



# Advancing Collaborative Mental Health Care in Canada's Primary Care Settings:

A National Quality Framework  
with Recommended Measures

---

## REPORT TO THE Mental Health Commission of Canada

Nadiya Sunderji  
Allyson Ion  
Vincent Tang  
Matthew Menear

Gwen Jansz  
Pamela Wener  
Abbas Ghavam-Rassoul  
Michel Gervais



Mental Health  
Commission  
of Canada

Commission de  
la santé mentale  
du Canada

[mentalhealthcommission.ca](http://mentalhealthcommission.ca)

# Acknowledgments

This report is the result of a two-year partnership project between the Quality Improvement for Collaborative Care (QI4CC) research team (based at St. Michael's Hospital), the Canadian Psychiatric Association and College of Family Physicians of Canada's collaborative working group on shared mental health care, and the Mental Health Commission of Canada (MHCC). The project emerged out of prior Ontario-focused research led by the QI4CC team.\*

The project was led by Nadiya Sunderji, MD, with the support of a network of researchers that included Allyson Ion, PhD (candidate), Vincent Tang, MD (candidate), Matthew Menear, PhD, Gwen Jansz, MD, PhD, Pamela Wener, PhD, Abbas Ghavam-Rassoul, MD, and Michel Gervais, MD, among others. The team is grateful to the many people who contributed to this project, including

- QI4CC research team members for their engagement, input, and support through all phases of the research, with special thanks to Priya Vasa, MD, and Ann Stewart, MD
- Laura Carvalhal Schoffel for assistance on recruiting interview participants and managing interview data
- the MHCC's Knowledge Exchange Centre, which helped make this work possible through a small partnership agreement, and for the guidance and support of Francine Knoops, Bonita Varga, Christopher Canning, PhD, and Brandon Hey
- members of the CPA and CFPC's collaborative working group on shared mental health care, which offered many insightful comments throughout this research and made suggestions for potential interview participants, including Nick Kates, MBBS, (co-chair), Patricia Mirwaldt, MD, (co-chair), Pam Doran, MD, Maria Patriquin, MD, and the late Roger Bland, MDCM

- Alpna Munshi, MD, whose wise advice on cultural competence and its measurement was invaluable
- members of the MHCC's Hallway Group and Youth Advisory Council, who helped the research team ground this work in their lived experiences through their thoughtful comments and recommendations.

Ce document est disponible en français

## SUGGESTED CITATION

Sunderji, N., Ion, A., Tang, V., Menear, M., Jansz, G., Wener, P., Ghavam-Rassoul, A., & Gervais, M. (2019). *Advancing collaborative mental health care in Canada's primary care settings: A national quality framework with recommended measures*. Ottawa, Canada: Mental Health Commission of Canada.

This document is available at [mentalhealthcommission.ca](https://mentalhealthcommission.ca).

© 2022 Mental Health Commission of Canada

ISBN: 978-1-77318-292-6

Legal deposit National Library of Canada



Health  
Canada

Santé  
Canada

The views represented herein solely represent the views of the Mental Health Commission of Canada. Production of this material is made possible through a financial contribution from Health Canada.

---

\* Visit the [QI4CC website](https://q4cc.ca) for information on the full scope of their research.




“

The biggest piece missing for me was hope. I was told I'd have mental illness forever, be on medication forever, and never be able to work. Had I spoken to others with lived experience of a mental health condition who were further along in their recovery (peer support), hope could have been reignited.

Had I experienced care as reflected in the framework, I would not only have a sense of hope, I'd realize that recovery is not only possible but expected. I'd then be confident and comfortable knowing my care providers were communicating with each other with my best interests at the forefront. Being empowered for my own self-determination and rationale in my treatment plan would have been welcomed, as opposed to blindly doing what I was told and being threatened that I'd lose services if I didn't do what I was told. So, yes, the framework is the ideal, but if it becomes reality it will result in a positive service-provision experience.

”



... shared during the consultations  
by a person with lived experience  
of a mental health problem

# Contents

<b>Introduction</b>	<b>5</b>
<b>Methodology</b>	<b>6</b>
<i>Background</i>	6
<i>The original QI4CC framework</i>	6
<i>Revising the QI4CC framework</i>	6
<i>Comparing MHCC indicators with the QI4CC framework</i>	7
<i>Ethics</i>	8
<i>Participants</i>	8
<i>Data collection and analysis</i>	9
<i>Extracting quality dimensions for measurement</i>	9
<i>Validating quality dimensions for measurement</i>	9
<i>Revising and validating the framework</i>	10
<i>Identifying specific measures</i>	10
<b>Participant Demographics</b>	<b>11</b>
<b>Revised QI4CC Framework</b>	<b>13</b>
<i>Collaborative care quality domains</i>	14
<i>Specific dimensions of collaborative care quality</i>	15
<b>Recommendations for Measuring the Quality of Collaborative Care in Practice</b>	<b>21</b>
<b>Discussion</b>	<b>25</b>
<i>Limitations</i>	26
<b>Endnotes</b>	<b>27</b>

# Introduction

To improve the quality of mental health and addictions care, specialists, primary care providers, service users, families, and other stakeholders must work together in structured ways. Yet, while collaborative mental health care\* in Canada is widely considered an evidence-based practice,<sup>1, 2, 3, 4</sup> its implementation across the country varies considerably and can also diverge from empirically supported models. As a result, its ability to improve outcomes for service users and populations is limited.<sup>5, 6</sup> Indeed, Canadian health-care providers, administrative leaders, and policy makers often struggle to identify evidence-informed and context-appropriate collaborative care practices and, as a result, find it difficult to evaluate and improve such care in their jurisdictions.

The revised Quality Improvement for Collaborative Care (QI4CC) framework that is outlined in this report, developed to assist stakeholders in organizing and delivering primary care mental health and addictions services, is intended to

- help planners and leaders in practice and policy reach a shared understanding of the quality dimensions in collaborative care services
- help to highlight the supports and structures needed for their successful implementation

- help planners and leaders identify measures for key quality targets to implement effective collaborative care
- support quality measurement and quality improvement initiatives
- facilitate the creation of new practice-based evidence on collaborative care, including comparative effectiveness research.

Practice-level measures can inform local quality improvement initiatives, provided that they are relevant, feasible to measure, informative, interpretable, and actionable. These measures should complement population-level indicators—such as those developed by the Mental Health Commission of Canada (MHCC)<sup>7</sup>—to ensure they are policy-relevant. This relevance is crucial for attracting the necessary resources to implement and sustain initiatives.

This report also responds to two other key project objectives:

- to update the current QI4CC quality framework<sup>8</sup> to reflect pan-Canadian perspectives and the recommendations of collaborative care clinicians, leaders, and decision makers
- to develop and recommend quality measures to prioritize when evaluating collaborative care initiatives in primary care practices

---

\* This term *collaborative care* will be used throughout this document in place of *collaborative mental health care*.

# Methodology

## Background

We used a qualitative study to explore the current state of collaborative care across Canada and determine how to define and measure its quality. We began by working from the QI4CC framework we previously developed in the Greater Toronto Area<sup>9</sup> to assess its national relevance. We also sought to align this framework with other policy-relevant initiatives such as the mental health indicators developed by the MHCC.<sup>10</sup> Throughout this project, we engaged and consulted with a range of stakeholders across the country, including the Canadian Psychiatric Association and the College of Family Physicians of Canada through their joint working group on collaborative care; lived experience advisers through the MHCC's Hallway Group and Youth Advisory Council; and clinicians, researchers, and other stakeholders who participated in the Canadian Collaborative Mental Health Care Conference. These consultations helped to shape our strategy and carry out our qualitative study, including its participant recruitment, data collection, analysis, and the interpretation of findings and implications.

## The original QI4CC framework

As mentioned, this revised framework builds on previous work by our research team.<sup>11, 12, 13</sup> It was informed by the multiple forms of knowledge needed to support the adoption and sustainability of collaborative care in real-world clinical practice.<sup>14, 15, 16, 17</sup> These materials included scientific knowledge drawn from research studies and evidence syntheses, pragmatic and contextual knowledge from front-line clinicians and administrators,

and experiential knowledge from individuals living with mental illness who have had direct contact with mental health and primary care services. We also conducted a systematic review of the academic and “grey” literature (international in scope),<sup>18</sup> and qualitative interviews with health-care providers and collaborative mental health service users in Toronto.<sup>19, 20</sup> Additionally, we consulted with an expert stakeholder advisory group (based largely in the Greater Toronto Area, although several contributors had relevant regional and/or national experience).

## Revising the QI4CC framework

1. **Variation in primary care reform** — Primary care reform for team-based models of care (e.g., the Patient's Medical Home) varies across Canada.
2. **Rural and remote health care** — The types of collaborative activity that family physicians and nurses use in rural and remote settings are different from those in urban settings (e.g., the use of telehealth and collaboration with visiting providers). Variable distribution of health human resources between urban and rural settings also influences variations in collaborative activities.
3. **Appropriateness for First Nations, Inuit, and Métis** — Our definition of collaborative care and our conceptualization of *quality* are rooted in Eurocentric knowledge as well as in literature and experiential knowledge grounded in both a positivist theoretical paradigm\* and western medical practices, which may not align with Indigenous world views and approaches.†

\* According to this perspective, there is a singular accurate view of reality, which can be independently replicated regardless of the observer.

† Unfortunately, meaningfully and respectfully engaging with Indigenous knowledge keepers turned out to be beyond the capacity of this project.

## Comparing MHCC indicators with the QI4CC framework

To inform and focus our data collection and analysis, and ensure the national relevance of our recommended set of quality measures, the research team compared the existing QI4CC framework with mental health indicators developed and endorsed by the MHCC.<sup>21</sup> After considering these two source documents, the following assumptions informed this project:

- Collaborative care is an empirically supported approach to improving population mental health.
- Health policy and funding lead directly to the structures that shape health-care delivery processes on the ground.
- Working concurrently to measure and improve care at both the system/population/policy level and clinical practice level is important. Outcomes related to collaborative care processes can be measured at individual or population levels (e.g., by using administrative data).
- The collective leadership of diverse stakeholders, from policy makers to health-care providers and service users, is vital to the ongoing evolution and effective implementation of collaborative care to meet population health needs.

Based on our comparison and our search for common themes, we decided in consultation with our MHCC partners to focus on four domains of practice-level indicators that would be relevant to the policy and local clinical levels:

1. Access and timeliness
2. Client care outcomes
3. Equity and Population-based care
4. Client inclusion and participation



## Ethics

This project was approved by the St. Michael's Hospital research ethics board, and all participants gave oral consent to take part in the data collection activities.

## Participants

From February to October 2018, we sent email or fax invitations to 59 individuals across Canada inviting each of them to participate as a key informant in the study. Potential participants were identified through consultations with members of the collaborative working group on shared mental health care (CWGSMHC), the QI4CC research team, MHCC staff, and attendees at the June 2018 Canadian Collaborative Mental Health Care Conference. We contacted clinicians, administrators, policy experts, and researchers in primary care, family medicine, psychiatry, nursing, psychology, quality improvement, and health-care management. Our goal was to learn more about regional, provincial, and national priorities and experiences as well as variations in collaborative care implementation and evaluation efforts.

We then refined our search to make sure we represented multiple disciplines, sources of expertise, and different parts of Canada.\* As with other qualitative research, we generated our sample purposively and prioritized our outreach to individuals who could share in-depth information related to the project's objectives.<sup>22</sup>

In addition to individual interviews, we met with CWGSMHC members three times between the fall of 2017 and the fall of 2018. This group consists of approximately five psychiatrists and five family physicians from different regions of Canada as well as ex officio representatives

\* Since our original project had robustly engaged perspectives from Ontario, we deliberately under-represented that province in this process.

from the MHCC and the Canadian Collaborative Mental Health Care Conference. At each meeting, based on the current stage of the project, we elicited input regarding sampling and recruitment (e.g., potential interview participants), the broad quality domains and specific quality dimensions recommended for measurement, and our knowledge translation/dissemination plans.

Finally, we consulted (via the MHCC's Hallway Group and Youth Advisory Council) with a small number of people who had lived experience of mental illness and experience accessing mental health services across Canada. Five persons volunteered to attend two webinar meetings in September 2018. In these meetings, after an orientation to the subject matter and our work to date, we asked them for feedback<sup>†</sup> on the framework using three questions:

1. How is your experience of collaborative care reflected (or not) in the framework?
2. What adaptations might be needed for the framework to better reflect your experience of collaborative care?
3. If this framework reflected reality, would it meet your needs? Would it, in your view, be providing good care?

<sup>†</sup> Participants provided additional feedback and recommendations by email.

## Data collection and analysis

We conducted semi-structured phone interviews with 33 key informants between February and November 2018.\* We also held in-person focus group meetings with two collaborative care teams in Ontario.† For both individual interviews and focus groups, we asked

- what was their understanding of the components and objectives of collaborative care
- how had collaborative care been implemented in their local context or region, and what was their role in its development, delivery, stewardship, and/or evaluation
- what dimensions or constructs were important to measure to determine if collaborative care was working well (and from whose perspective)
- what were their reactions, feedback, and suggested revisions to our quality framework
- what feedback and reflections did they have regarding specific quality measures for the four quality domains we had selected.‡

All the interviews and focus groups were audio-recorded and transcribed verbatim. Data collection and analysis were concurrent, and we iteratively refined the interview guide to condense it and focus on the most promising areas for practice-level measurement (based on alignment with the MHCC's indicators and feedback from the CWGSMHC).

In the next phase (April 2018 to January 2019), we analyzed the data in stages. Our overall approach was to use a qualitative content analysis to validate or extend the framework based on participants' perspectives.<sup>23, 24, 25</sup>

\* 30 in English, three in French

† English

‡ I.e., access and timelines, client care outcomes, client inclusion and participation, and population-based

As we moved through these stages, we involved multiple team members to cross verify the data; this triangulated team approach helped to minimize bias, validate our findings, and enrich our interpretation of the data.



### *Extracting quality dimensions for measurement*

Our analysis team met twice in April 2018 to begin reflecting on the interviews we had completed and the ideas participants had raised. These conversations focused on the suggestions we received for measuring the quality of collaborative care. To assess them, we distributed the transcripts equally among the team members and asked each person to extract quality constructs and measures in terms of the four prioritized quality domains. For each domain we generated specific quality dimensions that were concrete and tangible enough to measure. At our third meeting (May 2018), we refined our list so that there were two or three dimensions for each domain (based on 17 individual interviews and two focus groups with collaborative care teams).§ Our analysis identified areas of overlap and synergy across key informant interviews, and the reflective dialogue that ensued was essential to our data triangulation and validation process.



### *Validating quality dimensions for measurement*

Next, we consulted with key stakeholders and content experts to review the quality dimensions and potential measures, as part of our integrated knowledge translation process.

In June 2018, we presented our analysis team's list to the CWGSMHC and participants at the Canadian Collaborative Mental Health Care Conference to see if it resonated with collaborative care leaders across the country. Feedback from these presentations affirmed the preliminary measurement ideas and suggested specific ways of making them operational.

§ These interviews and focus groups provided 54 per cent of the qualitative data collected by early May 2018.

Between June and November 2018, we reviewed our quality dimensions for measurement with key informants we had interviewed.\* In these followup interviews, we asked participants for their feedback on each dimension as well as if and how its measurement was relevant, feasible, and/or actionable in their collaborative care practice and local context.



### *Revising and validating the framework*

Between July and September 2018, the analysis team continued analyzing the qualitative data thematically, as part of the process to revise and validate the framework. Two team members conducted a directed content analysis,<sup>26</sup> using the domains (with definitions) and dimensions from the original QI4CC framework. That helped us organize and code the individual qualitative interviews we'd had up to the end of July 2018.<sup>†</sup> We then identified quotes from each interview to show which ideas were reflected in the domains and/or dimensions of that framework. As we did so, we also remained open to new emerging codes. Throughout this coding process, we documented any changes to wording in the domain definition and/or specific dimensions and identified any new domains and/or dimensions. By doing so, we ensured that participants' ideas, experiences, and recommendations would all be captured in the revised framework. Once this was completed, we circulated it to our analysis team for review.

We then evenly distributed the individual interviews and focus group transcripts conducted up till the end of August 2018<sup>‡</sup> among the analysis team and assigned the transcripts not yet reviewed. Team members read each transcript, documented their thoughts, and identified relevant quotes to show if and how each participant's perspectives were reflected in the revised framework. The team met again in September 2018 to continue analyzing, mapping qualitative data onto the framework, and revising as needed to capture new and emerging themes. During this process, we

\* 12 participants, or 36 per cent of the total interview sample

† 25 participants, or 76 per cent of the total interview sample

‡ 27 participants, or 82 per cent of the total interview sample



refined its language and ideas, added new domains and dimensions, and clarified existing ones. The resulting framework reflected the pan-Canadian perspectives and feedback we received during the data collection stage.



### *Identifying specific measures*

Throughout our data analyses, we attempted to identify measures that would capture the quality dimensions being recommended. This process included consulting literature, including our prior systematic review of the quality measures used (or proposed) to evaluate collaborative care.<sup>27</sup> Overall, we sought measures that captured the intended concept, that were valid, reliable, user-friendly (e.g., widely available, no- or low-cost), and would produce interpretable and actionable results. We aimed to distil a short list of recommended measures that a clinical or health-system leader could readily access and implement.



# Participant Demographics

The three tables below summarize the demographic characteristics of the individuals (Table 1), CWGSMHC members (Table 2), and advisers with lived experience (Table 3) who participated in the in-depth interviews and consultations.

**TABLE 1.** Demographic characteristics for individual interviews

### Region of Canada

Characteristic	N=33 (%)
Newfoundland/New Brunswick/ Nova Scotia	7 (22)
Quebec	6 (18)
Ontario	2 (6)
Manitoba/Saskatchewan/Alberta	5 (15)
British Columbia	5 (15)
Nunavut/Northwest Territories/ Yukon	5 (15)
National	3 (9)

### Most relevant perspective

Characteristic	N=33 (%)
Clinician	14 (43)
Clinician and researcher/ administrator	9 (27)
Administrator*	4 (12)
Researcher	3 (9)
Policy expert	3 (9)

### Discipline

Characteristic	N=33 (%)
Family medicine	12 (37)
Psychiatry	6 (18)
Psychology	4 (12)
Administration	5 (15)
Collaborative care researcher	3 (9)
Nursing	2 (6)
Quality improvement	1 (3)

\* One administrator participant also identified as a patient partner.

**TABLE 2.** Demographic characteristics for CWGSMHC members*Region of Canada*

Characteristic	N=13 (%)
Newfoundland/New Brunswick/ Nova Scotia	2 (15)
Quebec	2 (15)
Ontario	2 (15)
Manitoba/Saskatchewan/Alberta	2 (15)
British Columbia	2 (15)
Nunavut/Northwest Territories/ Yukon	0
National	3 (23)

*Most relevant perspective*

Characteristic	N=13 (%)
Clinician and researcher/ administrator	11 (85)
Policy expert	2 (15)

*Discipline*

Characteristic	N=13 (%)
Family medicine	6 (46)
Psychiatry	5 (38)
Policy/administration	2 (15)

**TABLE 3.** Demographic characteristics for advisers with lived experience*Region of Canada*

Characteristic	N=5 (%)
Newfoundland/New Brunswick/ Nova Scotia	0
Quebec	0
Ontario	2 (40)
Manitoba/Saskatchewan/Alberta	2 (40)
British Columbia	1 (20)
Nunavut/Northwest Territories/ Yukon	0
National*	1 (20)

*Additional perspectives (if any)*

Characteristic	N=5 (%)
Clinician	2 (40)
Peer support	2 (40)

\* The breakdown for Region of Canada totals six participants because one participant represented both a provincial and national organization.



# Revised QI4CC Framework

The revised QI4CC framework uses broad descriptions for the domains of quality and adds specific dimensions within each. The domains represent major quality constructs that describe

- the aims and objectives of collaborative care
- the key care processes required to achieve those aims
- the necessary infrastructure and supports for successful implementation.

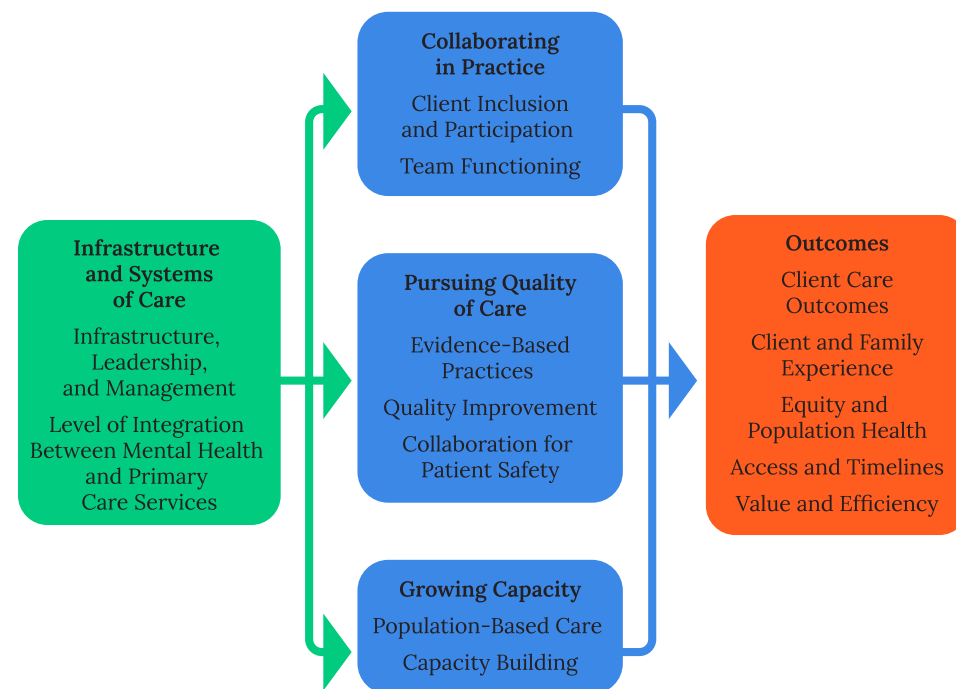
The specific dimensions capture evidence-informed elements at organizational, team, and individual levels that can be measured so as to understand how collaborative care is functioning.

The framework is informed by and incorporates two generic frameworks for quality:

- **Donabedian** — According to Donabedian,<sup>28</sup> organizational and health-system conditions (structures) shape how health care is delivered (processes) which, in turn, affect clinical, client experience, and health-service use outcomes (among others).<sup>29</sup>
- **National Academy of Medicine** — The National Academy of Medicine's seminal report on quality of care identified six aims for health care, including safety, effectiveness, patient-centredness, timeliness, efficiency, and equitability.<sup>30</sup>

Figure 1 depicts the ways structures contribute to outcomes that are mediated by care processes. These structures may help health policy makers and funders appreciate how system design and the resourcing of collaborative care ultimately yield measurable outcomes at individual, population, and system levels.\*

**FIGURE 1.** Inter-relationship of collaborative care quality domains



\* To convey this contribution, we deliberately simplified the complex and adaptive nature of health systems and omitted feedback loops. We would particularly like to emphasize the crucial role of collective leadership and the engagement of all stakeholders.

## Collaborative care quality domains

The broad domains and their definitions are listed below.

### *Client care outcomes*

Care achieves good results for clients, based on outcomes that are important to clients.

### *Client and family experience*

Care is geared toward providing the best possible experience for clients and their families (broadly defined).

### *Equity, population health outcomes, and population-based care processes*

The collaborative care team delivers care to the whole client population (e.g., it allocates services equitably to those in need and is attentive to any barriers to seeking help), including health promotion and preventive care. The organization engages in practice-level quality improvement supported by data about the client population.

### *Access and timeliness of care*

Clients easily receive care within a reasonable time frame in relation to the severity of illness, level of risk, and level of function (e.g., timely identification of mental illness, wait time for psychotherapy after a recommendation is made). Potential barriers to accessing services (e.g., costs, geography, cultural appropriateness) are mitigated.

### *Value and efficiency*

From a systems perspective, the care delivered has good value relative to cost. Multiple perspectives, systems, and potential rewards are considered when measuring cost-effectiveness (e.g., health care, social support, justice, child protection, client-incurred costs).

### *Client inclusion and participation*

The collaborative care team enables clients to play a meaningful role in their own care. Care is responsive to individual client needs and preferences. Clients are given ample opportunities to be included in the co-design, co-creation, collaborative evaluation, and quality improvement of services, regardless of their social positioning.

### *Team functioning*

The team of primary care and mental health service providers (which includes the client) work well together with mutual trust and respect.

### *Evidence-based practices*

Programs and treatments are designed and implemented with the best available research and the local context in mind. Care is appropriate, avoiding unnecessary or insufficient treatment, and is tailored to the individual.

### *Quality improvement*

The collaborative care team continuously works to improve quality of care (e.g., routinely evaluating programs from multiple perspectives and incorporating the results into program development and provider training).

### *Collaboration for patient safety*

The collaborative care program is organized to provide the safest possible care (e.g., promotes safe medication prescribing practices, engages all team members in improving patient safety).

### *Capacity building*

Providers learn on the job in order to better care for clients over time.

## *Infrastructure, leadership, and management*

Care is provided under appropriate conditions (e.g., appropriate physical space, skilled health-care providers from different disciplines). Leadership and accountabilities support collaborative care.

## *Level of integration between mental health and primary care services*

Services are well coordinated within the collaborative care program, and between the primary care team and external mental health specialists (e.g., hospital-based psychiatric care) and other sectors (e.g., education).

## **Specific dimensions of collaborative care quality**

These specific dimensions within each quality domain are evidence-informed and measurable.

### *Client care outcomes*

Care achieves good results for clients, based on outcomes that are important to clients.

#### **Dimensions**

1. Care improves client functioning and quality of life (e.g., return to work, school, and/or family and friends).
2. Care improves client recovery and wellness on indicators such as self-efficacy, hope, purpose, empowerment, social inclusion, community participation, and happiness/positive mental health.
3. Care reduces the severity of mental illness symptoms and increases remission rates.
4. Care improves physical health status.
5. Clients achieve the outcome(s) they hoped for.

## *Client and family experience*

Care is geared toward providing the best possible experience for clients and their families (broadly defined).

#### **Dimensions**

1. Clients are satisfied with their care (i.e., have a positive perception of care).
2. Team members collaborate with clients and each other to reduce mental illness stigma and facilitate client engagement.
3. Care is appropriate and responsive to an individual client's culture, literacy level, and socio-economic status, which are asked about rather than assumed.
4. Care is compassionate, humanistic, comprehensive, and multi-faceted: providers assess and endeavour to respond to each person's biopsychosocial and spiritual needs.
5. Clients experience continuity of care when receiving services from multiple providers, concurrently or sequentially. Contact is maintained between clients and primary care providers.
6. Care provides clients with the opportunity to develop a relapse prevention plan.

## Equity, population health outcomes, and population-based care processes

The collaborative care team delivers care to the whole client population (i.e., it allocates services equitably to those in need and is attentive to any barriers to seeking help), including health promotion and preventive care. The organization engages in practice-level quality improvement supported by data about the client population.

### ■ Dimensions

1. The collaborative care team reflects on health inequities and disparities in the care affecting their clients. The team minimizes barriers to health and health care while assessing and responding to the social determinants of health at a population level.
2. The collaborative care team proactively optimizes physical and preventive health care for clients experiencing mental health concerns.
3. The collaborative care team (providers and the program as a whole) engages in “opportunistic case finding,” cued by multiple data sources (e.g., health-care system use, other sources of information/protocols) in response to individual and population health needs (ideally, in real time).
4. The primary care organization has the infrastructure to collect, manage, and harness insights from data on the population of clients served. IT infrastructure exists to support population-based care (e.g., clinical registries, timely clinical measures).
5. The organization uses available data to reflect on the health needs of the population served (e.g., including social determinants of health, recognizing population diversity) and to be more proactive in planning, implementing, delivering, and improving services.

## Access and timeliness of care

Clients easily receive care within a reasonable time frame in relation to the severity of illness, level of risk, and level of function (e.g., timely identification of mental illness, wait time for psychotherapy after a recommendation is made). Potential barriers to accessing services (e.g., costs, geography, cultural appropriateness) are mitigated.

### ■ Dimensions

1. Mental health services are made available in a range of intensities, according to client needs (e.g., severity of illness) and provider needs (e.g., assistance making a specific diagnosis or recommending a next step in treatment).
2. Clients are offered services in modalities that are accessible and/or preferable to them (e.g., text- or phone-based, online, outside of regular business hours, in non-institutional settings).
3. Wait times from referral to mental health assessment and from assessment to service (e.g., psychotherapy) are minimized. Clients are offered relevant supports while waiting for specialized services, including peer support.
4. Written and oral communications between team members are timely and facilitate client care.
5. Teams monitor attendance and seek to understand and respond to no-show rates.
6. Services offered (e.g. psychotherapy, further consultation) are accessible to clients in terms of location, cost, and client preference (e.g., including phone or online).
7. There is a mechanism or process to triage, prioritize, and sequence client care (i.e., other than a first-come, first-served basis) that is responsive to clients’ needs while managing resources.

## Value and efficiency

From a systems perspective, the care delivered has good value relative to cost. Multiple perspectives, systems, and potential rewards are considered when measuring cost-effectiveness (e.g., health care, social support, justice, child protection, client-incurred costs).

### ■ Dimensions

1. Services are prioritized and delivered with a view to their cost-effectiveness; in other words, the organization does the most it can with the resources it has.
2. The organization and team members seek efficiencies for clients and providers (e.g., sharing client data [with consent] to maximize informational continuity and minimize the duplication of effort or need to tell one's story over again).
3. Collaborative care reduces unnecessary or insufficient treatment to deliver the appropriate level of care (e.g., by escalating the level of care within the team or facilitating targeted referrals or transfers of care).

## Client inclusion and participation

The collaborative care team enables clients to play a meaningful role in their own care. Care is responsive to individual client needs and preferences. Clients are given ample opportunities to be included in the co-design, co-creation, collaborative evaluation, and quality improvement of services, regardless of their social positioning.

### ■ Dimensions

1. Clients (and substitute decision makers, where applicable) are a central member of the care team and are supported and encouraged to be as involved as they wish to be in planning and implementing their care (e.g., determining goals; managing health conditions; understanding available options, treatments, rationales, and mechanisms of action; care planning; offering feedback; having their health records).
2. Clients and families are meaningfully engaged in program development, implementation, evaluation, care delivery, and quality improvement.
3. Opportunities to give and/or receive peer support (within the primary care team or through partnerships or collaborations) are made available to clients.
4. Families' and caregivers' lived expertise and advocacy on behalf of clients are valued. Clients are encouraged to include their informal supports in their care team. Families and caregivers are supported and encouraged to be as involved as they wish to be in their loved one's care (with the client's consent).



## Team functioning

The team of primary care and mental health service providers (which includes the client) work well together with mutual trust and respect.

### ■ Dimensions

1. Providers and clients are clear about their own and each other's roles and scopes of practice (which are reassessed as needed).
2. Team relationships and communications support ongoing collaborative-care skills development and provision. All team members' perspectives are valued and represented in clinical care and knowledge exchange.
3. Clients experience the well-functioning team by being offered multiple perspectives on their clinical problems and their choices of treatment or care options.
4. Clinical leadership is effective in supporting teamwork and collaboration.
5. Staff turnover is not excessive (i.e., does not erode team or program functionality).
6. Providers are satisfied with care and have a positive experience of delivering collaborative care (e.g., feel engaged, supported, care delivery is rewarding).
7. Team members share common principles to guide care.
8. Team members are supported in self-care, wellness, and burnout prevention.

## Evidence-based practices

Programs and treatments are designed and implemented with the best available research and the local context in mind. Care is appropriate, avoiding unnecessary or insufficient treatment, and is tailored to the individual.

### ■ Dimensions

1. The team implements a model of collaborative care that is informed by research. It evaluates the implementation and outcomes of its collaborative care program.
2. The team has a shared understanding of specific evidence-informed strategies of care for specific conditions (e.g., depression).
3. Providers present clients with evidence-informed choices to inform shared decision-making in all aspects of care.
4. Where evidence is emerging (e.g., public health crises), innovation is paired with evaluation, quality improvement, and dissemination.

## Quality improvement

The collaborative care team continuously works to improve quality of care (e.g., routinely evaluating programs from multiple perspectives and incorporating the results into program development and provider training).

### ■ Dimensions

1. Quality of care is evaluated from multiple perspectives (e.g., client/family, provider, organization, system), and evaluation informs program development, quality improvement activities, and provider training.
2. The primary care team's quality improvement program includes items that address the care of clients living with mental illness.

## Collaboration for patient safety

The collaborative care program is organized to provide the safest possible care (e.g., promotes safe medication prescribing practices, engages all team members in improving patient safety).

### ■ Dimensions

1. The organization has a strong safety culture (i.e., individual, group, and management values and perceptions, competencies, and patterns of behaviour that demonstrate a commitment to safety. Risk is acknowledged, there is a blame-free environment, collaboration occurs across ranks to find solutions that reduce vulnerabilities, and sufficient resources are made available to address safety concerns).
2. The team conducts population-level safety interventions (e.g., collaborates to search electronic health records (EHR) for clients receiving unsafe medications/doses, furnishes interventions such as consultation and/or education to providers to improve safe prescribing).
3. Medication prescribing is safe (e.g., medication reconciliation occurs at key points of vulnerability, there are low rates of potentially hazardous prescribing practices).
4. The organization and team effectively manage near misses, errors, and negative outcomes (e.g., systematic identification, disclosure, review, learning, provider support).

## Capacity building

Providers learn on the job in order to better care for clients over time.

### ■ Dimensions

1. The organization supports team training in collaborative care.
2. Knowledge exchange is multidirectional between mental health and primary care providers and clients.

3. Clients and caregivers build skills for mental health and addictions care over time.
4. Providers have timely access to consultation and other decision aids (e.g., algorithms) that support care.
5. There is an organizational culture of learning and mutual support.

## Infrastructure, leadership, and management

Care is provided under appropriate conditions (e.g., appropriate physical space, skilled health-care providers from different disciplines). Leadership and accountabilities support collaborative care.

### ■ Dimensions

1. The collaborative care program has adequate funding and uses it efficiently.
2. The team optimizes the allocation and use of physical space and tele-/e-mental health infrastructure for collaborative practices (e.g., for provider interactivity).
3. The team is co-located in the same space where possible or, if not possible, attempts to approximate co-location (e.g., through virtual tools/technology). From the client's perspective, all the doors they knock on are the right doors.
4. The team allocates and optimizes the use of time for collaborative practices (e.g., client-provider and provider-provider interactions).
5. There are sufficient and skilled human resources appropriate to the needs of the population served and modes of practice required (e.g., tele-mental health).
6. Organizational leaders support and enable collaborative practices and measure their collective impact (e.g., not just individual clinicians' impact).

7. Local clinical and administrative leaders are effective in coordinating with other organizations and delivering services to overlapping client populations (e.g., horizontal network management).
8. Mental health service users have a formal leadership role in the organization.
9. IT infrastructure exists to support individual clinical care (e.g., shared EHR supports communication, collaboration, and decision making).
10. The collaborative care program is operationally reliable, with consistent day-to-day service delivery and care processes that occur as planned or intended.
11. Regional health policies and funding models support collaborative practice and provide a foundation for effective primary care.



## *Level of integration between mental health and primary care services*

Services are well coordinated within the collaborative care program, and between the primary care team and external mental health specialists (e.g., hospital-based psychiatric care) and other sectors (e.g., education).

### **■ Dimensions**

1. Mental health and primary care services share a common mission and goal.
2. Primary care and mental health service providers (and departments, where relevant) jointly decide which services will be offered as well as where and to whom.
3. Bidirectional care pathways between mental health and primary care services facilitate client transitions (e.g., system navigation, informational continuity).
4. Community mental health and addiction services, and advocates including people living with mental health problems and illnesses and caregivers, are partners in designing and delivering services.



# Recommendations for Measuring the Quality of Collaborative Care in Practice

Practice-level indicators can be used to evaluate and improve the quality of collaborative care in primary health settings. While practices and programs will need to develop feasible, reliable, and valid ways of measuring these quality dimensions for their local settings, any improvement initiative will need to develop a “family” of measures. This family includes measures related to

- **process** — checking whether the intended change was implemented with fidelity
- **outcome** — assessing whether the change led to an improvement
- **balancing** — considering any unintended negative consequences of the change.

There are several advantages to focusing this family of measures on the quality dimensions in Table 4. Consider the following:

1. These dimensions reflect essential aims and approaches of collaborative care that are widely endorsed across Canada.
2. These dimensions will allow innovative clinical and administrative leaders in collaborative care programming to more easily compare results with peers and know how to continually improve collaborative care in primary care settings.
3. Innovators can attract the attention and support of policy makers and funders by demonstrating the relevance of their work to population health and health-system priorities.
4. Policy makers and funders will be able to more easily assess the results of investing in collaborative care initiatives.\*

---

\* To support points 3 and 4, by design, our recommended quality dimensions align with MHCC indicators (in *Informing the Future: Mental Health Indicators for Canada*), which allow each jurisdiction to measure its progress in transforming the system and improving outcomes over time.

**TABLE 4.** Recommended quality dimensions for measuring collaborative care

Quality Domain	Specific Dimensions to be Measured	Potential Tools for Measurement
Access and timeliness	<p><b>Triage</b></p> <p>A mechanism or process to prioritize and sequence client care beyond a first-come, first-served basis, (e.g., urgency).</p> <p><b>Decision support</b></p> <p>The time between a primary care provider's request and their receipt of support (e.g., from a specialist) for managing client care (e.g., could involve direct client consultation or advice provided without seeing the client, depending on circumstances).</p> <p><b>Wait time</b></p> <p>The time between recognizing a need for service and receiving an appropriate treatment (from the client's perspective).</p>	<p><u>Assessment of Chronic Illness Care (ACIC)</u>: Decision Support (Part 3b): "Effective chronic illness management programs assure that providers have access to evidence-based information necessary to care for patients — decision support. This includes evidence-based practice guidelines or protocols, specialty consultation, provider education, and activating patients to make provider teams aware of effective therapies" (para. 1).<sup>31</sup></p>
Client care outcomes	<p><b>Quality of life</b></p> <p>Includes social and role functioning</p> <p><b>Recovery</b></p> <p>Includes wellness, hope, self-efficacy, social inclusion, meaning, and purpose</p> <p><b>Symptom reduction</b></p> <p>Based on validated rating scales</p>	<p>The (free) <u>Sheehan Disability Scale</u> and <u>EQ-5D Instruments</u> are widely used to evaluate collaborative care interventions.</p> <p>The SF-12 measurement tool is often used to evaluate the impact of collaborative care interventions on quality of life; however, barriers to its use include the cost and challenges in its analysis/interpretation.</p> <p>The <u>Personal Recovery Outcome Measure</u> is a new 30-item self-report scale. It is freely available and can be used to measure recovery in people with mental health challenges.</p> <p>The measure has been tested with adults and young adults to date, showing high internal consistency and validity.*</p> <p>The <u>PHQ-9 Depression Symptom Self-Report Scale</u><sup>32</sup> and <u>GAD-7 Anxiety Symptom Self-Report Scale</u> are freely available measures of symptoms that are commonly used to evaluate collaborative care interventions.</p>

\* Also see: Barbic, P. S., Kidd, S. A., Durisko, Z. T., Yachouh, R., Rathitharan, G., & McKenzie, K. (2018). What are the personal recovery needs of community-dwelling individuals with mental illness: Preliminary findings from the Canadian Personal Recovery Outcome Measure (C-Prom) study. *Canadian Journal of Community Mental Health*, 37, 29-47. <https://doi.org/10.7870/cjcmh-2018-005>



Quality Domain	Specific Dimensions to be Measured	Potential Tools for Measurement
Client inclusion and participation	<p>Clients are included <b><i>in their own care.</i></b></p> <p>Clients are meaningfully involved <b><i>in program planning, evaluation, and improvement</i></b> at all stages.</p>	<p>The <a href="#">2010 Commonwealth Fund International Health Policy Survey</a> measured inclusion by asking how often clients were involved (to the extent they wanted to be) in decisions about their treatment (response options were: always, often, sometimes, or rarely/never).</p> <p>The <a href="#">Public and Patient Engagement Evaluation Tool</a> asks respondents the extent to which they agree with the following statements:</p> <ul style="list-style-type: none"> <li>• Organizational leaders ensure that public and patient input is used in [collaborative-care] service planning and decision making.</li> <li>• I am aware of PPE activities that have influenced relevant decisions at the [collaborative-care] program level.</li> </ul> <p>Practices could also consider asking whether client satisfaction data is used to inform decisions (e.g., at the program or board level), but this inquiry signifies a lower level of engagement.</p>

Quality Domain	Specific Dimensions to be Measured	Potential Tools for Measurement
Equity, population health outcomes, and population-based care processes	<p><b>Infrastructure</b></p> <p>The primary care organization has the infrastructure to collect, manage, and harness insights from data on the population of clients served.</p> <p><b>Proactive care</b></p> <p>The primary care organization uses available data to reflect on health needs of the population of clients served (e.g., including social determinants of health) and to become more proactive in planning and delivering services.</p>	<p>ACIC: Clinical Information Systems (Part 3d): “Timely, useful information about individual patients and populations of patients with chronic conditions is a critical feature of effective programs, especially those that employ population-based approaches” (para. 1). Respondents rate their clinic on an A to D scale, with descriptors provided:</p> <ul style="list-style-type: none"> <li>• “Registry (list of patients with specific conditions)... is not available” (Level D) or “is tied to guidelines which provide prompts and reminders about needed services” (Level A).</li> <li>• “Information about Relevant Subgroups of Patients Needing Services ... “is not available” (Level D) or “is provided routinely to providers to help them deliver planned care” (Level A).</li> </ul> <p>Note that data may be from different sources (e.g., electronic health records or community/regional statistics).</p> <p>ACIC: Integration of Chronic Care Model Components. “Effective systems of care integrate and combine all elements of the Chronic Care Model; e.g., linking patients’ self-management goals to information systems/registries” (para. 1). Respondents rate their clinic on an A to D scale, with descriptors provided:</p> <ul style="list-style-type: none"> <li>• “Organizational Planning for Chronic Illness Care... does not involve a population-based approach” (Level D) or “uses systematic data and input from practice teams to proactively plan population-based care, including the development of self-management programs and community partnerships, that include a built-in evaluation plan to determine success over time” (Level A).</li> </ul>



# Discussion

In this report, we outline the revised QI4CC framework, which provides an important set of quality dimensions and potential measures for practices across Canada to use as they implement, develop, and improve their collaborative care programs. Its distilled set of measures is based on a broad evidence base, including the first-hand knowledge of people with lived experience. Due to the participation of mental health service users, the framework includes specific measures that matter to people living with mental health challenges. While the previous framework also included a broad evidence base, the revised version includes additional feedback and input that ensures its national applicability. A comparison of the previous framework with MHCC indicators further validated our recommended measures. The framework now includes a quality domain for capacity building, previously considered but not included in the original framework. Additionally, the national consultation highlighted the importance of technology for accessing collaborative care, especially in rural and remote areas, as well as cultural competence at provider and organizational levels. Future studies should explore the framework's international applicability, its appropriateness for team-based care beyond primary care, and its relevance to care of chronic physical health conditions.

We hope this concise set of measures supports primary care and mental health teams as they collaborate to implement them to improve their practice. While doing so will initially require additional resources, as teams become adept at measurement, strategies for efficient measurement can be shared across programs. Treating mental illness in primary care brings many challenges: clients face difficulties accessing mental health care, while primary care clinicians experience challenges with coordinating it. Still, our perception is that primary care teams are less experienced in, and face more barriers with, measurement and quality improvement in collaborative mental health care than they do in physical health care. This situation may stem from the challenges of practising in a field often taken to be less *measurable* — a perception furthered by a lack of government incentives or requirements to measure mental health-related outcomes (compared with cancer screening, e.g.) and a high burden of measurement overall in health care (i.e., competing demands). We believe this set of suggested measures for four domains will provide teams with much-needed tools to commit (or re-commit) to quality measurement and improvement activities in collaborative care. Over the longer term, common measures will allow teams to compare results and build on each other's measurement and improvement activities, thereby adding vitally needed practice-based evidence to the field of collaborative care.

## Limitations

We set out to update our quality framework to reflect a pan-Canadian perspective and to recommend a set of quality measures (informed by evidence) to evaluate collaborative care initiatives in primary care practices. There are several limitations to our study.

We had a 56 per cent response rate (33 of 59) to our individual interview requests, but we did our best to include people representing different disciplines (e.g., family medicine, psychiatry) and perspectives (e.g., clinicians and administrators). Geography, population distribution and health policies create widely varied micro-environments across Canada. While delivering health care in urban areas is vastly different than in rural areas, rural health care in southern Ontario also bears little resemblance to rural practice in Labrador or northern Manitoba. Even as we sought to get a sense of collaborative care implementation, there may be some gaps in our information (i.e., limitations of our sample) given the variable models of collaborative and interprofessional care as well as the organization of primary care across regions, health authorities, and provinces.\*

It was also challenging to connect with key informants from the North, so we relied on our collaborators to support our outreach efforts. For some key informants working there, our population-based care measures were met with particular trepidation. Information technology was either lacking or had not been implemented — including the shared electronic health records and the routinized/systematic mechanisms that are needed to collect, manage, and harness data related to their client populations. Such technology may be crucial to measuring population health and planning care that addresses the specific impacts of the social determinants of health on the mental, physical, social, and spiritual health of individuals.

Although both the original and revised frameworks received feedback from people receiving collaborative care, including input from mental health

\* For example, we only spoke with one participant from Alberta where the behavioural health consultant model has been adopted in some settings. Also, as mentioned, we deliberately under-represented Ontario in our sample, as our development of the previous framework was based in Toronto.

service users for this version, more work is needed to fully appreciate what criteria are important to people who use collaborative care services. We could benefit from further input on evaluating the domains of access and timeliness, client care outcomes, and client inclusion and participation as well as on which measurement tools are acceptable and would best capture these criteria.

We continue to be uncertain regarding if and how this work fits with Indigenous world views and knowledge systems, or whether the framework and quality measures could support efforts to decolonize and Indigenize collaborative care. These efforts would involve the leadership of Indigenous voices, scholars, and other representatives in the development, provision, and evaluation of collaborative care. Some of our key informants were intimately connected with and worked alongside Indigenous leaders, helpers, and Elders in the provision of collaborative care. They referenced the need for critical partnerships to do this work, including the integration of cultural services (e.g., traditional teachings, ceremonies, land-based knowledges and practices, community events), commitments to reconciliation, and Indigenous self-determination. We will continue to explore opportunities to connect with Indigenous health leaders to understand the framework's relevance in their local contexts and its possible implementation.



# Endnotes

- 1 Kates, N., Mazowita, G., Lemire, F., Jayabarathan, A., Bland, R., Selby, P., ... Audet, D. (2011). The evolution of collaborative mental health care in Canada: A shared vision for the future. *Canadian Journal of Psychiatry*, 56 (5, Insert) 1-10.
- 2 College of Family Physicians of Canada. (2011). *A vision for Canada: Family practice – The patient’s medical home* [Position paper]. Retrieved from [https://www.cfpc.ca/uploadedFiles/Resources/Resource\\_Items/PMH\\_A\\_Vision\\_for\\_Canada.pdf](https://www.cfpc.ca/uploadedFiles/Resources/Resource_Items/PMH_A_Vision_for_Canada.pdf)
- 3 Woltmann, E., Grogan-Kaylor, A., Perron, B., Georges, H., Kilbourne, A. M., & Bauer, M. S. (2012). Comparative effectiveness of collaborative chronic care models for mental health conditions across primary, specialty, and behavioral health care settings: Systematic review and meta-analysis. *American Journal of Psychiatry*, 169, 790-804. <https://doi.org/10.1176/appi.ajp.2012.11111616>
- 4 Archer, J., Bower, P., Gilbody, S., Lovell, K., Richards, D., Gask, L., ... Coventry, P. (2012). Collaborative care for depression and anxiety problems. *Cochrane Database of Systematic Reviews*, 2012(10). <https://doi.org/10.1002/14651858.CD006525.pub2>
- 5 Sunderji, N., Ghavam-Rassoul, A., Ion, A., & Lin, E. (2016). *Driving improvements in the implementation of collaborative mental health care: A quality framework to guide measurement, improvement and research*. <https://doi.org/10.13140/RG.2.2.14312.47365>
- 6 Sunderji, N., Kurdyak, P. A., Sockalingam, S., & Mulsant, B. H. (2018). Can collaborative care cure the mediocrity of usual care for common mental disorders? [Editorial]. *Canadian Journal of Psychiatry*, 63, 427-431. <https://doi.org/10.1177/0706743717748884>
- 7 Mental Health Commission of Canada. (2015). *Informing the future: Mental health indicators for Canada*. Retrieved from <https://mentalhealthcommission.ca/wp-content/uploads/2021/09/Informing-the-Future-Mental-Health-Indicators-for-Canada.pdf>
- 8 Sunderji, N., Ghavam-Rassoul, A., Ion, A., & Lin, E. (2016). *Driving improvements in the implementation of collaborative mental health care*.
- 9 Sunderji, N., Ghavam-Rassoul, A., Ion, A., & Lin, E. (2016).
- 10 Mental Health Commission of Canada. (2015). *Informing the future: Mental health indicators for Canada*.
- 11 Sunderji, N., Ghavam-Rassoul, A., Ion, A., & Lin, E. (2016). *Driving improvements in the implementation of collaborative mental health care*.
- 12 Sunderji, N., Ion, A., Ghavam-Rassoul, A., & Abate, A. (2017). Evaluating the implementation of integrated mental health care: A systematic review to guide the development of quality measures. *Psychiatric Services*, 68, 891-898. <https://doi.org/10.1176/appi.ps.201600464>
- 13 Ion, A., Sunderji, N., Jansz, G., & Ghavam-Rassoul, A. (2017). Understanding integrated mental health care in “real-world” primary care settings: What matters to health care providers and clients for evaluation and improvement? *Family Systems and Health*, 35, 271-282. <https://doi.org/10.1037/fsh0000294>
- 14 Eyre, L., Farrelly, M., & Marshall, M. (2017). What can a participatory approach to evaluation contribute to the field of integrated care? *BMJ Quality and Safety*, 26, 588-594. <https://doi.org/10.1136/bmjqs-2016-005777>
- 15 Marchand, E., Stice, E., Rohde, P., & Becker, C. B. (2011). Moving from efficacy to effectiveness trials in prevention research. *Behaviour Research and Therapy*, 49, 32-41. <https://doi.org/10.1016/j.brat.2010.10.008>
- 16 Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). Diffusion of innovations in service organizations: Systematic review and recommendations. *Milbank Quarterly*, 82, 581-629. <https://doi.org/10.1111/j.0887-378X.2004.00325.x>

- 17 Whitebird, R. R., Solberg, L. I., Jaeckels, N. A., Pietruszewski, P. B., Hadzic, S., Unutzer, J., . . . Rubenstein, L. V. (2014). Effective Implementation of collaborative care for depression: What is needed? *American Journal of Managed Care*, 20, 699-707.
- 18 Sunderji, N., Ion, A., Ghavam-Rassoul, A., & Abate, A. (2017). Evaluating the implementation of integrated mental health care: A systematic review to guide the development of quality measures.
- 19 Ion, A., Sunderji, N., Jansz, G., & Ghavam-Rassoul, A. (2017). Understanding integrated mental health care in “real-world” primary care settings: What matters to health care providers and clients for evaluation and improvement?
- 20 Sunderji, N., Ion, A., Lin, E., Ghavam-Rassoul, A., & Jansz, G. (2018). Participatory approaches to evaluating integrated care: The vital role for client inclusion and participation [Correspondence]. *BMJ Quality and Safety*, 27, 90-91. <http://dx.doi.org/10.1136/bmjqs-2017-006604>
- 21 Mental Health Commission of Canada. (2015). *Informing the future: Mental health indicators for Canada*.
- 22 Richards, L., & Morse, J. M. (2007). *Readme first for a user's guide to qualitative methods*. Los Angeles, CA: Sage Publishing.
- 23 Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, 1277-1288. <https://doi.org/10.1177/1049732305276687>
- 24 Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research Nursing and Health*, 33, 77-84. <https://doi.org/10.1002/nur.20362>
- 25 Sandelowski, M. (2000). Whatever happened to qualitative description? *Research Nursing and Health*, 23, 334-340. [https://doi.org/10.1002/1098-240X\(200008\)23:4<334::AID-NUR9>3.0.CO;2-G](https://doi.org/10.1002/1098-240X(200008)23:4<334::AID-NUR9>3.0.CO;2-G)
- 26 Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis.
- 27 Sunderji, N., Ion, A., Ghavam-Rassoul, A., & Abate, A. (2017). Evaluating the implementation of integrated mental health care.
- 28 Donabedian, A. (2003). Selecting approaches to assessing performance. In R. Bashshur (Ed.), *An introduction to quality assurance in health care*, pp. 45-57. New York, NY: Oxford University Press.
- 29 McDonald, K. M., Sundaram, V., Bravata, D. M., Lewis, R., Lin, N., Kraft, S. A., ... Owens, D. K. (2007). *Closing the quality gap: a critical analysis of quality improvement strategies* (Vol. 7, Care coordination). Rockville, MD: Agency for Healthcare Research and Quality (U.S.).
- 30 Institute of Medicine (U.S.) Committee on Quality of Health Care in America. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academies Press.
- 31 MacColl Institute for Healthcare Innovation, Group Health Cooperative. (2000). *Assessment of chronic illness care* [Measurement instrument] (Version 3.5). Retrieved from [https://www.act-center.org/application/files/2016/3111/2004/Assessment\\_Assessment\\_of\\_Chronic\\_Illness\\_Care\\_version\\_3.5.pdf](https://www.act-center.org/application/files/2016/3111/2004/Assessment_Assessment_of_Chronic_Illness_Care_version_3.5.pdf)
- 32 Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16, 606-613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>