Evaluation Proposal

Evaluation Design for Program Impact and Improvement

Prepared By:
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Prepared For:
ISMP Canada
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ISMP Canada SMS-LTC - Quality Improvement Stream

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Re: Evaluation of the Quality Improvement Stream

Encompass Solutions is pleased to respond to the Request for Proposal for the evaluation of the Quality Improvement Stream. Encompass Solutions is comprised of team of highly qualified and experienced evaluators with a breadth of knowledge in research, evaluation, administration, and clinical applications in Canadian healthcare and social programs.

Encompass Solution values collaboration and inclusion, transparency, equity, and diversity. These values serve as our guiding principles and are the foundation of the approach taken in developing this proposal, and to our future work with you. We believe that our values align with the values of your program through your organizational values, and your interest in EDIS Evaluation.

We understand the needs of this evaluation to include an evaluation of the design and implementation of the program, to learn about early outcomes of the program activities and to incorporate EDIS into the evaluation. For this reason, we have designed an evaluation that employs an Empowerment approach, that seeks to learn about process and outcome and incorporates participatory methods.

In this proposal you will find:

- An overview of our understanding of the program
- Logical model narrative describing components of the program, assumptions and external factors affecting implementation (logic model located in Appendix A
- A description of the evaluation design including, evaluation purpose and approach, stakeholder engagement, and methods for data collection, analysis, and dissemination,
- A list of potential challenges and mitigation strategies
- Relevant CES competencies
- Evaluation matrix (Located in Appendix B)

We appreciate the opportunity to submit this proposal. It is our hope to contribute to this important program with an approach that aligns with your goals and values and by offering you an evaluation plan that will support these.

Thank you and we look forward to working with you.

Sincerely,
Encompass Solutions

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We would like to begin our proposal with acknowledgement that this program engages groups, individuals and Long-Term Care Homes located on many traditional territories covering several Treaties in Ontario, Canada. While the Institute for Safe Medication Practices is an International Organization, the Canadian Chapter is in Toronto, Ontario, on the traditional territory of the Mississauga of the Credit, covered by Treaty 23.

Our Understanding of the Program

Located in Toronto, Ontario, the Institute for Safe Medication Practices (ISMP) Canada is an independent, national, not-for-profit organization committed to advancing medication safety in all healthcare settings. ISMP is led by a board of 12 highly regarded health care leaders and has an annual operating budget of $2.8m. The vision of ISMP is to reach zero preventable harms from medications (ISMP, 2023). Organizational objectives are to "Learn, Share and Act" synthesizing and disseminating knowledge. Organizational values include quality, reliability, and integrity; learning, sharing, and empowering, privacy and confidentiality; research and innovation; and trust and transparency (ISMP, 2023).

Strengthening Medication Safety in Long-Term Care (SMS-LTC) is a program funded by the Ministry of Long-Term Care Ontario (MLTCO) that aims to improve medication safety and medication management in all homes in Ontario. This program is split into 4 streams, each of which provide LTC homes with expertise and resources to improve medication safety and management. The four streams include, measurement and evaluation, incident analysis, quality improvement, and tools and support. This evaluation will focus on the Quality Improvement (QI) stream.

Currently in the implementation stage, the QI stream was publicly launched in November 2021 as a pilot program spanning 3 years (Sufian, et al. 2011). The intention of the QI stream is to support Long-Term Care homes (LTC) in continuous improvement of their medication practices. The QI stream is supported by an advisory committee comprised of 24 members who reflect a wide cross-section of stakeholders tasked with providing advice on development, implementation, and evaluation of the initiative. The target audience of this program is select LTC homes in Ontario, each reflective of diverse populations, needs, regions, size, and ownership structure. Selected LTC homes are called Champion Homes. Each Champion Home appoints a QI team who are the primary participants of the program. QI activities are designed to be completed within approximately 16 months from initiation and comprise the following six activities:

- Medication Safety Self-assessment
- Online Learning Modules
- Three Advanced Workshops
- Coaching and Facilitation
- Select and Implement 2 Medication Management Improvement Projects
- Final Evaluation

Champion Homes each participate in the identities 6 activities, in addition to receiving a Champion Home Launch Guide and participate in regular Zoom meetings, as well as developing and implementing context specific initiatives that are relevant to the LTC home and needs of the population.

Logic Model

Encompass Solutions has created a logic model (Appendix A) for ISMP Canada's SMS-LTC Quality Improvement (QI) Stream, as described above. A logic model is a graphic representation of the relationships between resources, activities, outputs, outcomes of a program. The model reflects the core assumptions used to implement activities to achieve desired outcomes and potential risks and external factors that may influences causal pathways within the model. This logic model operates under three assumptions: 1) that the Gurwitz et al. (2005) study remains the most important study about drug adverse reactions for its basis of management plans; 2) QI teams and LTC staff are willing to engage with ISMP Canada; and, 3) the activities are the best knowledge translation format.

Additionally, Encompass Solutions identified potential risks to ISMP Canada's desired outcomes: 1) Activities are not specific for QI team and LTC staff needs and 2) Limited human resources in LTC homes to implemented and follow medication management plans. The external factors that influence the causal pathways within the logic model are related to 3) COVID-19 and health systems changes impacting the ability to participate in the program and implementation of medication management plans. Prior to completion, we will meet with ISMP Canada to ensure the logic model is congruent with their vision of the program.

Evaluation Design

Evaluation Purpose & Objectives
Based on ISMP's request for evaluation, the main purpose of this evaluation is to:
- Q1. Evaluate the fundamental design and implementation of the QI stream,
- Q2. Provide insight to the early outcomes generated through participation, and
- Q3. Explore how Equity, Diversity, Inclusion and Sustainability (EDIS) can be incorporated into the program.

Evaluation Type and Approach

Given the implementation stage of the SMS-LTC program and its complex evaluation needs, we propose **a process evaluation** combined with an **outcomes component** to explore the program's implementation and immediate outcomes. A process evaluation will provide insight into the effectiveness of the program's design and delivery. The outcomes component will provide insight into the program's impact on its target population by identifying, documenting, and analyzing the effectiveness of program activities and whether they lead to intended immediate and intermediate outcomes. By using this mixed design, we aim to provide a holistic assessment of the program and develop feasible and meaningful recommendations to strengthen implementation and support sustained impact.

To maximize the value of the evaluation, we propose an **Empowerment approach** employed through an EDIS lens, which intentionally prioritizes diverse stakeholder needs and perspectives, and promotes capacity-building by engaging stakeholders early and continuously throughout the process (Canadian Evaluation Society, n.d.). This approach is designed to strengthen program performance and productivity while enabling the agency and voices of program staff,

participants, and other stakeholders to shape and learn from the evaluation process (Fetterman, 2000). Through this approach, Encompass Solutions and engaged stakeholders will take stock of program strengths and weaknesses, establish goals for program improvement, determine and utilize participant strengths and contributions, and help participants determine the information needed to document progress. Moreover, this approach aligns closely with Continuous Quality Improvement (CQI) principles and goals (e.g., cycles of reflection and action, monitoring evidence-based strategies), and reflects the core values of IMSP (e.g., learning, sharing, reliability, trust, etc.). The Encompass team will work with ISMP and QI teams to identify appropriate stakeholder representatives and develop a common understanding of evaluation priorities, approaches, and methodologies. Regular check-ins will be included in evaluation activities to assess the appropriateness of the evaluation plan in response to new findings and changes in the program and its ecosystem. By ensuring the evaluation design is guided by stakeholders' intended use of the evaluation, we hope to improve the likelihood that the evaluation processes and findings are used to inform decisions and facilitate program improvements.

Methods

Stakeholder Engagement

Multiple types of stakeholders will be engaged throughout the evaluation process to gain a wide view of perspectives into the program, how it functions, and to enhance the evaluation's goal of assessing the programs fundamental design and implementation (MEASURE, 2011). The specific stakeholders engaged with will be determined by who needs to use the data, who has influence and resources that can aid the program, and who will be affected by the outcome (MEASURE, 2011). The preliminary groups of stakeholders we intend to closely engage with — which are identified in Figure 1 below and will be confirmed with ISMP as part of the finalization of the evaluation plan — include the Quality Improvement Teams of each Champion Home site, the staff, residents, and family caregivers of Champion Homes, the ISMP Advisory Committee, and the ISMP Quality Stream Team. Consistent with our empowerment approach, we believe these groups should be prioritized because of their diverse perspectives and experiences with program activities, function, and design. At the end of the evaluation, the ISMP Board, the Ministry of Long-Term Care, and relevant advocacy groups will be engaged in results sharing and knowledge exchange to broaden the sphere of learning from this evaluation. Communication will be established at the beginning of the evaluation through flexible and appropriate means (e.g., Zoom or Teams meetings, e-mail correspondence and/or phone conversations) and sustained throughout the evaluation timeline.

Figure 1. Stakeholders & Engagement Summary

Evaluation Planning & Preparation

To ensure evaluation processes and findings support ongoing incremental change that are sustainable, we will leverage the principles of CQI. This evaluation proposal recommends methods that can be deployed concurrently and inform each other's ongoing development. This strategy will enable rapid cycle evaluations, aimed at generating actionable knowledge and meaningful engagement across key stakeholder groups in an iterative manner. Using a co-development approach, we will prepare data collection tools (beyond pre-existing data sources), data analysis standards, stakeholder engagement plans, and risk management strategies during this phase. Understanding the diverse nature of the stakeholder groups, we will also engage appropriate expertise within the program to identify any ethical concerns and incorporate mitigating strategies within the evaluation design. We propose the use of mixed methods, where qualitative and quantitative data work together to support a richer and broader understanding of evaluation findings. By utilizing a variety of data collection and analysis methods, participants are given opportunity to share their expertise and experiences in their preferred way and allows the team to utilize data triangulation techniques to reduce bias and improve accuracy, usability, and validity of results.

Recruitment & Consent Process

Key stakeholders will be engaged via diverse methods both digitally and in-person to create an inclusive environment and encourage participation. The first step in this process includes the collection of informed consent. A well-planned consent process can build trust and confidence in the evaluation team and establish a mutual understanding of the evaluation purpose. We will follow best practices of informed consent and provide potential participants with consent forms that clearly describe the purpose of the evaluation, processes, and risks using accessible language. The evaluation team will be trained on the importance and processes for managing consent and will support participants and parents/guardians throughout the evaluation.

Document and Data Review (Q1, Q2, Q3)

Document review is a cost-effective way to use existing program information, data, and documentation to support the understanding of the program and identify areas for improvement

(CDC, 2018). We will leverage two categories of existing documents to provide early insights that will help create themes for other engagements:

- A review of existing relevant program information will support the evaluation team in building a deeper understanding of program functions and challenges to support the development of a comprehensive logic model.
- A review of existing data collected as part of program activities to lower the cost and time barriers to evaluation, including feedback survey data collected as part of the Online Learning Module and Advanced Workshops, Indicators collected as part of the Self-Assessment and Priority Improvement Project implementation, and administrative data pertaining to the delivery of the program activities

Final Evaluation Survey – Mixed Methods (Q1, Q2, Q3)

We propose taking a mixed methods approach with respect to the Final Evaluation Survey. Quantitative questions will allow us to quickly identify trends that can be probed with qualitative questions or follow up engagements. The goal of the survey will be to answer the evaluation questions identified in the Evaluation Matrix seen in Appendix B. We will assess whether current survey data collected during Online Learning and Advanced Workshops can be used to adequately answer the evaluation questions. We will make all attempts to leverage existing data to minimize the size and burden of completing the Final Evaluation Survey. The survey will ask Champion Homes to reflect upon their experience in the context of the population they serve, and the priority improvement projects they've completed. Within those specific contexts, the survey will collect feedback on how well the materials and communication channels supported each Champion Home's process improvement capacity building. The survey will include questions on how effective program activities were, including considerations for the self-assessment forms, coaching & facilitation sessions, practical project experience, the launch guide, and monthly community of practice sessions.

Focus Groups (Q1, Q2, Q3)

We will leverage focus groups to generate conversation and collect qualitative information on the effectiveness of the program design and implementation, and impact through the EDIS lens. We will engage expertise from the ISMP Advisory Committee, organizational leaders, partner organizations, advocacy groups, and persons with lived experience to share experiences and perspectives to collaboratively identify and address EDIS concerns. Themes from document and data review will be used to inform the questions posted during the focus group sessions, but we will heavily rely on the expertise of the focus group participants to guide the conversation.

Data Analysis

Both qualitative and quantitative data will be transcribed and imported into the client's preferred data analytics tool to enable efficient and consistent organization, analysis, and summarizing of large data sets. Qualitative data will be analyzed thematically using standards developed during the evaluation planning phase to ensure consistency in approach by all evaluation team members. Quantitative data will be analyzed using descriptive statistics. To support the validity of the

findings, we will work with stakeholders to identify potential biases and ensure they are monitored during data collection and analysis. All methodologies and assumptions will be clearly tracked for ongoing assessment of potential bias.

Data Party

A Data Party is a participatory approach to data analysis that brings together a diverse range of stakeholders (Better Evaluation, 2022). The intention of the data party is to bring the stakeholder group together to formally review and interpret data that has been collected (Better, Evaluation, 2022). We will work with stakeholder groups to collaboratively develop the data party structure to ensure everyone is able to provide meaningful input. We will present the results of preliminary data analysis and engage key stakeholders to provide their interpretations, taking into consideration the unique circumstances of each Champion Home. Once we reach a consensus on key findings, the group will work together to develop specific and measurable action plans for implementing change. Engaging stakeholders in this way brings their perspective to the analysis and increases the likelihood they will understand and incorporate the analysis (Vargas, 2015).

Dissemination of Results

Results will be disseminated to key stakeholders via a **Formal Report** at the end of the evaluation, which will describe in depth the results and insights on effectiveness of the design and implementation of the QI stream, early outcomes, and how EDIS can be incorporated in future rollouts. In addition, Encompass Solutions will work with ISMP Canada to develop content for a short basic **Public Distribution Campaign** to share the results more broadly with the community and public.

We propose the use of a **Gallery Walk** to share key findings within each Champion Home. Collaborating with QI teams, we will create engaging visual displays of the evaluation findings and the value of the quality improvement programs that can be easily understood by everyone. We will share these visuals at dedicated areas within each home to create a space where viewers can inspect and reflect on the findings at their own pace and engage in conversation with fellow viewers. This method will allow individuals that were not part of the QI efforts to gain an understanding of and generate interest in the program and its goals as well as the principals of quality improvement.

Evaluation Matrix

Encompass Solutions has created an evaluation matrix that outlines our proposed evaluation questions, indicators, data sources and data collection methods (see Appendix B). Encompass Solutions will propose the evaluation questions to prioritized stakeholders and incorporate their feedback to the final and revised evaluation matrix.

Challenges and Mitigation Strategies

We understand that circumstances may change and will remain flexible to work with ISMP to identify appropriate solutions. Outlined below (Figure 2) are potential challenges and proposed mitigation strategies to minimize negative impact should these challenges materialise.

Possible Challenges	Proposed Mitigation Strategies
Ethical Concerns	• Engage stakeholders during planning to identify and develop strategies to minimize undesired impacts. • Implement consent process to ensure data is only collected from those that are capable to provide informed consent. • Work with ISMP Advisory Committee to monitor for ethical concerns.
Data Security and Confidentiality Concerns	• Data will be anonymized at the aggregate-level, stored in a secure fashion, and discarded according to ethical data storage standards.
Evaluation Team and Stakeholder Bias	• Evaluators are trained and will follow Competencies for Canadian Evaluators (CES). • Evaluators will consider all perspectives and seek alignments with the evaluation goals. The evaluators will ensure that there will be no dismissing of opinions and concerns. • Evaluation team will have transparent communication with stakeholders throughout the evaluation.
Accessibility/ Appropriateness of Evaluation Materials and Methods	• Co-development with prioritized stakeholders will ensure any accessibility concerns are addressed during evaluation planning. • Communication tools will reflect the preferences and needs of each stakeholder group. • Seek ongoing feedback from stakeholders for early identification of risks.
Limited Resource Availability	• Evaluators will conduct majority of evaluation activities to support small operational team. • Evaluators will maximize use of existing tools and data where appropriate and focus on using free or low-cost options in completing evaluation activities. • Stakeholders will only be engaged at agreed upon times to minimize burden.
Project Risks	• Ensure project management expertise is available in the evaluation team • Conduct regular check ins with advisory committee on progress • Develop clear roles & responsibilities during planning phase
COVID-19 Limitations	• All evaluation activities will be reviewed and adapted to comply with public health and organizational guidelines. • In person engagement will be done via telephone, virtual meetings, digital information sharing, and physical mail.

Figure 2. List of possible challenges and proposed mitigation strategies

Canadian Evaluation Society Competencies

Outlined below (Figure 3) indicates the CES competencies that Encompass Solutions believes are the most important to implementation of this evaluation and describes the ways they have been incorporated into the design.
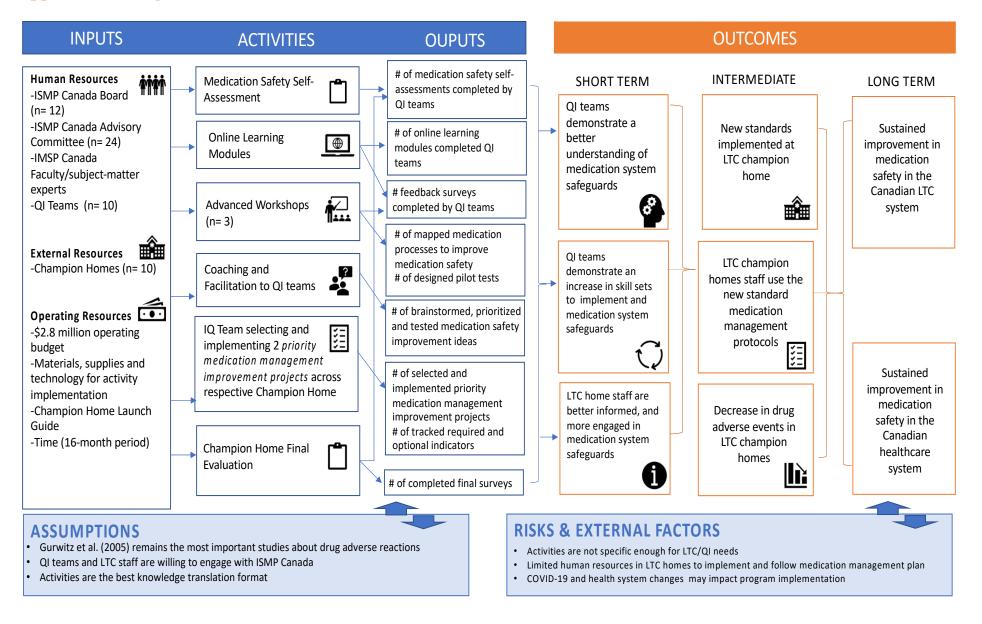
Situational Practice Domain	3.3 Respects all stakeholders and strives to maintain and build trusting relationships.	This CES competency (CES, 2018) is important as one of the core values of ISMP (Trust and Transparency) and speaks to the relationship Encompass Solutions will strive for in ISMP and all relevant stakeholders. This evaluation incorporates the stated competency through stakeholder engagement activities, empowerment and capacity building and inclusion cross-sectional perspectives.
Interpersonal Practice Domain	5.9 Attends to issues of diversity and culture.	This CES competency (CES, 2018) is important to the values of Encompass Solutions and aligns with the aim for EDI inclusion in this evaluation. This evaluation incorporates the stated competency through consideration of LTC specific context and seeking diverse perspectives through our empowerment approach and data collection methods.

Figure 3. describes our use of the Canadian Evaluation Society competencies.

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Appendix A – Logic Model

INPUTS	ACTIVITIES	OUPUTS	OUTCOMES

Human Resources
- ISMP Canada Board (n= 12)
- ISMP Canada Advisory Committee (n= 24)
- IMSP Canada Faculty/subject-matter experts
- QI Teams (n= 10)

External Resources
- Champion Homes (n= 10)

Operating Resources
- $2.8 million operating budget
- Materials, supplies and technology for activity implementation
- Champion Home Launch Guide
- Time (16-month period)

ACTIVITIES
- Medication Safety Self-Assessment
- Online Learning Modules
- Advanced Workshops (n= 3)
- Coaching and Facilitation to QI teams
- IQ Team selecting and implementing 2 *priority medication management improvement projects* across respective Champion Home
- Champion Home Final Evaluation

OUPUTS
- # of medication safety self-assessments completed by QI teams
- # of online learning modules completed QI teams
- # feedback surveys completed by QI teams
- # of mapped medication processes to improve medication safety # of designed pilot tests
- # of brainstormed, prioritized and tested medication safety improvement ideas
- # of selected and implemented priority medication management improvement projects # of tracked required and optional indicators
- # of completed final surveys

OUTCOMES

SHORT TERM
- QI teams demonstrate a better understanding of medication system safeguards
- QI teams demonstrate an increase in skill sets to implement and medication system safeguards
- LTC home staff are better informed, and more engaged in medication system safeguards

INTERMEDIATE
- New standards implemented at LTC champion home
- LTC champion homes staff use the new standard medication management protocols
- Decrease in drug adverse events in LTC champion homes

LONG TERM
- Sustained improvement in medication safety in the Canadian LTC system
- Sustained improvement in medication safety in the Canadian healthcare system

ASSUMPTIONS
- Gurwitz et al. (2005) remains the most important studies about drug adverse reactions
- QI teams and LTC staff are willing to engage with ISMP Canada
- Activities are the best knowledge translation format

RISKS & EXTERNAL FACTORS
- Activities are not specific enough for LTC/QI needs
- Limited human resources in LTC homes to implement and follow medication management plan
- COVID-19 and health system changes may impact program implementation

Appendix B – Evaluation Matrix

Evaluation Question	Indicator(s)	Data Source	Data collection method
1. How effective is the design of the QI stream activities and materials in supporting QI teams to reduce preventable harm from medications? (Q1, Q3)			
1.1. How helpful was the content and format of QI stream activities and materials in helping QI teams understand how to improve medication safety?	% of respondents reporting "helpful" or "very helpful" to questions relating to learning	QI teams	Online learning module feedback survey, Advanced workshop feedback survey, Final Evaluation survey (self-assessment forms, coaching, facilitating, project, launch guide, and zoom meetings)
1.3. How does the current design allow for contextual differences of each LTC home to meet diverse population needs?	Description of how QI stream design fits different contexts and meets diverse population needs	Representatives from each key stakeholder group	Focus group with participants representing various perspectives
2. How effective is the implementation of the QI stream activities and materials in supporting QI teams to reduce preventable harm from medications? (Q1, Q3)			
2.1. To what extent were the QI stream activities and materials implemented or disseminated as planned?	% of activities and materials implemented/disseminated as planned	ISMP QI team	Administrative data
2.2. To what extent did the QI stream activities and materials engage QI teams?	% of QI teams engaging in/with different QI stream and activities and materials	QI Teams LTC homes	Self-assessment forms, Online learning module attendance data, Online learning modules feedback surveys, Advanced workshop feedback surveys, Final evaluation survey, LTC project documents and plans
2.3. What is the level of satisfaction of QI teams with the delivery of different QI stream activities or materials?	% of respondents reporting "satisfied" or "very satisfied"	QI teams	Final evaluation survey
2.4. How does the delivery of QI activities and materials allow for contextual differences of each LTC home to fully participate in this initiative?	Description of how QI stream activity and material deliver fits different contexts and meets diverse population needs	Representatives from each key stakeholder group	Focus group with participants representing various perspectives
3. What improvements have been made in relation to priority medication management projects as a result of participating in this QI initiative? (Q2, Q3)			
3.1. How has the participation in this QI initiative influenced implementation of priority medication management projects in Champion LTC homes?	% of LTC homes reporting "often" or "always", including a disaggregation by different homes and populations they serve	LTC homes	Self-assessment form
3.2. To what extent have immediate and intermediate outcomes improved in LTC homes as a result of participating in this QI initiative (I.e., understanding and medication safety)?	% of respondents reporting "agree" or "strongly agree"	QI Teams	Online learning module feedback survey, Advanced workshop feedback survey, Final evaluation survey (general questions about learning improvement)

3.4. What impact has implementing a priority medication management project had on LTC homes, service users, and families?	Description of impact of project on LTC homes, service users, and families?	Representatives from each key stakeholder group	Focus group with participants representing various perspectives