eat an elephant? One bite at a time. I invite us all to read and, above all, use this document to move towards a constantly improving health and social care system, one cycle of improvement at a time!

Antoine Groulx
Family physician, professor-researcher and scientific director of the Unité de soutien SSA Québec

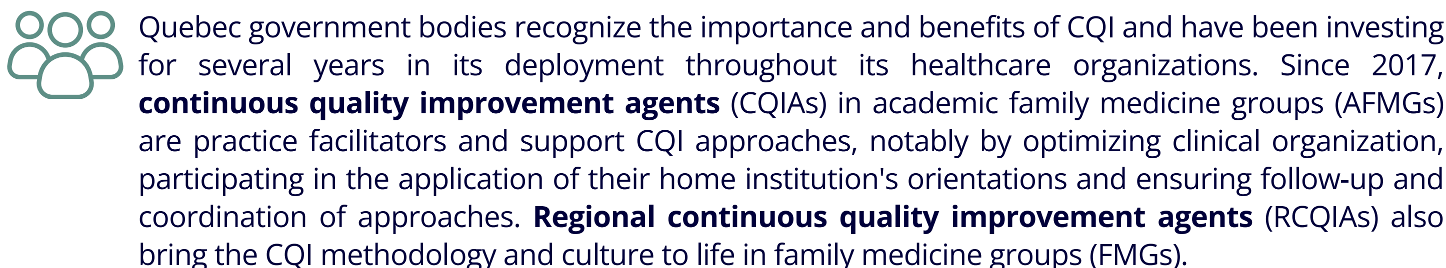


Let's recognize and embrace CQI, integrate partnership with patients, disseminate successful initiatives and include this method in the training plan for professionals working in health and social services.

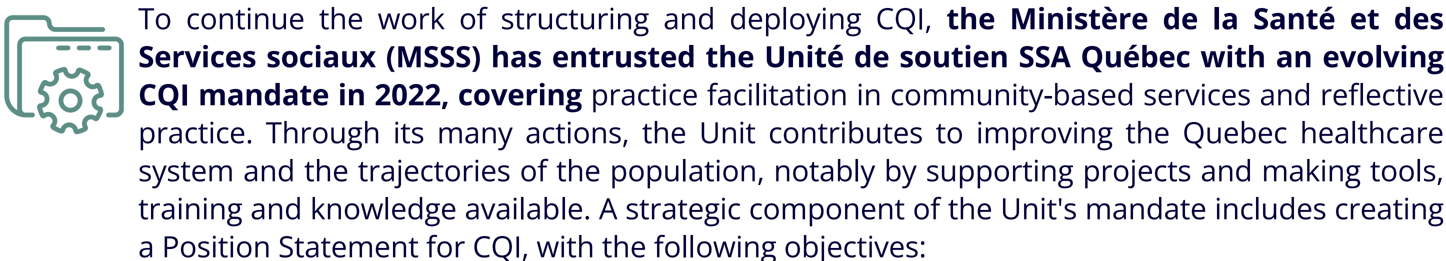
SUMMARY

Continuous quality improvement (CQI) is the ongoing, combined effort of all stakeholders in an organization to make changes that will lead to better health outcomes for users, better care and services, and improved ongoing development of professional skills (free translation of: Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale, 2017, p.7).

CQI initiatives help to establish a **culture of quality in health care and social services**, based on best practices and involving the population in its network, which, for all intents and purposes, belongs to them. Carrying out meaningful CQI initiatives in the workplace enhances team cohesion, collaboration and communication between the various stakeholders. Users' satisfaction with their care increases and their experience improves.

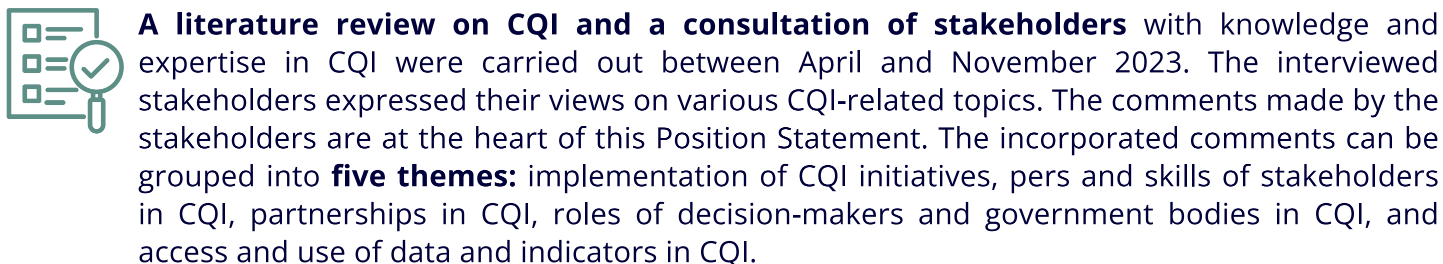


Quebec government bodies recognize the importance and benefits of CQI and have been investing for several years in its deployment throughout its healthcare organizations. Since 2017, **continuous quality improvement agents** (CQIAs) in academic family medicine groups (AFMGs) are practice facilitators and support CQI approaches, notably by optimizing clinical organization, participating in the application of their home institution's orientations and ensuring follow-up and coordination of approaches. **Regional continuous quality improvement agents** (RCQIAs) also bring the CQI methodology and culture to life in family medicine groups (FMGs).



To continue the work of structuring and deploying CQI, **the Ministère de la Santé et des Services sociaux (MSSS) has entrusted the Unité de soutien SSA Québec with an evolving CQI mandate in 2022, covering** practice facilitation in community-based services and reflective practice. Through its many actions, the Unit contributes to improving the Quebec healthcare system and the trajectories of the population, notably by supporting projects and making tools, training and knowledge available. A strategic component of the Unit's mandate includes creating a Position Statement for CQI, with the following objectives:

1. Developing a common understanding of CQI by presenting the state of knowledge, such as its definition, models and impacts;
2. Making recommendations so that Quebec can build on best practices and become the benchmark for CQI;
3. Identifying feedback tools to support CQI implementation.



A literature review on CQI and a consultation of stakeholders with knowledge and expertise in CQI were carried out between April and November 2023. The interviewed stakeholders expressed their views on various CQI-related topics. The comments made by the stakeholders are at the heart of this Position Statement. The incorporated comments can be grouped into **five themes:** implementation of CQI initiatives, pers and skills of stakeholders in CQI, partnerships in CQI, roles of decision-makers and government bodies in CQI, and access and use of data and indicators in CQI.

SUMMARY - 5 THEMES

01

The first theme highlighted the impression of several stakeholders that they do not have sufficient knowledge to define and apply CQI principles, or that they are unfamiliar with them. They sometimes find it difficult to translate CQI principles into action. Stakeholders also call for a reorganization of their work schedules to allow time for CQI. Turnover and human resource constraints in the healthcare sector make it difficult to sustain CQI initiatives over the long term. In order to (1) clarify the nature of CQI and the stakeholder roles, (2) optimize coordination and management of CQI initiatives, and (3) minimize human resource constraints and negative effects, the stakeholders have identified three priorities among all recommendations:

1. Develop and make available to all stakeholders a common reference guide for CQI.
2. Prioritize CQI approaches that are meaningful for healthcare environments, in particular through the use of an approach prioritization tool.
3. Ensure decision maker engagement in each CQI team to share expertise and encourage, support and disseminate approaches throughout the network.

02

The second theme revealed that, while some tools exist to optimize CQI in the workplace, such as CQI models and their methodology, or notions of CQI in training curricula, these are not standardized. Few resources are available or accessible to guide or support day-to-day CQI work, or any recognition of legitimate CQI expertise. This lack of legitimacy can act as a barrier to the recruitment and retention of professional CQI staff, and hinders the highlighting of accomplished work and innovations. CQI approaches can also lead to mistrust or resistance on the part of some professional staff in healthcare settings, who fear being monitored, judged or losing their professional credentials. To foster a harmonized vision and culture of CQI, and to rally and value the stakeholders involved, two priorities have been identified by them:

1. Promote a strong CQI culture by demonstrating its added value and changing misperceptions.
2. Integrate and promote CQI in university programs.

SUMMARY - 5 THEMES

03

The third theme highlights the contribution of work in partnership and the integration of users within CQI initiatives. In proposing its 2018 partnership framework, Quebec distinguished itself by centering users central role in the management of their care and social services. Users share their experiential knowledge, both in terms of their care and their experiences in the health and social services network. However, recruiting them for CQI initiatives remains a challenge, due to the significant time commitment involved, lack of explicit selection criteria and lack of remuneration for participation. Collaboration between stakeholders, organizations or teams, requiring a range of expertise, can also be complex, particularly in terms of management and coordination. The lack of time to devote to CQI, in addition to the usual healthcare workload reported by many stakeholders, is also a major issue influencing the level of collaboration and motivation. To engage users in the CQI process, value their role, and encourage collaboration, stakeholders identified three priorities from the set of recommendations. These priorities are :

1. Strengthen users involvement in CQI processes.
2. Develop a guide to optimize CQI partnerships.
3. Recognize and value the expertise of users who wish to become involved in CQI initiatives by allocating a dedicated budget for their remuneration.

04

The fourth theme raises the importance of the support and commitment of government bodies and their decision-makers in implementing and supporting CQI approaches, for example by deploying CQIAs in the field. Stakeholders have expressed a difficulty in aligning government priorities with those of organizations, which sometimes prevents the implementation of long-term changes in care and services. A difficulty or lack of dedicated funding for CQI initiatives reflects the complexity of prioritizing them by government bodies. In addition, government bodies have the opportunity to share CQI success stories in Quebec with their networks, but are not always aware of all the initiatives underway in the field, making dissemination difficult. It was also noted that there is a lack of a clear link in all communications and publications about CQI initiatives, and that no single organization has official dissemination responsibility. In order to recognize the importance of CQI, align community priorities with ministerial orientations, and optimize the dissemination of CQI initiatives and results, the priority identified by stakeholders is to :

Create a space for provincial sharing of CQI initiatives, and designate an entity responsible to optimize and animate this space.

SUMMARY - 5 THEMES

05

The fifth and final theme deals with the many challenges associated with access to and use of data and indicators in CQI. The stakeholders mentioned the absence of several useful sources of information for CQI. Data is not easily accessible and does not circulate in the network, in particular because of long lead times, unsuitable tools or legal protection provisions. Some data are not accessible because they are not measured by the health environments. Data quality is also an issue, as there is a lack of standardisation in data collection and evaluation, which prevents comparisons between health environments. Data and indicators are not linked in real time, and some of them are less representative of reality because they come from budget measures or billing. Developing common indicators for the health environments could be a way of providing an overview of changes in the quality of care in the network. However, these indicators must be relevant to the settings and adaptable to different realities, evidence-based, accurate and measurable using a unified, shared comparison tool. To promote access to data and contribute to a common measurement culture, stakeholders identified seven priorities:

1. Optimize the operationalization of legislation to facilitate access to data.
2. Promote greater cohesion in data access procedures.
3. Contribute to a standardized and shareable data extraction model in order to develop a feedback system accessible in real time, with indicators on organizational, clinical and academic practices.
4. Implement and share a data comparison tool that does not require any identification of facilities, and that allows performance to be unbundled and CQI efforts to be recognized.
5. Develop a portfolio of available data in real time to guide actions and align priorities.
6. Train and support super-users who facilitate data access, extraction and understanding.
7. Encourage and support operationalization of locally derived CQI indicators.

UNITÉ DE **SOUTIEN**
SSA | QUÉBEC
Ensemble pour un système de santé qui apprend

CQI

THE QUINTUPLE AIM

Intented to healthcare improvement, the quintuple aim (Figure 1) initially comprised three dimensions: improving the health of the population, improving the efficiency of the healthcare system, and improving the patient experience and outcomes (Nundy et al., 2022).

In 2004, the dimension of well-being of human resources in health and social services was added, in recognition of the challenges faced by professional staff in healthcare environments. These challenges could be, for example, burnout among professional staff, with significant effects on users satisfaction and health outcomes. A fifth dimension, equity in health and social services, is one of the key elements for improving users care (Itchhaporia, 2021). Taken together these five aims are commonly referred as the quintuple aims.

CONTEXT

Figure 1. The quintuple aim

THE LEARNING HEALTH SYSTEM

The learning health system (LHS) is one of the most promising approaches for transforming healthcare (Menear et al., 2019), and helps to achieve the quintuple aim.

LHS combines clinical care, research and knowledge transfer to improve patient care. Health data are used to generate new knowledge, which is rapidly integrated into clinical practice. This integration leads to the generation of new data, triggering a new learning cycle (Easterling et al., 2021). These ongoing cycles identify what strategies, interventions or approaches have worked, why, and for what types of users they might be effective, all based on evidence to improve healthcare practice (Easterling et al., 2021).

LHS advances clinical safety and health research, and is increasingly adopted in Quebec healthcare organizations to provide better quality healthcare to users. In fact, the quality and safety of patient care is the focus of several Quebec ministerial orientations.

CONTEXT

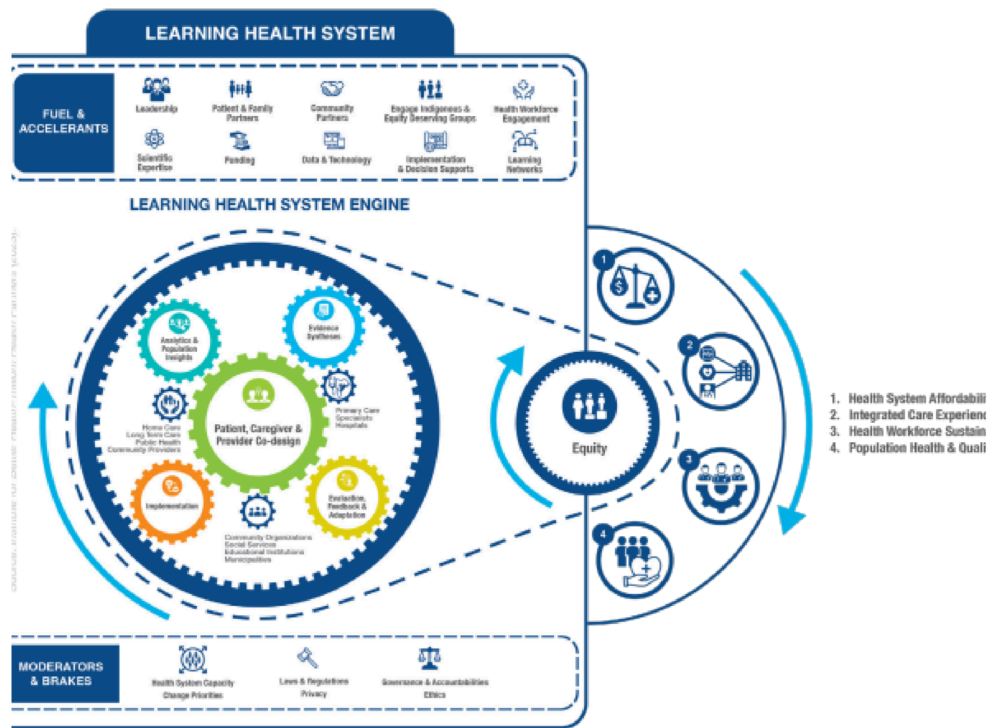


Figure 2. The learning health system (LHS)

MINISTERIAL AND ORGANIZATIONAL GUIDELINES ON QUALITY AND SAFETY OF CARE

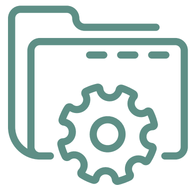
In Quebec, law 15 (Government of Quebec, 2023) passed in December 2023 created Santé Québec, an entity responsible for coordinating network activities and overseeing the delivery of health and social services by public and private organizations.

This new law proposes to facilitate access to safe quality health and social services by developing a provincial program on service quality in line with overall government expectations and orientations. The provincial program thus encourages public organizations and licensees to follow recognized practices with regard to the quality, safety, relevance and efficiency of the services offered in the network (Gouvernement du Québec, 2023). User satisfaction is also assessed, enabling services to be adapted. The measurement and monitoring of the performance, the efficiency and the quality of services, based on recognized indicators, are the basis for the certification of the quality of practices according to predefined standards.

The Ministère de la Santé et des Services sociaux (MSSS) management framework for academic family medicine groups (AFMG) includes the deployment of continuous quality improvement agents (CQIA) in settings to ensure the consolidation of primary care and service practices (Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale, 2017). Among other things, these agents identify opportunities for improvement with regard to care and services and act as practice facilitators in FMGs by improving one or more dimensions of the quality of care and services.

Accreditation Canada contributes to better health care by objectively assessing health and social service facilities and organizations against benchmarks of excellence. These benchmarks, created in collaboration with providers, users and decision-makers, and implemented by the Health Standards Organization (HSO) and the International Organization for Standardization (ISO), establish what works and what needs to be improved in facilities and organizations to enhance the quality of their care (Accreditation Canada, 2022). Benchmarks provide an opportunity for facilities and organizations to optimize their resources and increase the efficiency, quality and safety of their healthcare by demonstrating compliance with standards for the delivery of safe, high-quality care (Accreditation Canada, 2022).

The College of family physicians of Canada (CFPC) evaluates the participation of its physicians in learning activities that enable them to improve their knowledge and skills within their practice (College of family physicians of Canada, 2019). A guide to better integrating continuous quality improvement (CQI) has also been produced and is used in family medicine residency programs. These practice improvement approaches integrated into the training of new physicians enable a systemic approach to the quality and safety of patient care, and foster a community of practice (College of family physicians of Canada, 2021).



PRESENTATION OF THE UNIT'S MANDATE

The Unité de soutien SSA Québec uses the quintuple aim and patient-oriented partnership to support the implementation of a LHS in the territories of Quebec's four University Health and Social Services Networks (RUISSSs).

The Unité contributes to the continuous improvement of the Quebec healthcare system and the care trajectories of the population. **One of the Unit's initiatives is to introduce CQI practices that contribute to the implementation of a network-wide LHS**. In line with ministerial orientations and the AFMG management framework on the quality and improvement of care offered to users, the Unit works with the research, health and social services communities as a catalyst for feedback and CQI tools. **In 2022, the MSSS has entrusted the Unit with the mandate of continuing the work of structuring and deploying CQI. This work has contributed to the emergence of an LHS and improve practices in the health and social services network.** This mandate embodies a means of developing a more enlightened and shared vision of what CQI is, and of developing the skills of those who support knowledge and innovation to improve the network. In light of these objectives, the Unit proposes the CQI Position Statement.

CONTEXT

METHODOLOGY

The objectives of the Position Statement are to :

- Develop a common understanding of CQI by presenting the state of knowledge.
- Make recommendations so that Quebec can build on best practices and take the lead in CQI.
- Identify available feedback tools that support the CQI implementation.

In order to document the state of knowledge, **a literature review was completed based on several keywords**, in various databases and using inclusion and exclusion criteria (Appendix 1). A structured review of grey literature, such as government, association or organization websites, was also carried out.

Individual and group consultations provided feedback from various stakeholders about CQI and its feedback tools, in order to illustrate a comprehensive picture of the current situation. Users (including an Indigenous user) or their representatives, members of research teams or health and social services teams, managers, decision-makers, representatives of organizations and associations, people from the SSA Québec Support Unit and from outside Québec provided feedback on a number of CQI-related themes. These themes covered, for example, the definition of CQI, its models and impacts; the dissemination of CQI approaches and their results; and indicators (Appendix 2).

Finally, before final submission to the Ministry, structured feedback on the Position Statement recommandations and priorities for action to be implemented was sollicited from a review committee made up representatives of these groups.

DEFINITION AND OBJECTIVE OF CQI

The World Health Organization (World Health Organization, 2019) has defined six dimensions of quality of care:

- **Safe:** users are not harmed by the care they receive.
- **Effective:** care is based on scientific knowledge and is provided to those who could benefit from it.
- **Users-centred:** care respects and responds to users' preferences, needs and values.
- **Timely:** waiting times and delays that are detrimental to users and providers are reduced wherever possible.
- **Efficient:** available resources are optimized and waste (equipment, supplies, ideas, energy) is avoided.
- **Equitable:** the care provided does not vary due to personal characteristics such as gender, ethnicity or geographical location.

CQI is defined as the continuous and combined effort of all stakeholders in an organization to make changes that will lead to better health outcomes for users, better care and services, and better ongoing development of professional skills (Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale, 2017, p.7).

DEFINING CQI

To be successful, CQI requires a culture that encourages all stakeholders involved to adopt a systemic, reflective approach to identifying opportunities for improvement. The CQI method seeks to identify and understand problems, tests potential solutions and measures impact in the workplace to optimize care and services for users and families. CQI helps to adjust to changing needs, uses the right tools and achieves results tailored to realities (The Health Foundation, 2021). **The primary intent of CQI is to bring measurable improvement to an aspect of healthcare delivery, based on evidence and knowledge, requiring several cycles of change to find the best solution and refine it.** CQI uses a rigorous methodology, engages and consults with a multitude of stakeholders, and utilizes data from settings (Backhouse & Ogunlayi, 2020).

There are six stages in the CQI cycle (Institute for Healthcare Improvement, 2023):

- Identifying the problem, the target population and the people involved (CQI teams).
- Defining the objective to be achieved or accomplished.
- Developing a change plan including team composition, role allocation and meeting planning, real-time data collection and information sharing with employees.
- Selecting indicators adapted to the CQI approach and indicating how they are to be measured.
- Collecting and interpreting data, and documenting successes and challenges.
- Implementing change on a larger scale and disseminating results.

In order to successfully implement CQI approaches, several strategies are recommended. **The first strategy** is to state the objectives of CQI processes according to the SMART framework, i.e. they must be :
Specific: specify what is to be achieved in a clear, easy-to-understand manner.
Measurable: indicate the value to be achieved or the measure to be used.
Achievable: consider available resources and stakeholder motivation.
Realistic: be meaningful and relevant to stakeholders.
Time-bound: set a clear deadline for achieving objectives.

The **second strategy** lies in aligning CQI approaches with the organization's established priorities, enabling, among other things, greater coherence and buy-in from all stakeholders, as well as mobilization to carry them out and see them through to completion (Jones et al., 2019).

DEFINING CQI

The third strategy is to get all stakeholders on board, persuade them that there is a problem to be solved, and ensure that their commitment is maintained once the change has been implemented, despite the many other demands on their time (Jones et al., 2019). In particular, reflective practice embodies one of the means that promote professional staff engagement in practice change (Lafortune & With the collaboration of C. Lepage, 2008). Reflective practice is defined as “a distancing and critical look at one's own functioning, as well as an individual and collective analysis of actions and decisions taken in the course of action” (Lafortune & with the collaboration of C. Lepage, 2008, p.16). When reflective practice is supported by data, it enables professional staff to recognize the gap that may exist between best practice and current practice. The involvement of a decision-maker remains essential in the composition of CQI teams.

CQI initiatives are carried out by interdisciplinary teams combining a variety of expertise and skills in the field. While the composition of these teams may vary according to identified needs and priorities, they are generally well formed:

- A user;
- A practice facilitator;
- A clinical or administrative leader;
- A manager.

DEFINING CQI

DIFFERENTIATING CQI FROM RESEARCH

CQI and research are sometimes confused, but there are important differences (Table 1). CQI helps teams and environments to rapidly implement changes related to an identified problem (Russ et al., 2023). Research, on the other hand, seeks to validate or inform a hypothesis and draw conclusions, thus contributing to new generalizable knowledge and an approach that can be operationalized over the long term (Berman et al., 2018). In general, CQI is conducted to fill an operational gap identified by the field, while research is conducted to fill a knowledge gap (Berman et al., 2018).

Table 1

	CQI	**Research**
Objective	Solve a problem or improve environmental results	Create new generalizable knowledge
Population	People involved in the change	Predetermined fixed sample
Bias	Uncontrolled	Controlled
Data collection	Continuous in cycles	Pre-post intervention
Schedule	Quick	Long (years)
Ethics approval	Not required	Required
Benefits for participants	Almost immediate	Long-term and sometimes indirect
Generalization of results	Low to moderate	Moderate to high
Publication	Possible but rare	Frequent

DEFINING CQI

CQI MODELS

While there are a number of CQI models that can be used together, three are most commonly used in care settings.

The Six Sigma model is a method that aims to reduce process variability to improve overall quality (Antony et al., 2018). Among other things, this model is used in healthcare to improve the quality of services and prevent or reduce errors or users waiting times (Thakur et al., 2023). Statistical data analysis, design of experiments and hypothesis testing are methods used in this model.

The Lean model aims to identify and eliminate all waste and loss within an organization, i.e. any process or procedure that adds no value (Miller, 2015). This model mobilizes staff at all levels to implement innovative solutions leading to the reduction of waste and the improvement of the patient experience (Thakur et al., 2023). It puts users at the center of all activities and promotes the fluidity of work (Clark et al., 2013). The Lean model uses tools such as workplace organization and visual controls.

The Model for Improvement was developed by Associates in Process Improvement and subsequently adopted by the Institute for Healthcare Improvement (IHI) (Scoville & Little, 2014). The model for improvement focuses on making small, incremental improvements over time using PDSA cycles: Plan-Do-Study-Act based on a clearly defined goal (NHS England and NHS Improvement, 2022). PDSA cycles start small, to minimize risk, and are scaled up once the change has had the desired impact. The model for improvement asks three questions (NHS England and NHS Improvement, 2022):

- What are we trying to achieve (objective)?
- How will we know when a change is an improvement? (indicators)
- What changes can we make to improve the situation (ideas for change)?

This model is appropriate for quality-of-care problems whose causes have been previously identified, and aims to improve users experience and population health (Scoville & Little, 2014).

According to the stakeholders most frequently taught, the Model for Improvement is the one most taught to the resident medical student community in Quebec, due to its simplicity to be understood using three questions and the PDSA cycles. Although the Lean model is well established in healthcare organizations, the Improvement model is increasingly being taught, as it is easy to contextualize and explain, whether to members of care teams or to users. Whatever CQI model is chosen, the fact remains that it needs to be deployed in the right way, and people need to be trained to use the right set of tools for the right situation.

DEFINING CQI

CQI ON THE INTERNATIONAL SCENE

Many countries have invested to implement and support CQI in health and social care.

In France, the Commission de l'évaluation et de l'amélioration de la qualité des établissements et services sociaux et médico-sociaux establishes and disseminates the reference framework, procedures and recommendations for good practice in terms of the quality of services delivered in healthcare environments (Haute Autorité de Santé, 2023). Every four years, the Haute Autorité de Santé requires an assessment of the quality of services provided in healthcare environments and the safety of care offered to users of public healthcare organizations. To obtain Quality of Care certification, it is necessary, among other things, to consider the point of view of users on their experience, to evaluate the results in terms of health and appreciation of the experience in the establishment, to enable care teams to organize their practices using the methods they deem most appropriate, and to commit to CQI and care safety approaches by taking concrete action (Haute Autorité de Santé, 2023).

Belgium supports quality and users safety in its hospitals through a program based on three pillars: the vision of recovery, users and family participation, and continuity of care. In order to evaluate the growing number of CQI initiatives, Belgium has set up a procedure that includes voluntary accreditation of hospitals implementing initiatives, publication of quality indicators and mandatory government inspection of facilities (Government of Belgium, 2022).

DEFINING CQI

In Australia, the Australian Commission on Safety and Quality in Healthcare (ACSQHC) develops and reviews quality standards and guidelines in consultation with industry, organizations and consumers. It also evaluates clinical care through the collection, analysis and dissemination of clinical indicators, and advises on improving healthcare quality (Australian commission on safety and quality in healthcare, 2019).

In England, the National Quality Board (NQB) is supporting its CQI development plan through the transformation of its system along several themes, including digital transformation, research and innovation, the health and social care workforce, users safety and improving population health and health inequalities (Greater Manchester combined authority, 2019).

The **U.S.** National Strategy for Quality Improvement in Healthcare provides a framework for quality improvement efforts, shares knowledge and measures the results of implemented interventions according to three objectives. These objectives are to provide better care by making it more users-centered, to improve population health by supporting evidence-based interventions, and to reduce the cost of healthcare for individuals (US Department of Health and Human Services, 2012). Among the many approaches in place to promote CQI, the Institute for Healthcare Improvement (IHI) is proactive in improving care and provides methods, tools and best practices, for example by proposing the Model for Improvement (Institute for Healthcare Improvement, 2023).

With the development of its revised health care quality strategy for 2022 (Federal Ministry for Social Affairs, Health, Care and Consumer Protection, 2022), **Austria** is contributing to improving the effectiveness and efficiency of the health care system and guaranteeing quality of care for its population. The strategy is based on a number of values and priorities, including users safety, quality of structure, processes and results, risk management, equal access to care, evidence-based decision-making and transparency of information (Federal Ministry for Social Affairs, Health, Care and Consumer Protection, 2022).

DEFINING CQI

CQI IN CANADA

Health Excellence Canada works with a variety of partners to spread innovation, build capacity and support policy change so that Canadians can benefit from safe, high-quality healthcare.

Through its Quality and Consumer Safety Framework for Healthcare, Health Excellence Canada transforms innovations into sustainable improvements in all areas of healthcare. The framework aims to improve key areas of quality and safety, reduce unwarranted variations in care, and strengthen high-quality healthcare services that improve the users experience (Canadian patient safety institute, 2020). Health Excellence Canada offers a variety of training programs to improve the quality and safety of healthcare services. This program is designed for healthcare executives who wish to develop their leadership skills in order to transform the organizational culture with regard to patient safety. In particular, the program enables them to learn how to use evidence to support solutions to systemic problems, and to deepen their knowledge of co-creating approaches with users (Health Excellence Canada, 2024).

It was in **Saskatchewan** that over 1,500 CQI initiatives were first implemented in the Canadian healthcare system. The Saskatchewan Health Quality Council (HQC) plays a leading role in setting up quality improvement departments within regional health authorities, and in building knowledge and capacity in quality improvement methodology. In particular, the council is responsible for monitoring and evaluating quality in healthcare, and helps various partners to strengthen their CQI skills (Quality patient safety and accreditation project team, 2019).

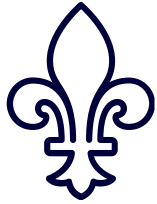
Manitoba's Quality and Learning Framework is aligned with the Quadruple Aim (now the Quintuple Aim) and focuses on quality improvement to make Manitoba's healthcare system more successful (Quality patient safety and accreditation project team, 2019). The framework guides health planning, measurement and evaluation through two objectives: positive experiences for users and health care teams, and sustainable development of the health care system.

DEFINING CQI

In Alberta, the Health Services Continuing Care Quality Management Framework describes the structure, functions and responsibilities for improving and operationally implementing the quality of care and services (Alberta Health Services, 2014). The framework highlights six principles: putting individuals and their families at the center of their healthcare; committing to quality and safety; fostering a culture of trust and respect; focusing on wellness and public health; enabling decision-making based on the best available evidence; and ensuring equitable access to timely and appropriate care. Achieving these principles requires bringing appropriate, person-centered and continuously improving care to the community, developing partnerships within an evidence-based learning culture and encouraging teamwork (Alberta Health Services, 2014).

The purpose of the **British Columbia** Patient Safety & Quality Council (Health Quality BC) is to provide advice and recommendations to the Minister of Health Services on issues related to patient safety and quality of care. By taking action, the council strengthens users safety, promotes transparency in care and contributes to the identification of best practices (BC Patient Safety & Quality Council, 2017). Comprehensive CQI training is also available for physicians and their team members (Specialist Services Committee, 2024). In addition, a repository tool listing CQI approaches is available, facilitating information sharing and aligning efforts and resources (Specialist Services Committee & Shared Care Committee, 2024).

To identify priorities and advance practice improvement in primary care, the **Ontario** College of Family Physicians, in collaboration with Health Ontario, conducted a project in 2015 (Ontario College of Family Physicians, 2015). The objectives of this project were to identify the essential elements to support the progression of continuous practice improvement in primary care, engage in dialogue with providers and obtain feedback from stakeholders on the best approach to disseminating quality improvement practices across the province. As a result of this project, the Ontario College of Family Physicians made a few recommendations, including strengthening leadership and quality improvement support and education, and facilitating data access and use (Ontario College of Family Physicians, 2015). Ontario also makes various tools available to its professional staff in healthcare settings, including a companion guide to implementing a quality improvement plan within an organization or agency (Health Quality Ontario, 2017; Ontario Health, 2022).



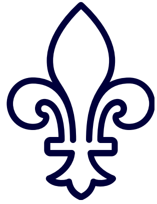
QUEBEC'S MINISTERIAL ORIENTATIONS IN CQI

CQI IN QUEBEC

Since 2017, the deployment of CQIAs in AFMGs has helped support the quality of clinical care and services. These CQIAs act as practice facilitators by supporting change and optimizing clerical and organisational tasks, for example, by participating in the application of their home institution's orientations and ensuring the follow-up and coordination of CQI approaches in the settings (Ministère de la Santé et des Services Sociaux, 2020).

The arrival of regional continuous quality improvement agents (RCQIAs) is also helping to deploy the CQI methodology and culture within front-line organizations and facilities. They collaborate with managers and teams in the field and develop networks with CQIAs. RCQIAs and CQIAs jointly develop CQI approaches and encourage their dissemination to emulate improvement successes.

To promote the practice of CQIAs and RCQIAs, offer unified training for all CQI stakeholders, support large-scale CQI initiatives and contribute to the advancement and transfer of CQI knowledge, **the Académie Qualité Santé (AQS), a new player, is currently developing a comprehensive training platform.** Thanks to this new training offering, professional healthcare staff, learners, managers, members of research teams and users will be able to develop their CQI knowledge and skills, enabling them to become agents of change in their environment. Still under development, the AQS offer is divided into three parts. The first is a series of video clips on CQI and the key elements of its approach, as well as clips on the role of user partners in CQI. The second component offers online training courses for healthcare professionals in training or practice, as well as managers, combined with face-to-face workshops for those wishing to initiate CQI in their environment. The third component offers a one-year hybrid training program that develops the knowledge and key concepts of practice facilitation. Individual mentoring is also offered.



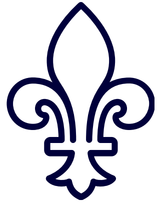
TOOLS TO SUPPORT CQI IN QUEBEC

CQI IN QUEBEC

Currently, tools to support CQI stakeholders are limited. Electronic medical records (EMRs) are an important source of data, containing, among other things, socio-demographic information, medical histories, pharmaceutical profiles and diagnoses of users of the health and social services network.

Extracting this data, in the form of reports or lists of users, is important in CQI, but the format, type of data available, associated costs and procedure for accessing it can vary from one supplier to another. Nor were EMRs designed to support CQI, which complicates the sharing and operationalization of data in local approaches. Since indicators are linked to daily activities and can be modified, contributing to the power of action and behavior change of professional staff in healthcare settings, **it would be beneficial to better structure and harmonize EMRs** (Glenngård & Anell, 2021). The data could then be used by professional staff in healthcare settings, such as CQIAs, as leverage to improve care and healthcare practices, for example by developing dashboards for their setting.

Professional staff in healthcare settings may also have access to audit and feedback tools and reports on their clinical performance, which they can use as a quality improvement strategy for their practice (Brown et al., 2019). Audit and feedback tools and reports should be accessible in real time, offer a comparator, be role-specific and incorporate an action plan (Brown et al., 2019; Glenngård & Anell, 2021; Tsang et al., 2022; Van Den Bulck et al., 2020). **The effectiveness of audit and feedback tools on improving care and patient experience outcomes is influenced, among other things, by socio-environmental factors, including context and available resources**. According to the stakeholders consulted and the literature, feedback tools that are not made for the people using them, without guidance, leadership or incentives, are inadequate (Donnelly et al., 2023). Under these conditions, these tools do not enable reflective practice and leave the impression of a performance evaluation, either of facilities or of professional staff.

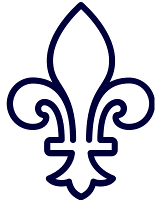


CQI IN QUEBEC

Reflective practice activities include the presentation of indicators in relation to evidence, group discussions to make sense of the data, and concrete CQI approaches. One of the met researchers mentioned that in a reflective practice activity, the presence of reliable data and indicators is crucial: "Indicators help us to take a critical look at what [professionals] are doing in the light of best practices. And we know that indicators often create cognitive dissonance, which leads them to learn". **Two reflective practice initiatives are underway in Quebec**: the Collective for best practices and improvement in primary care services (CoMPAS+), focuses on diabetes, chronic obstructive pulmonary disease (COPD) and polymedication. The second approach, l'outil réflexif sur l'accès adapté (ORAA), deals with adapted access to primary care.

Among the various tools supporting CQI, some themes are not yet covered in Quebec. This is the case for laboratory test use and monitoring, competency-based performance, acute disease management, disease prevention and screening, nursing, safety, mental health, healthy lifestyle promotion, maternal health and clinicians' daily workflow (Hutchison et al., 2020; Tsang et al., 2022). One study found that "all feedback interventions targeting medication safety, preventive medicine, cholesterol management and depression were effective" (Van Den Bulck et al., 2020, p.711). The various tools and indicators are not listed by quality theme, and the latest review on the use of indicators dates from 2013 (Institut national d'excellence en santé et en services sociaux, 2013). **This lack of knowledge and overview of available measures and tools hinders the selection of clear measures aligned with priority issues, as well as the development of relevant indicators.** This overview of the tools that support CQI demonstrates the importance of developing a long-term vision, consensus and shared operationalization of indicators, as much as the creation of real-time dashboards on a set of quality indicators for the front line.

There is likely a gap to be bridged with the ideal vision of a feedback system with data accessible in real time, with clinical and organizational practices chosen by users and professional staff in healthcare settings that would foster the emergence of an LHS.



CQI IMPACTS

The impacts of CQI on the general population, care teams, users, caregivers and families are reported both in the literature and by the stakeholders solicited for the Position Statement.

CQI is reported to contribute to a culture of quality (Rogers et al., 2019) and reflexivity in healthcare, and to improve services and the safety of care and follow-up (Abrampah et al., 2018). CQI enables the implementation of a new, more efficient practice, and engages the population in its healthcare network (Tran et al., 2021). **Undertaking CQI initiatives that are meaningful to professional staff in healthcare settings rallies recalcitrant or hesitant individuals to get involved, and leads to a ripple effect in the environment** (Ratner & Pignone, 2019). The increased sense of belonging and pride in having contributed to CQI initiatives and to the organization's success, as well as improved team cohesion, collaboration and communication between staff members (Smith et al., 2019) all serve to enhance the value of CQI initiatives in healthcare settings. Similarly, achievements raise awareness among all stakeholders involved of the negative impacts caused by negligence and sloppiness, both at team level and for users, enabling an adjustment in practices (Smith et al., 2019).

CQI approaches also have impacts for users, including increased satisfaction with access to care and services (Baker et al., 2016), improved quality of care (Rogers et al., 2019) and enhanced patient experience. CQI fosters fluid communications between stakeholders and users (Armstrong et al., 2013) and offers them the opportunity to engage with their healthcare network (Baker et al., 2016). Finally, users benefit from care and services that are continuously improved in line with best practices.

CHRONOLOGY OF REPORTS, TOOLS AND RESOURCES SUPPORTING CQI

CQI IN QUEBEC | *Timeline*

UNITÉ DE SOUTIEN SSA | QUÉBEC

Ensemble pour un système de santé qui apprend

RECOMMENDATIONS

IMPLEMENTATING CQI INITIATIVES

There are many challenges to implementing CQI. Some people working in healthcare feel they don't fully understand what CQI is in practice, or have a lack of familiarity with it (Rubenstein et al., 2014).

Few guides are available to guide good practice in CQI; nor do the roles that the various stakeholders involved in CQI occupy, including the CQIAs, seem to be well defined. **These practice facilitators improve practices by sharing tools, resources and expertise, but their work needs to be better defined and utilized to embed a CQI philosophy within institutions** (Laberge et al., 2022; Liddy et al., 2013). It can sometimes be difficult to separate CQI approaches from research projects, even more so when some include a combination of both. Similarly, the different directions that approaches can take are not well known, and continuous improvement through training is put forward more by environments than the realization of CQI approaches, which is observed in physiotherapy, among others.

A number of stakeholders report that they are unable to adequately transfer knowledge to the field (McHugh et al., 2018) and to carry out post-implementation follow-up. The absence of a manager in CQI teams, or the management of approaches by people with no prior knowledge or skills, can mean that CQI approaches quickly run out of steam and changes are poorly or only half-implemented in settings (Shea et al., 2018).

It is ideal for CQI teams to have an experienced person in charge who possesses skills and competencies and is accountable for the process and the roles and responsibilities of members (Hespe et al., 2018). This experienced person mobilizes and engages stakeholders in CQI approaches and is in charge of data collection and feedback from users, as mentioned by this manager :

> It is someone who can organize meetings, collect data, take people to workshops and do the necessary follow-up. If we do not have that person, the projects fall apart.

CQI stakeholders also claim time in their schedules specifically dedicated to CQI approaches (Kerrissey et al., 2017). To this end, a representative of a Canadian organization explains:

> You have to set aside time in the day for thoughtful practice, and you have to make the most of it. People's schedules should not be so full that they can not devote themselves to it. They need time to reflect, and that is the problem we often encounter: we are so focused on the crisis of the day that we do not leave people time to reflect, to work as a team, to improve quality.

With the reality of daily crises in care environments, priorities are not to do CQI. Among other things, there is a tension between clinical time and time for CQI; **time must therefore be set aside to reflect on and document the problems encountered, as well as to find solutions to remedy them**, all done in collaboration (Arvidsson et al., 2021), confirmed by a person from the Unité de soutien SSA Québec :

> It is a challenge to free up people, give them time to review the literature, document a project properly and think through solutions.

Another challenge in carrying out CQI initiatives lies in turnover or constraints related to human resources, as commonly observed in the healthcare environment (Bailie et al., 2016). It has been observed that experienced people leave their positions, leading to issues of maintaining CQI approaches over the long term, resulting in local approaches being delayed or put on pause, or even stopped prematurely. Lacking stability, teams frequently have to recruit and retrain staff, and collaboration between teams is complex, all of which makes day-to-day life difficult to manage (Nguyen et al., 2019).

We need to clarify the nature of CQI and the roles of stakeholders, optimize the coordination and management of CQI processes, and minimize the negative effects of turnover, human resource constraints and time constraints.

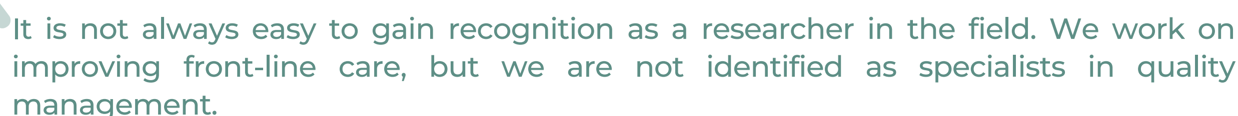
Implementation of CQI initiatives IT IS RECOMMENDED TO	
At strategic level	Encourage the allocation of continuing education credits to enable professional staff in healthcare settings to devote time to CQI.
On the tactical level	★ Develop and make available to all stakeholders a common reference guide for CQI in which are presented: A clear definition and common understanding of CQI. The steps involved in successfully implementing CQI. The roles of all stakeholders involved in CQI. Tasks assigned to CQI team members. • Create mechanisms to encourage the scaling-up of local approaches and the development of change packages. • Encourage and support the development of CQI facilitation teams. ★ Guarantee the presence of a decision-maker on each CQI team to share expertise and encourage, support and disseminate approaches throughout the network. • Facilitate access to and application of academic, clinical and organizational best practices.
At operational level	• Designate a person in charge with knowledge and skills for each CQI approach, who assigns tasks to team members, supports the operationalization of steps and ensures that objectives are met. ★ Prioritize CQI approaches that are meaningful for healthcare environments, notably through the use of an approach prioritization tool. • Implement, complete and measure the impact of CQI initiatives, in particular using appropriate timelines and indicators. • Solicit the commitment of stakeholders to free up the time and resources required to set up and carry out CQI initiatives.

★ Priority recommendations according to the CQI position statement review committee

PERSPECTIVES AND SKILLS OF STAKEHOLDERS IN CQI

The openness and involvement of CQI's stakeholders act as facilitators for carrying out approaches (Marshall et al., 2014). These approaches are conducive to positive change when stakeholders agree on common objectives and move in the same direction (Kerrissey et al., 2017). Involving all team members from the outset of the thinking process leads to interdisciplinary working, sharing common resources to achieve collaborative goals, and avoiding working in silos (Shea et al., 2018).

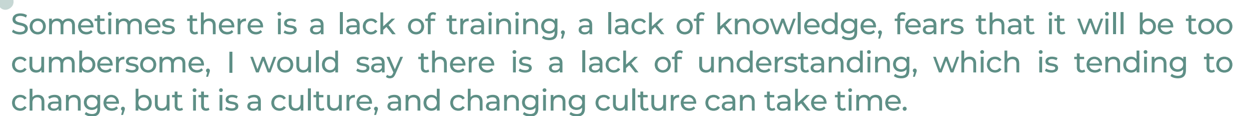
However, we note that **even though many stakeholders are involved in CQI, few resources exist or are accessible to guide and support them in their work**, and this does not allow them to develop their skills, which can lead to the belief that training is useless, unnecessary, too cumbersome or difficult to carry out. **There is also no professional designation related to CQI**, which can be an obstacle to recruiting and retaining professionals. Training for stakeholders could standardize knowledge and skills in CQI, and optimize and perpetuate its approaches. **Recognized training would also provide an assessment of the skills and expertise of all stakeholders involved in CQI**. Quebec's educational institutions could offer training courses or pathways that capitalize on CQI to improve community care services. In fact, it has been noted that for some Quebec organizations, orders and training fields, CQI concepts are integrated into the training curriculum, but are not standardized. This is notably the case for the Fédération des médecins omnipraticiens du Québec (FMOQ), the Ordre des infirmières et infirmiers du Québec (OIIQ), the Ordre des ergothérapeutes du Québec (OEQ) and the Ordre professionnel de la physiothérapie du Québec (OPPQ). Furthermore, the lack of recognition and legitimacy of the ACQ's field of expertise in Quebec does not allow us to highlight the work accomplished and the innovations implemented, as mentioned by one researcher:



> « It is not always easy to gain recognition as a researcher in the field. We work on improving front-line care, but we are not identified as specialists in quality management.

CQI also needs to be made more attractive and valued by various professional bodies. The lack of recognition of CQI in the careers of doctors, among others, means that their activities are not promoted, and that quality improvement, which is essential in the Quebec healthcare system, is not attractive. This lack of recognition is also reflected in the low enrolment of students in courses designed to develop CQI-related knowledge and skills.

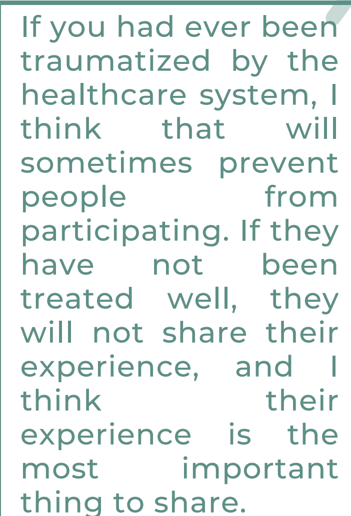
CQI stakeholders may also develop a distrust of the changes that accompany the implementation of CQI approaches, perceiving them as a way of monitoring or judging their work. Stakeholders question themselves and fear losing some of what they have acquired, or say they are already too busy to get involved in a CQI approach (Ye et al., 2020). This resistance to change can also be accompanied by a lack of interest in getting involved in such CQI approaches, and a refusal to question themselves or feel vulnerable (Ye et al., 2020). A representative of care settings explains:



> Sometimes there is a lack of training, a lack of knowledge, fears that it will be too cumbersome, I would say there is a lack of understanding, which is tending to change, but it is a culture, and changing culture can take time.

Managing change in a human way in CQI approaches, which sometimes pushes staff to question their ways of doing things, makes it possible to hear all stakeholders and find ways to alleviate fears and meet their needs (Miller et al., 2018). Change must be brought about in a way that is non-threatening to stakeholders, non-judgmental and positive: communication is key. The small-step approach applied in CQI approaches offers stakeholders the opportunity to open up to change and be its facilitators (Ratner & Pignone, 2019).

It has also been noted that certain changes are leading to a shift in the way health care and services are viewed. **According to one Indigenous user, health care and services must be considered holistically, including mental, physical, environmental and spiritual aspects**, with greater value placed on the individual and more attention paid to him or her within the health care system. The pain and trauma previously experienced by many cultural communities, including the First Peoples (Breault et al., 2021), with regard to their health care, means that these communities remain traumatized. People from these communities sometimes find it difficult to establish a relationship of trust with professional staff (Breault et al., 2021), as expressed by an Indigenous user:



> If you had ever been traumatized by the healthcare system, I think that will sometimes prevent people from participating. If they have not been treated well, they will not share their experience, and I think their experience is the most important thing to share.

These traumatic experiences for a diversity of users and caregivers of all origins have built walls, sometimes preventing discussion on both sides. To avoid such barriers, it is proposed to develop cultural safety, sensitivity, understanding and training for all cultural communities before attempting to implement changes to their health and social care and services (Ministère de la Santé et des Services Sociaux, 2021). Approaching change from a vision as allies of all these communities, rather than as a solution to their past suffering, would build bridges and strengthen mutual respect and communication.

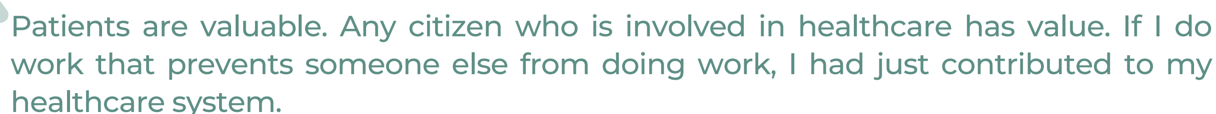
We need to foster a harmonized vision and culture for the CQI, and rally and value the stakeholders involved.

<table>
<tr><th colspan="2">PERSPECTIVES AND SKILLS OF STAKEHOLDERS IN CQI
IT IS RECOMMENDED TO</th></tr>
<tr><td>At strategic level</td><td>★ Promote a strong CQI culture by demonstrating its added value and changing misperceptions.
★ Integrate and promote CQI in university programs.</td></tr>
<tr><td>On the tactical level</td><td>• Offer CQI training to all stakeholders.
◦ Integrate CQI concepts into university training programs.
◦ Strengthen stakeholders' skills in CQI at all levels and facilitate access to training, in particular with the Académie Qualité Santé (AQS).
◦ Offer opportunities to carry out CQI outside the university environment.
◦ Consolidate stakeholders' academic learning by involving them in CQI processes from the outset of their practice.
◦ Offer continuing education opportunities in CQI.
◦ Reduce barriers, including communicative ones, with cultural communities by sensitizing stakeholders to the importance of cultural inclusion and safety in CQI.
• Recognize and value the work and expertise of stakeholders in CQI.
◦ Develop competency profiles that value the diversity of professional experience of CQIA and RCQIAs.
◦ Develop and implement a mechanism enabling people holding positions in CQI to preserve their acquired skills, including their professional seniority.
◦ Recognize CQI's field of expertise through official professional designations.</td></tr>
<tr><td>At operational level</td><td>• Raise awareness among care and social service staff of quality issues and the positive impact of CQI approaches.
• Alleviate fears, mistrust and resistance to the changes brought about by CQI approaches by, among other things, improving communication channels between the stakeholders involved in CQI.
• Promote interdisciplinarity and resource sharing within CQI teams.</td></tr>
</table>

★ Priority recommendations according to the CQI position statement review committee

PARTNERSHIP IN CQI

CQI concerns everyone, from managers to professional staff in healthcare environments, but especially users, for whom the system ensures that care and services are tailored to their needs. **Quebec stands out for the place and role it reserves for its users in the management of their healthcare journey** (Centre of Excellence on Partnership with Patients and the Public, 2022). It also stands out in the inclusion of users in CQI approaches, and in 2018 introduced its reference framework for the partnership approach between users, their loved ones and stakeholders in health and social services (Ministère de la Santé et des Services Sociaux, 2018). **User partnership is increasingly recognized as one of the best practices for improving care and social services based on evidence** (Cox et al., 2020). Users have greater influence over their own health and decisions about their care and services, and contribute to improving the quality and safety of care, in collaboration with healthcare professionals (Ministère de la Santé et des Services Sociaux, 2018), as mentioned by this user:



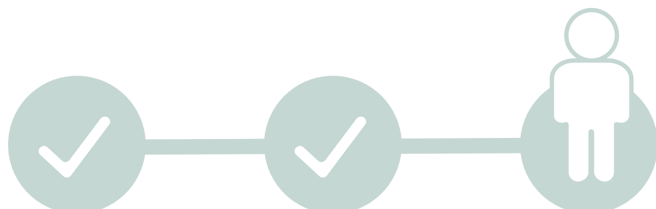
> Patients are valuable. Any citizen who is involved in healthcare has value. If I do work that prevents someone else from doing work, I had just contributed to my healthcare system.

A representative from the healthcare sector also mentioned that users :

> have a wealth of experience and observation that we absolutely must consider as part of our overall continuous quality improvement strategy, and those who are not convinced quickly become so after working with users on a committee.

CQI stakeholders interviewed for the Position Statement emphasized the importance of including user partners from the outset of CQI processes, during which they share their experiential knowledge (Bombard et al., 2018). User partners help identify issues to work on, co-create solutions and increase buy-in in teams (Pomey et al., 2015). However, some stakeholders mentioned that they do not have a clear idea of the role that users can play in CQI approaches and what they can concretely contribute within teams (Pandhi et al., 2020). The feeling of disappointing users, of feeling disorganized or finding that users are overly demanding (Liang et al., 2018) has also been reported. This feeling could be explained, among other things, by the fact that **there is no methodology or reference guide to promote the integration of users in CQI processes.**

On the users side, the feeling of not belonging in teams, of being irrelevant in conversations or of not really being heard has been mentioned (Ocloo et al., 2021). The role of users within CQI teams needs to be more central, more integrated, and needs to drive the implementation of changes based on real needs.



Recruiting users for CQI initiatives can sometimes be daunting. Their role requires significant involvement, both in terms of time and interest. Recruitment criteria for CQI initiatives are not explicit, and seem to attract the same type of users, i.e. those with a less negative attitude towards the healthcare system, who are available to get involved and who feel challenged by the subject of the initiatives. Remuneration for participation in CQI is not always offered (Richards et al., 2022), reducing the possibility of recruiting users who, in the absence of remuneration, cannot afford to lose part of their salary to devote time to it. CQI initiatives would benefit from the involvement of users with different profiles, who share an objective, constructive and sometimes different outlook, and who wish to improve care and services.

CQI processes bring together a number of stakeholders with different areas of expertise, which can sometimes complicate the organization and coordination of teams. Some professional staff in the healthcare sector are very busy and overworked. It has been observed that **CQI approaches are more successful if all the stakeholders involved agree on the direction of the approach and its objectives, if the approach is significant for the environment, and if there is an atmosphere of trust and a desire to innovate within the teams** (Cox et al., 2020). Collaboration enables us to move forward very quickly, and is an extremely powerful lever for change and improvement: there is a need to find the right people for the right means and the right actions.

We need to integrate users into the CQI process, value their role and encourage collaborative work.

PARTERSHIP IN CQI IT IS RECOMMENDED TO	
At strategic level	★ Recognize the added value of users who wish to become involved in CQI processes by allocating a dedicated budget to their remuneration.
On the tactical level	• Strengthen users involvement in CQI processes ★ ◦ Raise stakeholders' awareness of the importance of involving users in CQI initiatives. ◦ Train users to become partners in the CQI process. ◦ Train stakeholders to partner with users. ◦ Develop a guide to optimizing partnership in CQI, including among other things: ▪ Strategies for recruiting users with a diversity of profiles and opinions. ▪ Ways of integrating users into CQI processes. ▪ Roles that users can play in CQI initiatives. ▪ How to operationalize the guide. ◦ In collaboration with users, identify CQI priorities for local decision-making committees, such as local continuous quality improvement committees (CLACQ).
At operational level	• Improve the experience of users in CQI processes ◦ Take into account all the opinions and needs of users of health and social care services, in particular by working with them to identify priorities for CQI initiatives. ◦ In all circumstances, recruit users in CQI processes that enable them to value and share their experiential knowledge and their experiences in the healthcare system. ◦ Encourage the participation of users in CQI by recruiting, whenever possible, two representatives for each approach. ◦ Measure the impact of users participation in CQI processes, for example, through users feedback.

★ Priority recommendations according to the CQI position statement review committee

ORGANIZATIONAL PARTNERSHIP IT IS RECOMMENDED TO	
At strategic level	• Create sharing forums and tools for all stakeholders involved in CQI, including government bodies, academia, the healthcare community and users.
On the tactical level	• Encourage collaboration between CQI stakeholders and Canadian and Quebec organizations such as INESSS, RAMQ, ISQ, Health Excellence Canada, AQS, and professional orders such as CMQ and CFPC.
At operational level	• Maintain collaborations with academia to enable the development and support of knowledge and synergies with practice. • Establish partnerships between peers or environments facing similar challenges in terms of CQI approaches.

ROLES OF DECISION MAKERS AND GOVERNMENT BODIES IN CQI

Quebec's investment and the commitment of its decision-makers to CQI help to implement and advance its approaches, contribute to a provincial vision and enable the deployment of best practices (Ministère de la Santé et des Services Sociaux, 2023b). The dedicated staff to CQI, such as DQEPP, is also very supportive in the field.

Decision-makers often prioritize patient safety, which is the most important dimension of quality, and are in charge of risk management (Aho-Glélé et al., 2019). It is said that CQI approaches are occasionally imposed and are less successful in these environments. Similarly, the link between government planning and organizational priorities proves laborious in some cases (Pandhi et al., 2020), and does not allow for the development of a long-term vision for care and services that includes sustainable changes. **As a result, it can be difficult for facilities to determine independently which approaches to prioritize, taking into account many different perspectives and multiple requirements, standards and decision-making bodies**.

There is sometimes **a lack of commitment to CQI on the part of government bodies and financial organizations**, reflected in the difficulty or absence of funding for this type of approach (Hespe et al., 2018). Some researchers mention that they occasionally have to integrate CQI approaches into a broader research project: there is no budget envelope specifically earmarked for these CQI approaches (Dixon-Woods et al., 2012). This reality is even more acute in community settings, which makes it difficult to improve methods and practices or disseminate success stories in these settings.

To this end, managers have the power and influence to contribute significantly to the dissemination of CQI approaches and their results. It has to be said that, while there are some fine CQI success stories in Quebec, they are not easily disseminated throughout the networks, either to care settings or to the general population. Decision-makers, who play a watchdog role over the information transmitted and are the protectors of the organizations' values, are not always aware of all the CQI approaches in the settings, or lack the time to become acquainted with them (Hamilton et al., 2017), which hinders dissemination on a wider scale. **The dissemination of CQI results, both challenges and successes, is not the responsibility of any one body or organization, making its reach more complex**.

Although there are communities of practice in some environments, and ways of sharing with other teams and colleagues, **there is a lack of a common thread running through all communications and publications about CQI approaches**, which sometimes leads to unnecessary duplication of the same approaches, for example, tool development.

It's important to update the ways in which we disseminate information about CQI initiatives, because dissemination enables us to share knowledge and the solutions put forward for a problem that is sometimes experienced by several communities.

This sharing could lead some communities to become more aware of current initiatives and replicate those that have demonstrated benefits in terms of improving care and services. **As part of the consultation process, stakeholders suggested a number of ways to renew the dissemination of CQI in the community and with the general public, including :**

- Publication in specialized journals.
- Communities for sharing approaches and information on CQI.
- Coordinating committees for managers.
- Use of social media.
- Promotion in health and social services waiting rooms (posters, signs, health capsules, Powerpoint presentations).
- Use of the Carnet Santé Québec platform.
- Information e-mails to users and the general public.
- Newsletters
- Organization of events, such as webinars and symposia.
- Setting up a website dedicated to CQI and its activities.

We need to recognize the importance of CQI, align community priorities with ministerial orientations and optimize the dissemination of CQI approaches and results.

ROLES OF DECISION MAKERS AND GOVERNMENT BODIES IN CQI IT IS RECOMMENDED TO	
At strategic level	• Make CQI one of the strategic planning priorities of the health and social services network. • Create or dedicate a budget envelope within existing government programs to support CQI initiatives. ★ Create a provincial sharing space for CQI approaches, and designate an entity responsible for optimizing and animating this space.
On the tactical level	• Implement visual tools in each facility with a decision-maker to facilitate communication of CQI initiatives and align priorities.
At operational level	• Spread the word about opportunities to get involved in CQI in the network to encourage the recruitment of new professional staff.

★ Priority recommendations according to the CQI position statement review committee

ACCES AND USE OF DATA AND INDICATORS IN CQI

The accessibility of network data is an important issue, and one of the biggest challenges identified in the consultations. It was mentioned that many sources of information useful to CQI are not accessible. Data underpins all CQI initiatives and are a force for change, but do not circulate easily throughout the network (Kendell et al., 2021).

Significant delays in obtaining them, sometimes in terms of years, block the progress of several processes including CQI, and it is often difficult to dock data access and information technologies (Hespe et al., 2018). Similarly, data providers may not promote data access or use, or laws and other legal provisions act as a barrier due to a duty to protect (Van Panhuis et al., 2014). On the other hand, some data are not measured by the environments, as is the case, for example, of assessment of processes or changes implemented in an environment, or the impacts of these changes.

Where data is accessible, other challenges are noted. Data quality and the absence of standardization or common markers (Tran et al., 2021) make it difficult to compare data from one environment to another, and thus to evaluate practice. Nor are data and indicators linked in real time (Macnair et al., 2021), as explained by a representative of a health and social services organization:

> « We put a lot of barriers around the data use. Data are not linked, not in real time; data are a real problem in our system and we could do a lot better.

The available data are not suitable for CQI, as they often represent budgetary measures or billing-related information. As a result of management demands and budgetary constraints, data and indicators from organizations are less representative of the situation in the field, making dashboards less useful for quality improvement.

A representative of a group working with organizations to improve Canadian healthcare services and disseminate innovations said:

> « There are no data circulating, no comparable data in our environment, the most important measures for patients are not systematically documented, we work with medical-administrative data on volumes. Governance puts a lot of pressure on volume, but not on quality, which is not a priority.

Indicators are considered essential by network stakeholders, since they enable services and practices to be improved, evolve care, a picture to be painted of a situation and the next goals to be achieved for an organization (Aitken et al., 2016), in addition to identifying needs for improvement. However, care must be taken when using indicators, as they must be relevant to settings, evidence-based, precise and measurable (Beaulieu et al., 2015). A common understanding of how indicators should be measured, analyzed and explained is essential. **Indicators must not be perceived negatively, for example, as a way of evaluating staff or of incurring sanctions if the environment underperforms.**

The idea of developing common indicators for all settings is attractive. **A set of indicators used by all facilities could enable comparison in performance and give an overview of the evolution of care quality in the network** (Waelli et al., 2016). The challenge lies in choosing these indicators, and ensuring that they are used and measured in a way that is agreed by all stakeholders. For some of these stakeholders, the development of common indicators would be difficult, since they would be too generalized and might not be suitable for certain environments that present specific challenges, for example in terms of their geographical positioning (remote region), or the served population. Similarly, it is important to note that each facility is not in the same place in terms of priorities, realities and vision, which would make the use of common indicators more complex.

We need to promote data access and contribute to a common measurement culture.

ACCES AND USE OF DATA AND INDICATORS IN CQI IT IS RECOMMENDED TO

At strategic level	• Facilitate and democratize data access ★ Optimize the operationalization of legislation to facilitate data access. ★ Promote greater cohesion in data access procedures. ◦ Work with data suppliers to simplify access and structure and harmonize their data extraction services. • Promote the development and use of common indicators ◦ Develop common provincial indicator standards that take into account, among other things, the improvement efforts of CQI teams.
On the tactical level	• Promote the development of common indicators ◦ Contribute to and support the development of local cross-sector indicators. ★ Contribute to the development of a unified, shareable data extraction model in order to develop a feedback system accessible in real time, with indicators on organizational, clinical and academic practices. • Develop and support shared tools to standardize the use of data and indicators ★ Introduce and share a data comparison tool that does not require any identification of facilities, and that makes it possible to dissociate performance and recognize CQI efforts. ◦ Propose standardized data analysis and interpretation tools that can be used in a variety of healthcare environments.
At operational level	★ Develop and support the sharing of tools to standardize the use of data and indicators. ◦ Develop a portfolio of data available in real time to guide actions and align priorities. ◦ Train and support super-users who facilitate data access, extraction and understanding. ◦ Encourage and support shared operationalization of local approach indicators.

★ Priority recommendations according to the CQI position statement review committee

CONCLUSION

Continuous quality improvement is a recognized method for optimizing the quality of health care and social services, and contributes to a culture of quality and the emergence of a LHS. In order for Quebec to distinguish itself in CQI and be considered a leader in the field, the Position Statement presents several recommendations and identifies priorities for action based on a literature review and consultation with stakeholders with knowledge and expertise in CQI.

These recommendations have been grouped according to five themes, i.e. the implementation of CQI initiatives, the perspectives and skills of stakeholders in CQI, partnership in CQI, the roles of decision-makers and government bodies in CQI, and access and use of data and indicators in CQI. A prioritization of these recommendations is also proposed for each of these themes. It seems essential to study these recommendations and assess the possibilities of implementing them, taking into account the resources already available in the network. Now is the time to plan an action plan to put in place the measures needed to achieve these recommendations.

REFERENCES

Abrampah, N., Babar Syed, S., Hirschhorn, L., Nambiar, B., Iqbal, U., Garcia-Elorrio, E., Vijay, K., Devnani, M., & Kelley, E. (2018). Quality improvement and emerging global health priorities. International Journal for Quality in Health Care, 30(suppl1), 5-9. https://doi.org/10.1093/intqhc/mzy007

Accreditation Canada. (2022). Strategy 2022-2026. Safer Care. A Healthier World. https://accreditation.ca/files/HSO_Strategy-Refresh-EN-April-2022.pdf

Aho-Glélé, U., Bouabida, K., & Pomey, M.-P. (2019). État des lieux sur la gestion des risques et la sécurité des soins et des services au Québec: Évolution, exemples et recommandations. [Risk management and the safety of care and services in Quebec: developments, examples and recommendations] Risques & Qualité, XVI(4), 204-214. https://doi.org/10.25329/rq_xvi_4-thema-1

Aitken, M., de St Jorre, J., Pagliari, C., Jepson, R., & Cunningham-Burley, S. (2016). Public responses to the sharing and linkage of health data for research purposes: A systematic review and thematic synthesis of qualitative studies. BMC Medical Ethics, 17(1). https://doi.org/10.1186/s12910-016-0153-x

Alberta Health Services. (2014). Continuing care quality management framework. https://www.albertahealthservices.ca/assets/info/seniors/if-sen-ccqmf-framework.pdf

Antony, J., Mishra, D., & Barach, P. (2018). Six sigma in healthcare: A systematic review of the literature. International Journal of Quality & Reliability Management, 35(5), 1075-1092. https://doi.org/10.1108/IJQRM-02-2017-0027

Armstrong, N., Herbert, G., Aveling, E.-L., Dixon-Woods, M., & Martin, G. (2013). Optimizing patient involvement in quality improvement. Health Expectations, 16(3), e36-e47. https://doi.org/10.1111/hex.12039

Arvidsson, E., Dahlin, S., & Anell, A. (2021). Conditions and barriers for quality improvement work: A qualitative study of how professionals and health centre managers experience audit and feedback practices in Swedish primary care. BMC Family Practice, 22(1), 113. https://doi.org/10.1186/s12875-021-01462-4

Australian commission on safety and quality in healthcare. (2019). The state of patient safety and quality in australian hospitals 2019. https://www.safetyandquality.gov.au/sites/default/files/2019-07/the-state-of-patient-safety-and-quality-in-australian-hospitals-2019.pdf

Backhouse, A., & Ogunlayi, F. (2020). Quality improvement into practice. BMJ, 368(m865). https://doi.org/10.1136/bmj.m865

Bailie, J., Laycock, A., Matthews, V., & Bailie, R. (2016). System-level action required for wide-scale improvement in quality of primary health care: Synthesis of feedback from an interactive process to promote dissemination and use of aggregated quality of care data. Frontiers in Public Health, 4. https://doi.org/10.3389/fpubh.2016.00086

Baker, G., Fancott, C., Judd, M., & O'Connor, P. (2016). Expanding patient engagement in quality improvement and health system redesign: Three Canadian case studies. Healthcare Management Forum, 29(5), 176-182. https://doi.org/10.1177/0840470416645601

BC Patient Safety & Quality Council. (2017). BC Patient Safety & Quality Council. Strategic plan. https://healthqualitybc.ca/wp-content/uploads/StrategicPlan2017-2020.pdf

Beaulieu, M.-D., Pomey, M.-P., Del Grande, C., Côté, B., Tremblay, E., Ghorbel, M., & Hua, P. (2015). Élaboration d'indicateurs de qualité pour soutenir la gestion des maladies chroniques. [Development of quality indicators to support chronic disease management] Santé Publique, HS(S1), 67-75. https://doi.org/10.3917/spub.150.0067

Berman, L., Raval, M., & Goldin, A. (2018). Process improvement strategies: Designing and implementing quality improvement research. Seminars in Pediatric Surgery, 27(6), 379-385. https://doi.org/10.1053/j.sempedsurg.2018.10.006

Bombard, Y., Baker, G., Orlando, E., Fancott, C., Bhatia, P., Casalino, S., Onate, K., Denis, J.-L., & Pomey, M.-P. (2018). Engaging patients to improve quality of care: A systematic review. Implementation Science, 13(1), 98. https://doi.org/10.1186/s13012-018-0784-z

Breault, P., Nault, J., Audette, M., Échaquan, S., & Ottawa, J. (2021). Réflexions sur les soins de santé aux patients autochtones. [Thoughts on health care for Indigenous patients] Canadian Family Physician, 67(8), 571-573. https://doi.org/10.46747/cfp.6708571

Brown, B., Gude, W., Blakeman, T., van der Veer, S., Ivers, N., Francis, J., Lorencatto, F., Presseau, J., Peek, N., & Daker-White, G. (2019). Clinical Performance Feedback Intervention Theory (CP-FIT): A new theory for designing, implementing, and evaluating feedback in health care based on a systematic review and meta-synthesis of qualitative research. Implementation Science: IS, 14(40). https://doi.org/10.1186/s13012-019-0883-5

Canadian patient safety institute. (2020). The canadian quality & patient safety framework for health services. https://www.patientsafetyinstitute.ca/en/toolsResources/Canadian-Quality-and-Patient-Safety-Framework-for-Health-and-Social-Services/Documents/CPSI-10001-CQPS-Framework-English_FA_Online.pdf

Centre d'excellence sur le partenariat avec les patients et le public. (2022). Ensemble, je vais mieux. Livre blanc sur le partenariat avec les patients et le public. Principes de déploiement des fondements de modèle de Montréal. [Together, I am better. White Paper on Partnership with Patients and the Public. Principles for deploying the Montreal model foundations] https://ceppp.ca/wp-content/uploads/2022/10/livre-blanc-ceppp-4-octobre-2022.pdf

Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale. (2017). Cadre de référence en lien avec l'amélioration continue de la qualité dans les groupes de médecine de famille universitaires du Québec. [Reference framework related to continuous quality improvement in university family medicine groups in Quebec] https://reseau1quebec.ca/wp-content/uploads/2017/10/Cadre-der%C3%A9f%C3%A9rence-en-lien-avec-lACQ-en-GMF-U-Version-1.pdf

REFERENCES

Clark, D., Silvester, K., & Knowles, S. (2013). Lean management systems: Creating a culture of continuous quality improvement. Journal of Clinical Pathology, 66(8), 638-643. https://doi.org/10.1136/jclinpath-2013-201553

College of family physicians of Canada. (2019). A new vision for Canada. Family practice. The patient's medical home. https://patientsmedicalhome.ca/files/uploads/PMH_VISION2019_ENG_WEB_2.pdf

College of family physicians of Canada. (2021). Guide pour l'intégration de l'amélioration continue de la qualité dans les programmes de résidence en médecine de famille. [Guide for integrating continuous quality improvement into family medicine residency programs] https://www.cfpc.ca/CFPC/media/Resources/Health-Policy/RES_QI-Guide_FRE_final_REM.pdf

Commissaire à la santé et au bien-être. (2009). Rapport d'appréciation de la performance du système de Santé et de Services sociaux 2009. Construire sur les bases d'une première ligne de soins renouvelée: Recommandations, enjeu et implications. [Report assessing the performance of the Health and Social Services system 2009. Building on the foundations of a renewed first line of care: Recommendations, issues and implications] Commissaire à la santé et au bien-être. https://www.csbe.gouv.qc.ca/fileadmin/www/2009_PremiereLigne/csbe-Recommandations-t4-042009.pdf

Commissaire à la santé et au bien-être. (2021). Revue documentaire des cadres d'analyse de la valeur et de la performance du système de santé. [Documentary review of health system value and performance analysis frameworks] Commissaire à la santé et au bien-être. https://www.csbe.gouv.qc.ca/fileadmin/www/2021/CSBERevue_cadres_analyse_valeur_performance_Systeme_sante.pdf

Cox, R., Molineux, M., Kendall, M., Tanner, B., & Miller, E. (2020). Co-produced capability framework for successful patient and staff partnerships in healthcare quality improvement: Results of a scoping review. BMJ Quality & Safety, 31(2), 134-146. https://doi.org/10.1136/bmjqs-2020-012729

Dixon-Woods, M., McNicol, S., & Martin, G. (2012). Ten challenges in improving quality in healthcare: Lessons from the Health Foundation's programme evaluations and relevant literature. BMJ Quality & Safety, 21(10), 876-884. https://doi.org/10.1136/bmjqs-2011-000760

Donnelly, C., Janssen, A., Vinod, S., Stone, E., Harnett, P., & Shaw, T. (2023). A systematic review of electronic medical record driven quality measurement and feedback systems. International Journal of Environmental Research and Public Health, 20(1), Article 1. https://doi.org/10.3390/ijerph20010200

Easterling, D., Perry, A. C., Woodside, R., Patel, T., & Gesell, S. B. (2021). Clarifying the concept of a learning health system for healthcare delivery organizations: Implications from a qualitative analysis of the scientific literature. Learning Health Systems, 6(2), e10287. https://doi.org/10.1002/lrh2.10287

Federal Ministry for Social Affairs, Health, Care and Consumer Protection. (2022). Quality strategy for the Austrian healthcare system Version 2.1. Quality strategy update.

Glenngård, A., & Anell, A. (2021). The impact of audit and feedback to support change behaviour in healthcare organisations—A cross-sectional qualitative study of primary care centre managers. BMC Health Services Research, 21(1), 663. https://doi.org/10.1186/s12913-021-06645-4

Gouvernement de la Belgique. (2022). Qualité & sécurité des patients. Que nous apprennent les résultats du programme Pay for performance concernant l'accréditation ISQua à l'échelle de l'hôpital dans les hôpitaux généraux? [Quality & patient safety. What do the Pay for performance results tell us about hospital-wide ISQua accreditation in general hospitals?] https://www.becaremagazine.be/becare-novembre-2021-edition-15/qs-qualite-securite-des-patients

Gouvernement du Québec. (2023). An act to make the health and social services system more effective. https://www.assnat.qc.ca/fr/travaux-parlementaires/projets-loi/projet-loi-15-43-1.html?appelant=MC

Greater Manchester combined authority. (2019). Greater Manchester quality improvement framework.https://www.england.nhs.uk/north-west/wp-content/uploads/sites/48/2019/03/Quality-Improvement-Framework.pdf

Hamilton, A., Brunner, J., Cain, C., Chuang, E., Luger, T., Canelo, I., Rubenstein, L., & Yano, E. (2017). Engaging multilevel stakeholders in an implementation trial of evidence-based quality improvement in VA women's health primary care. Translational Behavioral Medicine, 7(3), 478-485. https://doi.org/10.1007/s13142-017-0501-5

Haute Autorité de Santé. (2023). Certification des établissements de santé pour la qualité des soins. [Certification of health establishments for quality of care] https://www.has-sante.fr/upload/docs/application/pdf/2023-09/manuel_2024.pdf

Health Excellence Canada. (2024). EXTRAtm. Executive training program. https://www.healthcareexcellence.ca/en/what-we-do/all-programs/extra-executive-training-program-ready-to-make-a-connection/.

Health Quality Ontario. (2017). Quality improvement plan (QIP). Guidance document for Ontario's health care organizations. https://www.hqontario.ca/Portals/0/documents/qi/qip/guidance-document-1611-en.pdf

Hespe, C., Rychetnik, L., Peiris, D., & Harris, M. (2018). Informing implementation of quality improvement in Australian primary care. BMC Health Services Research, 18(1), 287. https://doi.org/10.1186/s12913-018-3099-5

Hutchison, B., Haj-Ali, W., Dobell, G., Yeritsyan, N., Degani, N., & Gushue, S. (2020). Prioritizing and implementing primary care performance measures for Ontario. Healthcare Policy, 16(1), 43-57. https://doi.org/10.12927/hcpol.2020.26291

Institut national d'excellence en santé et en services sociaux. (2012). Des indicateurs de qualité à l'intention des professionnels et des gestionnaires des services de première ligne. Institut national d'excellence en santé et en services sociaux. [Quality indicators for primary care professionals and managers] https://www.inesss.qc.ca/fileadmin/doc/INESSS/Rapports/MaladiesChroniques/ETMIS2012_Vol8_No12.pdf

REFERENCES

Institut national d'excellence en santé et en services sociaux. (2013). Des indicateurs de qualité à l'intention des professionnels et des gestionnaires des services de première ligne. Institut national d'excellence en santé et en services sociaux. [Quality indicators for primary care professionals and managers] https://www.inesss.qc.ca/fileadmin/doc/INESSS/Rapports/MaladiesChroniques/Methodologie_selection_des_indicateurs.pdf

Institut national d'excellence en santé et en services sociaux. (2018). Utilisation des données cliniques issues des dossiers médicaux électroniques à des fins de recherche et d'amélioration continue de la qualité des soins et services de première ligne. [Use of clinical data from electronic medical records for research and continuous improvement of the quality of care] Institut national d'excellence en santé et en services sociaux. https://www.inesss.qc.ca/fileadmin/doc/INESSS/Rapports/SoinsPremiereLigne/INESSS_Utilisation_donnees_cliniques.pdf

Institut national d'excellence en santé et en services sociaux. (2022). Indicateurs de la qualité des soins et services de première ligne visant à appuyer l'amélioration continue de la qualité dans les groupes de médecine de famille au Québec. Repères GMF. [Indicators of the quality of primary care and services to support continuous quality improvement in family medicine groups in Quebec. FMG benchmarks] Institut national d'excellence en santé et en services sociaux. https://www.inesss.qc.ca/fileadmin/doc/INESSS/Rapports/GMF/INESSS_Indicateurs_GMF_GN.pdf

Institut Universitaire de Première Ligne en Santé et Services Sociaux, & Centre intégré universitaire de Santé et Services Sociaux de l'Estrie. Centre hospitalier Universitaire de Sherbrooke. (2020). Pour des trajectoires de soins et de services performantes : Un outillage pour l'analyse et la mesure [For high-performance care and service trajectories: Tools for analysis and measurement]. Institut Universitaire de Première Ligne en Santé et Services Sociaux. https://www.iuplsss.ca/clients/SanteEstrie/Soussites/Centres_de_recherche/IUPLSSS/transfert_connaissances/outilspublications/Pour_des_trajectoires_de_soins_et_de_services_performantes__Un_outillage_pour_l%E2%80%99analyse_et_la_mesure.pdf

Institute for Healthcare Improvement. (n. d.). How to improve: Model for improvement. Consulted on december 14, 2023, at https://www.ihi.org/resources/how-to-improve

Itchhaporia, D. (2021). The evolution of the quintuple aim. Journal of the American College of Cardiology, 78(22), 2262-2264. https://doi.org/10.1016/j.jacc.2021.10.018

Jones, B., Vaux, E., & Olson-Brown, A. (2019). How to get started in quality improvement. BMJ, 364(k5408). https://doi.org/10.1136/bmj.k5437

Kendell, C., Levy, A., Porter, G., Gibson, E., & Urquhart, R. (2021). Factors affecting access to administrative health data for research in Canada: A study protocol. International Journal of Population Data Science, 6(1), 1653. https://doi.org/10.23889/ijpds.v6i1.1653

Kerrissey, M., Satterstrom, P., Leydon, N., Schiff, G., & Singer, S. (2017). Integrating: A managerial practice that enables implementation in fragmented health care environments. Health Care Management Review, 42(3), 213-225. https://doi.org/Integrating: a managerial practice that enables implementation in fragmented health care environments

Laberge, M., Than, V., Tanguay, F., & Roch, G. (2022). The implementation of quality improvement facilitators in primary care settings in Quebec: A case study. Research Square. https://doi.org/10.21203/rs.3.rs-2142931/v1

Lafortune, L., & with the collaboration of C. Lepage. (2008). Guide pour l'accompagnement professionnel d'un changement [Guide to professional support for change] (Presses de l'Université du Québec).

Liang, L., Cako, A., Urquhart, R., Straus, S., Wodchis, W., Baker, G., & Gagliardi, A. (2018). Patient engagement in hospital health service planning and improvement: A scoping review. BMJ Open, 8(1), e018263. https://doi.org/10.1136/bmjopen-2017-018263

Liddy, C., Laferriere, D., Baskerville, B., Dahrouge, S., Knox, L., & Hogg, W. (2013). An overview of practice facilitation programs in Canada: Current perspectives and future directions. Healthcare Policy, 8(3), 58-67a.

Macnair, A., Love, S., Murray, M., Gilbert, D., Parmar, M., Denwood, T., Carpenter, J., Sydes, M., Langley, R., & Cafferty, F. (2021). Accessing routinely collected health data to improve clinical trials: Recent experience of access. Trials, 22(340). https://doi.org/10.1186/s13063-021-05295-5

Marshall, M., Mountford, J., Gamet, K., Gungor, G., Burke, C., Hudson, R., Morris, S., Patel, N., Koczan, P., Meaker, R., Chantler, C., & Roberts, C. (2014). Understanding quality improvement at scale in general practice: A qualitative evaluation of a COPD improvement programme. The British Journal of General Practice: The Journal of the Royal College of General Practitioners, 64(629), e745-751. https://doi.org/10.3399/bjgp14X682801

McHugh, M., Brown, T., Liss, D., Walunas, T., & Persell, S. (2018). Practice facilitators' and leaders' perspectives on a facilitated quality improvement program. Annals of Family Medicine, 16(Supplement 1), S65-S71. https://doi.org/10.1370/afm.2197

Menear, M., Blanchette, M.-A., Demers-Payette, O., & Roy, D. (2019). A framework for value-creating learning health systems. Health Research Policy and Systems, 17(79). https://doi.org/10.1186/s12961-019-0477-3

Miller. (2015). Le Lean management dans les soins de santé. https://www.ihi.org/sites/default/files/IHIWhitePaper_Le-Lean-Management_Francais.pdf

Miller, R., Weir, C., & Gulati, S. (2018). Transforming primary care: Scoping review of research and practice. Journal of Integrated Care, 26(3), 176-188. https://doi.org/10.1108/JICA-03-2018-0023

Ministère de la Santé et des Services Sociaux. (2012). Cadre de référence ministériel d'évaluation de la performance du système public de santé et de services sociaux à des fins de gestion. [Ministerial reference framework for evaluating the performance of the public health and social services system for management purposes] Ministère de la Santé et des Services Sociaux. https://www.msss.gouv.qc.ca/professionnels/documents/mesure-et-analyse-de-la performance/Cadre_de_reference_ministeriel_devaluation_de_la_performance.pdf

REFERENCES

Ministère de la Santé et des Services Sociaux. (2018). Cadre de référence de l'approche de partenariat entre les usagers, leurs proches et les acteurs en santé et en services sociaux. [Reference framework for the partnership approach between users, their loved ones and health and social services stakeholders]. https://publications.msss.gouv.qc.ca/msss/fichiers/2018/18-727-01W.pdf

Ministère de la Santé et des Services Sociaux. (2020). Cadre de gestion des groupes de médecine de famille universitaires (GMF-U). [Management framework for university family medicine groups (AFMG)] https://publications.msss.gouv.qc.ca/msss/fichiers/2019/19-920-01W.pdf

Ministère de la Santé et des Services Sociaux. (2021). La sécurisation culturelle en santé et en services sociaux. Vers des soins et des services culturellement sécurisants pour les Premières Nations et les Inuit. [Cultural security in health and social services. Towards culturally safe care and services for First Nations and Inuit] https://publications.msss.gouv.qc.ca/msss/fichiers/2020/20-613-02W.pdf

Ministère de la Santé et des Services Sociaux. (2023a). Améliorer l'accès, la qualité et la continuité des services de proximité. [Improving access, quality and continuity of local services] https://publications.msss.gouv.qc.ca/msss/fichiers/2023/23-803-01W.pdf

Ministère de la Santé et des Services Sociaux. (2023b). Plan stratégique 2023-2027. [Strategic plan 2023-2027] https://cdn-contenu.quebec.ca/cdn-contenu/adm/min/sante-services-sociaux/publications-adm/plan-strategique/PL_23-717-01W_MSSS.pdf

Nguyen, A., Cuthel, A., Padgett, D., Niles, P., Rogers, E., Pham-Singer, H., PharmD, Ferran, D., Kaplan, S., Berry, C., & Shelley, D. (2019). How practice facilitation strategies differ by practice context. Journal of General Internal Medicine, 35(3), 824-831. https://doi.org/10.1007/s11606-019-05350-7

NHS England and NHS Improvement. (2022). Quality, service improvement and redesign tools: Plan, Do, Study, Act (PDSA) cycles and the model for improvement. https://www.england.nhs.uk/wp-content/uploads/2022/01/qsir-pdsa-cycles-model-for-improvement.pdf

Nundy, S., Cooper, L., & Mate, K. (2022). The quintuple aim for health care improvement. A new imperative to advance health equity. American Medical Association, 327(6), 521-522. https://doi.org/10.1001/jama.2021.25181

Ocloo, J., Garfield, S., Franklin, B., & Dawson, S. (2021). Exploring the theory, barriers and enablers for patient and public involvement across health, social care and patient safety: A systematic review of reviews. Health Research Policy and Systems, 19(1), 8. https://doi.org/10.1186/s12961-020-00644-3

Ontario College of Family Physicians. (2015). Advancing practice improvement in primary care.

Ontario Health. (2022). QIP guidance document 2023/2024. https://www.hqontario.ca/Portals/0/documents/qi/qip/qip-guidance-2023-2024-en.pdf

Organisation mondiale de la santé. (2019). Guide d'élaboration d'une politique et d'une stratégie nationales relatives à la qualité. Approche pratique de formulation d'une politique et d'une stratégie pour l'amélioration de la qualité des soins. [Guide to developing a national quality policy and strategy. A practical approach to formulating a policy and strategy for improving the quality of care] https://iris.who.int/bitstream/handle/10665/310942/9789242565560fre.pdf?sequence=1

Pandhi, N., Jacobson, N., Crowder, M., Quanbeck, A., Hass, M., & Davis, S. (2020). Engaging patients in primary care quality improvement initiatives: Facilitators and barriers. American Journal of Medical Quality, 35(1), 52-62. https://doi.org/10.1177/1062860619842938

Pomey, M.-P., Hihat, H., Khalifa, M., Lebel, P., & Néron, A. (2015). Patient partnership in quality improvement of healthcare services: Patients' inputs and challenges faced. Patient Experience Journal, 2(1), 6.

Quality patient safety and accreditation project team. (2019). Manitoba quality & learning framework. https://sharedhealthmb.ca/files/quality-and-learning-framework-2019.pdf

Ratner, S., & Pignone, M. (2019). Quality improvement principles and practice. Primary Care, 46(4), 505-514. https://doi.org/10.1016/j.pop.2019.07.008

Richards, D., Cobey, K., Proulx, L., Dawson, S., de Wit, M., & Toupin-April, K. (2022). Identifying potential barriers and solutions to patient partner compensation (payment) in research. Research Involvement and Engagement, 8(7). https://doi.org/10.1186/s40900-022-00341-1

Rogers, E., Cuthel, A., Berry, C., Kaplan, S., & Shelley, D. (2019). Clinician perspectives on the benefits of practice facilitation for small primary care practices. Annals of Family Medicine, 12(Suppl 1), S17-S23. https://doi.org/10.1370/afm.2427

Rubenstein, L., Khodyakov, D., Hempel, S., Danz, M., Salem-Schatz, S., Foy, R., O'Neill, S., Dalal, S., & Shekelle, P. (2014). How can we recognize continuous quality improvement? International Journal for Quality in Health Care, 26(1), 6-15. https://doi.org/10.1093/intqhc/mzt085

Russ, S. J., Green, J., de Winter, L., Herrington, E., Hughes-Hallett, A., Taylor, J., & Sevdalis, N. (2023). An introduction to quality improvement. Journal of Clinical Urology, 1-9. https://doi.org/10.1177/20514158221075405

Scoville, R., & Little, K. (2014). Comparing lean and quality improvement. IHI White Paper. https://www.med.unc.edu/neurosurgery/wp-content/uploads/sites/460/2018/10/IHIComparingLeanandQIWhitePaper.pdf

Shea, C., Turner, K., Albritton, J., & Reiter, K. (2018). Contextual factors that influence quality improvement implementation in primary care: The role of organizations, teams, and individuals. Health Care Management Review, 43(3), 261-269. https://doi.org/10.1097/HMR.0000000000000194

REFERENCES

Smith, F., Alexandersson, P., Bergman, B., Vaughn, L., & Hellström, A. (2019). Fourteen years of quality improvement education in healthcare: A utilisation focused evaluation using concept mapping. BMJ Open Quality, 8(4), e000795. https://doi.org/10.1136/ bmjoq-2019-00079

Specialist Services Committee. (2024). Physician quality improvement initiative. https://sscbc.ca/physician-engagement/quality-improvement-initiative

Specialist Services Committee, & Shared Care Committee. (2024). The exchange. https://c0abr823.caspio.com/dp/1c9f50004e48ed50f0ee4d208816

Thakur, V., Anthony Akerele, O., & Randell, E. (2023). Lean and Six Sigma as continuous quality improvement frameworks in the clinical diagnostic laboratory. Critical Reviews in Clinical Laboratory Sciences, 60(1), 63-81. https://doi.org/10.1080/10408363.2022.2106544

The Health Foundation. (2021). Quality improvement made simple. What everyone should know about health care quality improvement. https://www.swselfmanagement.ca/uploads/resourcedocuments/quality%20improvement%20made%20simple.pdf

Tran, K., Webster, F., Ivers, N., Laupacis, A., & Dhalla, I. (2021). Are quality improvement plans perceived to improve the quality of primary care in Ontario? Canadian Family Physician, 67(10), 759-766. https://doi.org/10.46747/cfp.6710759

Tsang, J., Peek, N., Buchan, L., van der Veer, S. N., & Brown, B. (2022). Systematic review and narrative synthesis of computerized audit and feedback systems in healthcare. Journal of the American Medical Informatics Association: JAMIA, 29(6), 1106-1119. https://doi.org/10.1093/jamia/ocac031

US Department of Health and Human Services. (2012). National strategy for quality improvement in health care. https://thepcc.org/sites/default/files/resources/nqs2012annlrpt.pdf

Van Den Bulck, S., Spitaels, D., Vaes, B., Goderis, G., Hermens, R., & Vankrunkelsven, P. (2020). The effect of electronic audits and feedback in primary care and factors that contribute to their effectiveness: A systematic review. International Journal for Quality in Health Care, 32(10), 708-720. https://doi.org/10.1093/intqhc/mzaa128

Van Panhuis, W. G., Paul, P., Emerson, C., Grefenstette, J., Wilder, R., Herbst, A. J., Heymann, D., & Burke, D. S. (2014). A systematic review of barriers to data sharing in public health. BMC Public Health, 14(1). https://doi.org/10.1186/1471-2458-14-1144

Waelli, M., Gomez, M.-L., Sicotte, C., Zicari, A., Bonnefond, J.-Y., Lorino, P., & Minvielle, E. (2016). Keys to successful implementation of a French national quality indicator in health care organizations: A qualitative study. BMC Health Services Research, 16(1), 553. https://doi.org/10.1186/s12913-016-1794-7

Ye, J., Zhang, R., Bannon, J., Wang, A., Walunas, T., Kho, A., & Soulakis, N. (2020). Identifying practice facilitation delays and barriers in primary care quality improvement. Journal of the American Board of Family Medecine, 33(5), 655-664. https://doi.org/10.3122/jabfm.2020.05.200058

APPENDIX 1

KEYWORDS, DATA SOURCES AND INCLUSION/EXCLUSION CRITERIA

A two-stage approach was used to document continuous quality improvement and its feedback tools:

1. A review of existing literature in databases, current legislation and grey literature, and
2. Consultations with stakeholders with knowledge and expertise in CQI.

The review of existing literature was carried out from April to October 2023, using several search terms and diversified data sources. Grey literature included, for example, consulting the references of other articles identified or proposed by stakeholders. Identified documents had to:

- Mention CQI or its feedback tools.
- Address one of the following themes: definition of CQI, its models, impacts, facilitators, obstacles, the role of stakeholders, feedback tools, ways to evaluate it, or recommendations for improvement.
- Have been published within the last ten years (for scientific publications).
- Be in English or French.

English keywords	French keywords	Data sources
Practice facilitation Quality improvement Continuous quality improvement Quality improvement initiatives Quality improvement projects Quality improvement activities Quality improvement programs	Amélioration continue de la qualité Amélioration de la qualité Démarches d'amélioration continue de la qualité	Pubmed EBSCO Research Gate Google Scholar Article references Suggested by stakeholders Government sites, associations, etc.
Primary health care Primary care Canada primary care Primary health care practices Primary care practices	Soins en santé primaires Soins primaires Pratiques de soins en santé primaire Pratiques de soins primaires	
Framework Model Theory Concept	Cadre Modèle Théorie	
Data feedback Audit		

APPENDIX II

INTERVIEW GUIDE THEMES

Three individual and ten group interviews were conducted with stakeholders with knowledge and skills in CQI between August and November 2023.

Stakeholders were grouped according to various criteria: users or their representatives, members of research teams, physicians, professional staff from the health and social services sector, managers, professional staff from the Unité de soutien SSA Québec, organizations and associations, and people from outside Quebec.

Adapted interview guides to the interviewed groups enabled stakeholders to express their views on several CQI-related themes. These themes were:

- Knowledge of CQI.
- Involvement, description or realization of CQI initiatives.
- Vision of CQI.
- People to be involved in CQI and their roles.
- CQI dissemination strategies used to share the results of approaches in health and social service settings.
- CQI models.
- CQI facilitators.
- CQI obstacles.
- CQI impacts.
- Place of users in CQI initiatives outside Quebec
- Research contribution in CQI.
- Soliciting organizations and associations to carry out CQI initiatives.
- The use of indicators in health and social service settings.
- The importance of indicators in health and social service settings.
- The relevance of developing commun CQU indicators.
- The presence or absence of reflective approaches in settings.
- Audit and feedback tools.