

# STUDENT EVALUATION CASE COMPETITION CONCOURS DE CAS EN ÉVALUATION POUR LES ÉTUDIANT(E)S

# 2023 Competition Preliminary Round

# Strengthening Medication Safety in Long-Term Care - Quality Improvement Stream Institute for Safe Medication Practices Canada



### **February 4, 2023**

The Request for Proposals in this document was developed for the Student Evaluation Case Competition for educational purposes. It does not entail any commitment on the part of the Canadian Evaluation Society (CES), the Canadian Evaluation Society Educational Fund (CESEF), the Institute for Safe Medication Practices Canada (ISMP Canada), or any related sponsor or service delivery partner.

We thank ISMP Canada for graciously agreeing to let us use *Strengthening Medication Safety in Long-Term Care* for the preliminary round of the 2023 competition. We also thank Carolyn Hoffman for her input in preparing this case.

The Case Competition is proudly sponsored by:





#### Introduction

Welcome to the Preliminary Round of the 2023 CES/CESEF Student Evaluation Case Competition! Here is the scenario for this round:

Your consulting firm has been invited to respond to the attached Request for Proposals (RFP) to prepare an evaluation plan for the *Quality Improvement Stream* of the *Strengthening Medication Safety in Long-Term Care (SMS-LTC)*, an initiative to enhance the sector's ability to measure and improve medication safety led by the Institute for Safe Medication Practices Canada (ISMP Canada).

This SMS-LTC program is designed to support the long-term care sector in evaluating the safety of medication management systems. As part of the 3-year implementation of *SMS-LTC*, ISMP Canada would like to evaluate the design of the Quality Improvement Stream of their initiative.

Your proposal should (i) demonstrate your understanding of the SMS-LTC program, including a description of main objectives and tasks, a logic model; (ii) identify the evaluation questions, scope, outline an evaluation matrix, and the proposed methodology; and (iii) identify possible risks and challenges and indicate mitigation strategies to address these. You are also required to identify key evaluation competencies and related domains that are important for the successful evaluation of this program and explain how they are demonstrated in your proposal. Your evaluation framework and proposed methodology should also apply a lens of equity, diversity, inclusion, and sustainability.

Section 2.2 of the RFP describes the proposal requirements in more detail. The assessment criteria for the proposals are identified in section 2.3.

# **Organizing Committee**

The members of the 2023 CES Student Case Competition Working Group and Case Selection Sub-Committee are Kathryn Radford, Brian McGowan, Christine Sheppard, Micheal Heimlick, Tin Vo, Michelle Naimi, Samantha Inwood, Janine Badr, and Dominique Leonard.

Detailed descriptions of the <u>Competencies for Canadian Evaluators</u> is posted on the CES website under Designations.

### **Case Competition Rules**

- 1. On February 4, the team's designated contact person will receive an e-mail from Case Competition organizers indicating a website and team identification number for retrieval of the case (in both English and French).
- 2. Teams can begin work upon receipt of the document from the contact person.
- 3. Submissions may be in either official language.
- 4. The submission must be uploaded to the same website **no later than 5.5 hours** after initial download.
- 5. Coaches must not communicate with their teams once the case document has been downloaded and distributed to the team.
- 6. Submissions must be non-identifiable. Teams should refer to themselves only by an imaginative, non-revealing code name, such as Noble Consultants. Do <u>not</u> identify the <u>university</u>, city, or province/territory where your team is located. This is a key point to be kept in mind when writing your submission. You will be asked to change any identifying information if you include it.
- 7. Do <u>not</u> use the word 'evaluation' or a variation of it in your team name, as it is confusing for the judges if teams have chosen similar names.
- 8. Your submission should be prepared following the guidelines on page 9 and saved as **[your team name].pdf**, e.g. Noble Consultants.pdf. The submission must be submitted as one **PDF** file (not a zipped file of multiple documents).
- 9. Three proposals will be short-listed to select the teams to participate in Round 2 of the case competition. Teams will be notified in early to mid-April regarding the outcome of round 1. All teams will receive feedback.

#### **Questions or Problems**

To communicate with organizers on the day of the competition, please email <a href="mailto:casecomp@evaluationcanada.ca">casecomp@evaluationcanada.ca</a>, or call one of the following individuals:

Name	Phone Number	Availability (EST)
Christine Sheppard (enquiries in English)	1-226-792-7007	8:00 am to 6:00 pm
Kathryn Radford (demandes de renseignements en français)	1-613-558-6457	8:00 am to 6:00 pm

We look forward to your submission at the end of your 5.5 hours. Have fun and good luck!

# Request for Proposals: Strengthening Medication Safety in Long-Term Care - Quality Improvement Stream

# 1.0 Institute for Safe Medication Practices and Program Profile

#### 1.1 About the Institute for Safe Medication Practices Canada

The Institute for Safe Medication Practices Canada (ISMP Canada) is an independent, national, not-for-profit organization committed to advancing medication safety in all healthcare settings. ISMP Canada has an annual operating budget of approximately \$2.8m. The volunteer ISMP Canada Board is comprised of 12 highly regarded leaders in healthcare and other industries, as well as patient and family advisors.

Incorporated and launched over 20 years ago, ISMP Canada's mandate includes 1) receiving and analyzing medication incident and near-miss reports from all sectors of healthcare, including from consumers and patients, 2) identifying contributing factors and causes of medication errors, 3) making recommendations for the prevention of harmful medication incidents, and 4) collaborating with partners to take action to improve medication safety. The organization's vision is zero preventable harm from medications.

ISMP Canada's work is also guided by five core values:

- 1. **Quality, Reliability, and Integrity**: A quality, high integrity, reliable system for reporting medication incidents.
- 2. **Learning, Sharing, and Empowering**: Knowledge translation about medication system safeguards.
- Privacy and Confidentiality: Maintaining and protecting the confidentiality of individuals and organizations submitting data to ISMP Canada.
- 4. Research and Innovation: Advancing research and innovation in patient safety.
- 5. **Trust and Transparency**: Ensuring our actions are conducted with honesty and transparency, and funding is free of conflict of interest and consistent with our not-for-profit, independent status.

# 1.2 Strengthening Medication Safety in Long-Term Care (SMS-LTC) Initiative

The Gurwitz et al. (2005)<sup>2</sup> study remains one of the most important studies about Adverse Drug Events (ADEs) in the long-term care setting. ADEs include medication errors and adverse drug reactions. The 9-month study found an ADE rate of 9.8 per 100

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<sup>&</sup>lt;sup>2</sup> https://pubmed.ncbi.nlm.nih.gov/15745723/

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resident months with 42% of the ADEs deemed preventable (Gurwitz et al., 2005). The medication errors associated with preventable events occurred most often at the stages of ordering and monitoring in the medication process (Gurwitz et al., 2005). Residents are at increased risk of a preventable ADE if they are taking warfarin, atypical antipsychotic agents, loop diuretics, and opioids (Gurwitz et al., 2005). The more medications taken by a resident, the greater the risk of an ADE (Gurwitz et al., 2005).

In June 2017, Elizabeth Wettlaufer, a registered nurse working in various licensed, regulated, long-term case (LTC) homes, was convicted of first-degree murder, attempted murder, and aggravated assault after intentionally injecting her victims with an overdose of insulin.<sup>3</sup> Public outrage followed and the tragedies triggered alarm about the safety of the long-term care medication management systems, resulting in the *Gillese Inquiry*.

Following the release of findings and recommendations from the *Gillese Inquiry* (<u>The Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System</u>), ISMP Canada was asked to develop a proposal to improve medication safety and medication management in all homes in Ontario. This resulted in the development and launch of the *Strengthening Medication Safety in Long-Term Care* (SMS-LTC) initiative. The Ontario Ministry of Long-Term Care provided funding to ISMP Canada to implement the initiative across the province.

The <u>SMS-LTC initiative</u> is split into four streams, each providing participating long-term care homes with expertise and resources:

- 1. Measurement and evaluation
- 2. Incident analysis
- 3. Quality improvement
- 4. Tools and support

The focus of this RFP is on Stream 3 – Quality Improvement.

#### **Description of LTC Homes**

Long-term care homes provide a home-like environment for residents who require access to 24-hour nursing and personal care. In 2021, Canada had a total of 2076 long-term care homes; 46% are publicly owned, 29% are owned by private for-profit organizations and 23% are owned by private not-for-profit organizations.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> https://www.cbc.ca/news/canada/wettlaufer-nursing-licence-hearing-1.4212728

<sup>&</sup>lt;sup>4</sup> https://www.cihi.ca/en/long-term-care-homes-in-canada-how-many-and-who-owns-them

#### LTC Resident Profile in Canada<sup>5</sup>

90% have some form of cognitive impairment

86% need extensive help with activities such as eating or using the washroom

80% have neurological diseases

76% have heart/circulation diseases

64% have a diagnosis of dementia

62% have musculoskeletal diseases such as arthritis and osteoporosis

61% take 10 or more prescription medications

40% need monitoring for an acute medical condition

21% have experienced a stroke

#### **Champion Homes**

To support the pilot program of the SMS-LTC initiative, 10 LTC homes in Ontario were chosen (i.e., Champion Homes). The Champion Homes reflect diverse resident needs, geographic locations, sizes, and ownership models. The Champion Homes have selected representatives from residents and/or family caregivers, directors of care, medical directors or physicians, pharmacists, pharmacy technicians, registered nurses, registered practical nurses, personal support workers, and/or safety/quality improvement or risk management professionals as members of a **QI team**. Within their respective LTC home, the **QI team** is responsible for engaging with the SMS-LTC initiative.

## 1.3 Quality Improvement (QI) Stream

The QI Stream was publicly launched, with the other streams, as a pilot program in Ontario in November 2021 to support homes in continuous quality improvement of their medication practices by:

- Improving transitions between hospitals and long-term care homes to reduce the risk of medication errors in handoffs of care;
- Strengthen sector capacity to perform medication incident analysis;
- Increase resident and family engagement in the medication use process;
- Improve the safety of LTC medication management systems; and
- Ultimately, reducing the number of medication errors causing harm.

All QI Stream activities are designed for the **QI team** at each Champion Home that was established for the initial phase of the overall initiative. All QI Stream activities are designed to be completed within an approximately 16-month period from the initial launch. All Champion Homes participate in the 6 activities listed in **Table 1**; however, each **QI team** at the respective Champion Home must develop and implement QI initiatives relevant to their LTC home's context, including varying needs and challenges.

<sup>&</sup>lt;sup>5</sup> Canadian Institute for Health Information's Continuing Care Reporting System

**Table 1: QI Stream Activities and Timeline** 

Timeline	Activity
Nov 2021 to 2023	1. Medication Safety Self-Assessments at each Champion Home. The homes initially completed the self-assessment in 2021 and all 10 Champion Homes have repeated the self-assessment in the fall of 2022 with a third assessment to be conducted in 2023. There are 176 items in the self-assessment and homes are asked to rank items according to their implementation on a 5-point Likert scale (e.g., not implemented, rarely, sometimes, often, and always). Additionally, homes provide demographic information, including size of the community served, number of residents at the LTC home, LTC home ownership model (i.e., for-profit, municipal, not-for-profit), and whether the home is part of a larger health care organization or corporate group with common governance. LTC homes can access aggregate results for comparative purposes <sup>6</sup> . Some dimensions assessed to determine areas to improve include:  Resident and family engagement and partnerships Care team composition, workload, and practices Communication of medication information Medication ordering processes Medication therapy monitoring Medication labelling, storage and distribution, administration, system technology, and devices Work environment Quality improvement and risk management
Nov 2021 to Feb 2023	2. The online learning modules introduce the QI team at each Champion Home to the quality improvement journey, along with a common language and methodology. These modules provide opportunities for learners to perform some simple activities to understand the quality improvement concepts and tools, as well as translate the learning to the learners' facilities. All eight modules focus on quality improvement topics, such as process mapping, root cause analysis, and the basics of data analytics. Everyone who accesses an online module is voluntarily asked to complete a

<sup>&</sup>lt;sup>6</sup> The MSSA-LTC has been widely used by the long-term care community in Canada since it was launched by ISMP Canada in 2006 and updated in 2012. To April 15th, 2021, a total of 852 facilities had submitted at least one assessment.

Timeline	Activity
	feedback survey on their experience and learning. Access to modules is tracked by ISMP Canada.
Feb 2022 to Feb 2023	<ul> <li>3. Three advanced workshops are provided via remote facilitation by ISMP Canada faculty that are experts in process improvement. Participants from the QI teams are asked to attend and complete a feedback survey after each workshop. These workshops include:</li> <li>Mapping the medication process to identify the opportunities to improve medication safety</li> <li>Designing pilot tests for selected strategies to improve medication safety as identified through the medication safety self-assessment</li> <li>Sustaining the improvements made in medication safety through process controls and change management</li> </ul>
Feb 2022 to Feb 2023	<ul> <li>4. Coaching and facilitation are provided by subject-matter experts from ISMP Canada to QI teams. The coaching is provided to QI teams to help them:</li> <li>Define their medication safety opportunity;</li> <li>Measure the baseline, and analyze the processes associated with the defined opportunity;</li> <li>Brainstorm, prioritize, and test the most impactful improvement ideas; and</li> <li>Make the improved process the new standard at their LTC home.</li> </ul>
Apr 2022 to Feb 2023	<ul> <li>5. Each QI team is asked to select and implement 2 priority medication management improvement projects at their LTC home over this period. The QI teams are asked to track their overall progress using 6 required indicators and 12 optional indicators. The indicator data that is submitted to ISMP Canada includes: <ul> <li>Number of medication errors that alter a resident's health status or require enhanced resident monitoring per resident per quarter</li> <li>Number of resident transfers to emergency department per quarter</li> <li>Number of reported medication incidents per resident per quarter</li> <li>Number of adverse medication reactions per resident per quarter</li> </ul> </li> </ul>

Timeline	Activity		
	<ul> <li>Number of usages of rescue medication per resident per quarter</li> <li>Percentage of residents or caregivers meaningfully engaged in aspects of medication management</li> </ul>		
Feb 2023 to Mar 2023	6. Champion Home Final Evaluation – In addition to completing a third Medication Safety Self-Assessment, Champion Homes are asked to complete a final evaluation survey online. ISMP Canada will look to the evaluation consulting team for guidance on what elements to include in this survey. This survey will occur in parallel with the evaluation components that the evaluation consulting team recommends.		

In addition to the online learning modules, interactive workshops for QI teams, and facilitation support to help map and improve their medication processes, each champion home received a Champion Home Launch Guide to support their work.

Once a month Zoom meetings are held to give all Champion Homes the chance to connect with ISMP Canada Faculty and each other. At these sessions, questions or concerns with the initiative are discussed and homes are asked to share their work underway at the time. These sessions are all recorded.

#### **Key stakeholders**

Within Long-Term Care homes, quality improvement is a journey of residents and families, personal support workers, nurses, physicians, managers, and pharmacists coming together, staying together, and working together towards improved outcomes.

As such, ISMP Canada established an Advisory Committee (24 members) to engage the perspectives from a wide cross-section of key stakeholders and to receive advice on the development, implementation, and evaluation of the initiative. These include:

- Residents/families (e.g., Association of Residents' Councils, Family Council, from long-term care homes)
- Long-term Care Associations
- Champion Homes
- Provincial/Territorial Ontario Long-Term Care Clinicians (not-for-profit organization)
- Pharmacy Service Providers
- Provincial/Territorial Personal Support Worker Association
- Ministry of Long-Term Care
- Provincial/Territorial Centres for Learning, Research and Innovation

### 2.0 Scope of Work

# 2.1 Evaluation Services Required

The Institute for Safe Medication Practices Canada is seeking an Evaluation Consulting Team to conduct an evaluation of the *Strengthening Medication Safety in Long-Term Care - Quality Improvement Stream* over a 6-month period (calendar time, not consulting time). The goal of this work is to evaluate the fundamental design and implementation of the Quality Improvement Stream of the initiative focusing on the 10 Champion Homes. In addition, ISMP Canada is also interested in learning about the early outcomes generated by the Quality Improvement Stream. Although themes of equity, diversity, inclusion, and sustainability (EDIS) have not yet been incorporated into the Quality Improvement Stream, the Board of Directors indicated this is important to include. Evaluation Consulting Teams are encouraged to suggest how this could be explored through the evaluation of the Quality Improvement Stream.

# 2.2 Proposal Requirements

ISMP Canada expects proposals to include the following components:

- 1. An overview of your understanding of the ISMP Canada, the SMS-LTC Quality Improvement Stream, and the evaluation requirements.
- 2. A proposed logic model or alternative description/model of program flow and accompanying narrative for the SMS-LTC Quality Improvement Stream, including at least one underlying assumption, one risk and one external factor that may influence the outcomes. Assumptions, risks and external factors can be part of the figure or explained as part of the narrative. The logic model (or alternative description/model of program flow) should also be depicted in a way that is engaging and easy to understand.
- 3. An evaluation matrix/framework for the SMS-LTC Quality Improvement Stream, with a list of key evaluation questions and one to three indicators per question, clearly indicating which indicator is linked to which question and the related outcomes. Please include a description of how an equity, diversity, inclusion, and sustainability lens can be applied in the evaluation of the Quality Improvement Stream.
- 4. A description of the evaluation approach and data collection methods you recommend (including any theoretical approaches you deem necessary). Please propose elements that could be assessed in the final evaluation survey.
- 5. Anticipated challenges to conducting the evaluation (e.g., logistics, methodology, ethics, stakeholder engagement) and how you propose to deal with them (i.e., risk mitigation).

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6. The identification of 2 key Credentialed Evaluator competencies<sup>7</sup> and the domains into which they fall that you feel is most important for a successful evaluation of this program along with an explanation of why these competencies are important and how they are reflected in the evaluation plan.

ISMP Canada estimates that it will take 6 months for this evaluation. <u>The Committee</u> does not require that proposals include a budget or work plan.

Proposals <u>must</u> meet the following technical specifications. <u>Failure to adhere to these</u> <u>guidelines will result in penalties of up to 5%.</u>

- Maximum of <u>12</u> pages, excluding the cover letter, cover page, table of contents, and references. <u>Text over 12 pages</u>, including any appendices, will not be read, or scored.
- Standard paper size (8.5 x 11).
- 12-point minimum font size for text.
- Have 1-inch margins (top, bottom, left and right sides).
- For all tables and figures (embedded in-text or appended), minimum font size is 10 point and have margins less than 1 inch.

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<sup>&</sup>lt;sup>7</sup> Competencies for Canadian Evaluators is posted on the CES website under Designations.

# 2.3 Judging Criteria

The criteria by which submissions will be assessed are as follows:

Criteria		
1.	<b>Understanding of the requirement:</b> Demonstration of an understanding of the ISMP Canada, the <i>SMS-LTC - Quality Improvement Stream</i> , and the ISMP Canada's evaluation needs (beyond a reiteration of the text provided in the RFP).	5%
2.	Logic model and logic model narrative (or alternative description/model): Clarity, completeness and appropriateness of the proposed model, including at least one underlying assumption, one risk and one external factor that may influence whether the outcomes can be achieved. The assumptions, risks and external factors can be included as part of the figure or explained as part of the narrative. The model should be designed in a way that is easy for key stakeholders to understand.	15%
3.	<b>Evaluation approach and methods:</b> Appropriateness of the approach and data collection methods. with a diversity, equity, inclusion, and sustainability lens.	15%
4.	<b>Evaluation matrix/framework:</b> Appropriateness and clarity of evaluation questions, and appropriateness and feasibility of indicators.	20%
5.	<b>Challenges and mitigation strategy:</b> Clarity and appropriateness of the assessment of challenges to conducting the evaluation, including issues related to logistics, methodology, ethics, and stakeholder engagement, among others.	15%
6.	Competencies for Canadian evaluation practice: Relevance of the competencies identified and their related domains.	5%
7.	<b>Equity, diversity, inclusion, and sustainability:</b> An equity, diversity, inclusion, and sustainability lens is described in the approach and methodology, and/or applied throughout the proposal.	5%
8.	<b>Innovation:</b> Innovative ideas in relation to the logic model, the evaluation approach, methods, the framework or dealing with risks.	10%
9.	Proposal: Quality of the proposal (presentation and format)	10%
Тс	tal	100%