



USER GUIDE

# Medication Safety Self-Assessment® for Long-Term Care

Canadian Version III



Strengthening Med Safety in  
Long-Term Care



Institute for Safe Medication Practices Canada  
Institut pour la sécurité des médicaments  
aux patients du Canada

This User Guide is designed to support the use of the Medication Safety Self-Assessment for Long-Term Care (MSSA-LTC), Canadian Version III in your Home. It offers guidance for facilitation of the assessment process and support for using the results to develop a quality improvement plan.

For questions about the Medication Safety Self-Assessment for Long-Term Care, or this User Guide, email [mssa@ismpcanada.ca](mailto:mssa@ismpcanada.ca).

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Views expressed in this document are those of ISMP Canada and do not necessarily reflect those of the Province.



# MEDICATION SAFETY SELF-ASSESSMENT FOR LONG-TERM CARE CANADIAN VERSION III – USER GUIDE

## TABLE OF CONTENTS

<b>Section 1: Facilitator Guide.....</b>	<b>4</b>
Facilitator Checklist.....	5
MSSA Overview.....	6
Completing the MSSA-LTC.....	7
<b>Section 2: Interpretation of Results.....</b>	<b>17</b>
Comparing Your Data to the Aggregate Dataset .....	18
Single Homes .....	18
Multiple Sites - Collaborative Groups .....	21
<b>Section 3: Sharing Results.....</b>	<b>23</b>
Sharing Learning.....	24
Sample Slides .....	25
<b>Section 4: Understanding the Principles Supporting Resident Safety .....</b>	<b>29</b>
Understanding Human Factors .....	30
What is a “System Approach”.....	30
Hierarchy of Effectiveness .....	30
Just Culture.....	32

# Section 1:

# Facilitator Guide

## Facilitator Checklist

### Preparing to complete the assessment:

- ☐ Review the Introduction section of the MSSA-LTC document (p. 5-11)
- ☐ Review the Facilitator Guide (Section 1 of this document).
- ☐ Identify and invite the members of the assessment team. Plan to include resident and family caregiver representatives.
- ☐ Schedule meeting(s). Most teams can complete the assessment in 2-3 hours.
- ☐ Register to complete the MSSA-LTC at: <https://mssa.ismp-canada.org/ltc/register>.  
Note that it will take 1-3 business days to approve your registration before you can enter results into the online portal.
- ☐ Send a copy of the MSSA-LTC to each team member and ask them to read the Introduction Section and review and score each assessment item, according to their knowledge and experience.
- ☐ Print a hard copy of the MSSA-LTC for reference during the team meeting(s). Write the username and password in the front cover of the hard copy for future reference.

### Assessment Meeting:

- ☐ Log into the online access portal: <https://mssa.ismp-canada.org/ltc>.
- ☐ Complete the Demographic Information.
- ☐ Review the scoring algorithm with the team.
- ☐ Review each assessment item and agree on a consensus response. If there is disagreement, use the lowest score, as the goal of the assessment is to identify potential medication safety risks. Enter your choice into the online survey form.
- ☐ Keep notes on additional issues and considerations that come up during your meetings. Record these in the “Notes” section in your hard copy. (Notes cannot be recorded in the online version.)
- ☐ Save each Key Element section as you complete it. Save  
If you leave the Key Element page without saving, your data will be lost. If you cannot complete entering all your data at one time, you can log out and return to the assessment at a later time.
- ☐ Once you have completed all the Key Element sections, you will be prompted to Check MSSA For Errors. This step will identify any missing data entries.
- ☐ Next you will be prompted to select Submit MSSA Results. You may not change any data once you have finalized the MSSA.
- ☐ Review and share results. See [Section 2: Interpretation of Results](#).

## MSSA Overview

ISMP Canada is not a standard-setting organization and the assessment items in this document are not meant to represent a minimum standard of practice. Some of the practices described in the assessment items represent innovative practices and system enhancements that are not yet widely implemented; however, their value in reducing errors is grounded in research and expert analysis of medication incidents and their causes.

The process of completing the MSSA-LTC is intended to identify areas of focus for quality improvement and enhancement of medication practices to support resident safety. MSSA-LTC results can be combined with learning from review and analysis of medication incident reports to support organizational improvement programs. There is no minimum expected score, and Homes should not expect to score highly in all areas.

MSSA findings are intended for internal use and become more useful as repeat assessments are performed to see where improvements have been achieved over time and where challenges remain. MSSA findings are also useful for de-identified analysis and learning at a system level.<sup>1,2</sup>

De-identified aggregate results are available for comparison and learning related to quality improvement. The responses and results from individual Homes are securely stored by ISMP Canada and the identity of individual respondents cannot be determined by other participating Homes.

### Benefits of Completing the MSSA-LTC

The MSSA-LTC is an excellent way to raise awareness among care team members about how different components of the medication system contribute to resident safety.

The MSSA-LTC can help identify potential improvements to the medication system, including quick fixes as well as more complex changes, which can reduce the risk of medication incidents and improve resident safety.

### Structure of the MSSA

The self-assessment includes 176 items divided into 18 sections, referred to as “Key Elements”. Each Key Element section is divided into one or more sub-sections, referred to as “Core Characteristics”. Each Core Characteristic section includes a number of assessment items. Teams are asked to score the current level of implementation for each assessment item.

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<sup>1</sup> Medication Safety in Long-Term Care. ISMP Canada Safety Bulletin 2008 [cited 2021Feb21; 8(10). Available from: <https://www.ismp-canada.org/download/safetyBulletins/ISMPCSB2008-10MedicationSafetyinLongTermCare.pdf>

<sup>2</sup> Medication Safety in Long-Term Care: Measuring Quality Improvement Over 12 Years. ISMP Canada Safety Bulletin, 2009 [cited 2021 Feb21]; 19(3). Available from: <https://www.ismp-canada.org/download/safetyBulletins/2019/ISMPCSB2019-i3-LTC-MSSA.pdf>

## Completing the MSSA-LTC

The MSSA-LTC is best completed in a group meeting by an assessment team that includes residents and family caregivers in addition to Home leadership staff and care team members representing all disciplines involved in the medication use process.

### Engaging Residents and Family Caregivers

Residents and their family caregivers offer a unique perspective to the assessment team and play a vital role in identifying potential areas for improvement within the medication system in long-term care Homes. A resident safety culture is closely linked to resident and family caregiver engagement. When engagement increases, culture matures; as culture matures, engagement opportunities become more evident and authentic.

To promote resident and caregiver engagement during the assessment process, consider the following strategies:

- Invite residents and their family caregivers to a team meeting to discuss their experiences.
- Schedule meeting(s) to accommodate the availability of resident and their family caregivers.
- Ensure residents and their family caregivers have access to technology to support their involvement.

### *The Assessment Team*

Establish an assessment team consisting of, or similar to, the following:

- Resident and/or family caregiver
- Director of care
- Medical Director
- Prescriber(s): Physician and/or Nurse Practitioner
- Pharmacist
- Pharmacy technician, if applicable
- Registered Nurse
- Registered Practical Nurse
- Personal support worker
- Safety/quality improvement and/or risk management professional(s)

Since medication use is a complex, interdisciplinary process, the value and accuracy of the self-assessment is significantly reduced if it is completed by a single discipline. Participation of front-line staff and the consultant pharmacist enhances the validity of the results.

Allow sufficient time to complete the self-assessment. Most teams are able to complete the assessment in 2-3 hours, as a single meeting or in a series of one-hour meetings.

Support teams to accurately and honestly evaluate the current status of the medication practices in your Home.

Refer to the Facilitator Checklist.

## Scoring Your Self-Assessment

A five-point scale is used to score each item.

Assessment items refer to medications prescribed, dispensed, and administered to *all* residents of the Home unless otherwise noted.

### Scoring Your Self-Assessment

<b>N = 0</b>	<b>Not Implemented</b> – Select “Not Implemented” for items that are not in use at this time (e.g., medication system technologies). These items are designed to proactively inform safeguards if or when the practice applies in the future.
<b>R = 1</b>	<b>Rarely</b> – Select “Rarely” for items that are implemented and in practice less than 25% of the time.
<b>S = 2</b>	<b>Sometimes</b> – Select “Sometimes” for items that are implemented and in practice 25-50% of the time.
<b>O = 3</b>	<b>Often</b> – Select “Often” for items that are implemented and in practice 50-75% of the time.
<b>A = 4</b>	<b>Always</b> – Select “Always” for items that are implemented and in practice more than 75% of the time. For self-assessment items with multiple components, full implementation (score of A) is appropriate only if all components are present.

## Scoring Considerations

### A) Partial Implementation:

An item may be ranked **R-Rarely**, **S-Sometimes**, or **O-Often** if it describes a practice that is not fully implemented.

For example, item **2.1** states “*The medication administration record contains current resident photographs to assist staff in identifying residents for medication administration*”. If this practice is fully implemented in some areas (e.g., a secure unit for residents with dementia) but not everywhere, you would make a determination of **R-Rarely**, **S-Sometimes**, or **O-Often**, depending on the proportion of the Home where this practice is in place.

### B) Future Implementation:

If an item has been discussed or considered for implementation, or is planned to be implemented soon, it should still be scored as **N-Not Implemented** because it is not in practice at the time of completing the MSSA-LTC.

For example, Item **23.4** states “*Designated practitioners with training in quality improvement methodologies are utilized to enhance detection of medication incidents, oversee systems-based analyses, and coordinate effective incident reduction plans*”. If your Home had posted a position but not yet hired someone for this role, you would score this item as **N-Not Implemented**.

#### C) No Plan for Implementation/Not Applicable Items:

The MSSA-LTC is a safety assessment and is intended to guide Homes to consider opportunities to improve safe medication management.

If an item describes a service, practice or technology that you do not currently have or that is not applicable to your Home, use a score of **N-Not Implemented**.

Some of these items may present future opportunities, e.g., medication safety technologies. Others may reflect services, such as intravenous medication administration that are infrequently required and not feasible for implementation.

Items that are not in place in your Home do not contribute to your overall score, as these items will receive a score of 0.

#### D) Self-Assessment Items with Multiple Components:

Some assessment items have multiple components. To score **A-Always**, all components must be present. If one or some of the components has been partially or fully implemented throughout the organization, self-assessment scores should consider the most appropriate response, which could include, **R-Rarely**, **S-Sometimes** or **O-Often**.

For example, for Item 19.3 “*Staff have been trained in **and** follow detailed downtime procedures when medication system technologies are not available*”, your response would need to first consider whether all staff have been trained and second how much of the time the established procedures are followed.

#### E) Self-Assessment Items with Two Distinct Parts:

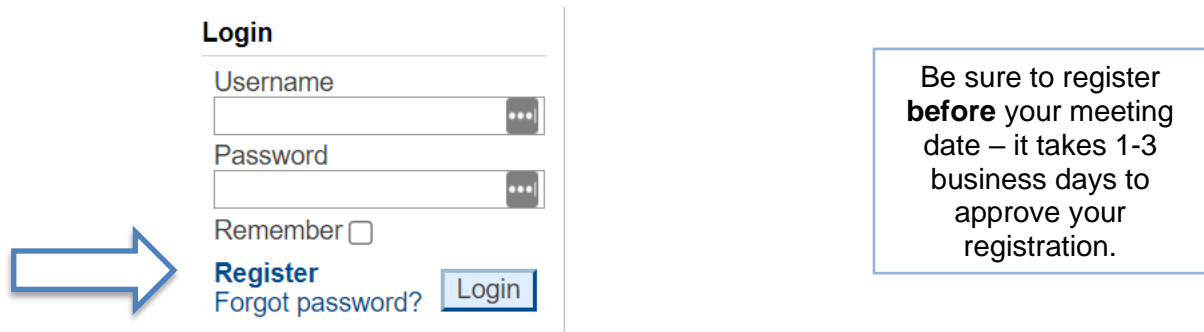
For assessment items with 2 distinct parts, separated with the word OR and labelled “a” and “b”, score either Part a or Part b, but not both.

## Online Data Entry

### Pre-registration

Pre-registration is required to enter your data into the online self-assessment tool.

Go to: <https://mssa.ismp-canada.org/ltc/register>. You will see the Login screen on the left-hand side of the page.



The screenshot shows a web interface for login and registration. On the left, a large blue arrow points towards the 'Register' link. The main form area is titled 'Login' and contains fields for 'Username' and 'Password', each with a 'Show/Hide' icon (three dots). Below these fields is a 'Remember' checkbox. At the bottom of the form are links for 'Register' and 'Forgot password?', and a blue 'Login' button. To the right of the form, a blue-bordered box contains the text: 'Be sure to register **before** your meeting date – it takes 1-3 business days to approve your registration.'

When you register, you will be asked to set up your own username and password. For easy retrieval, we recommend that you print a hard copy of the MSSA-LTC and write the username and password inside the front cover.

It will take 1-3 business days to approve your registration so you will need to register a few days before meeting with the Assessment Team. You will receive an email from ISMP Canada indicating that your registration has been approved.

### Survey Credits

ISMP Canada will authorize one survey credit at a time. If you want to repeat your assessment, you will need to contact ISMP Canada to request a new survey credit. Email [mssa@ismpcanada.ca](mailto:mssa@ismpcanada.ca).

Your previous assessments are stored in ISMP Canada's secure database, and you can continue to access all previously completed assessments.

### Confidentiality and Security of Data

Responses are submitted directly into ISMP Canada's secure database – no data is stored on the Internet. Only the Home submitting data can access it. Individual Homes are able to access de-identified aggregate results for comparative purposes. Individual respondents cannot be identified from the aggregate results.

ISMP Canada analyst staff can access data upon request, and with permission from the individual Home; for example, when a Home requests that ISMP Canada retrieve a username/password, or identifies an error in data submitted.

ISMP Canada is committed to protecting the privacy, confidentiality, and security of all information for which it is responsible. All activities related to MSSA data are conducted in compliance with ISMP Canada's privacy policy; available from: [https://www.ismp-canada.org/privacy\\_policy.htm](https://www.ismp-canada.org/privacy_policy.htm).

## Data Entry

1. Go to: <https://mssa.ismp-canada.org/ltc>.
2. Enter your Home's unique username and confidential password into the designated fields.

**Login**

Username

Password

Remember ☐

[Register](#) [Forgot password?](#)

3. Click on **Begin a new assessment** in the toolbar on the left side of the screen. Review the End User License Agreement and select the box to accept the agreement. Click **Submit**.

**ISMP CANADA**

Institute for Safe Medication Practices Canada  
Medication Safety Self-Assessment®

Account Settings | Logout

### End User License Agreement

By clicking the accept button, you confirm that you have read, understood and agree to the terms of the following policies.

**Privacy Policy** - Data transmission is encrypted and strict confidentiality guidelines are enforced. ISMP Canada is committed to maintaining your privacy.

**User Data Policy** - ISMP Canada will not publish nor disclose individual user data. Individual user data is owned by the user and can be erased via a request to [mssa@ismpcanada.ca](mailto:mssa@ismpcanada.ca).

**Aggregate Data Policy** - Aggregate data can be used internally by the user but not externally without ISMP Canada permission. ISMP Canada may publish aggregate data in the future for educational purposes.

☒ I accept the agreement

4. Complete the Demographics section and  your results.

Medication Safety Self-Assessment for Long-Term Care

### Demographics

**Demographics** I II III IV V VI VII VIII IX X XI XII XIII  
XIV XV XVI XVII XVIII XIX

1. Province:

2. Which category best describes the size of the community served by your Home?

☐ Very small population centre (less than 1,000)

☐ Small population centre (1,000 - 29,999)

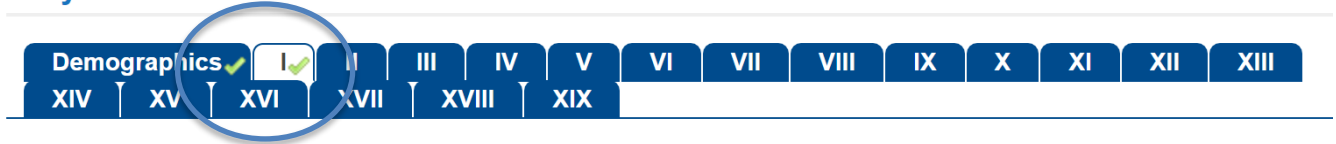
☐ Medium population centre (30,000 - 99,999)

☐ Large population centre (100,000 and over)

5. Complete each “Key Element” page and [Save](#) your results before moving to the next page. At the top of the page, you will see a checkmark for each completed section.

Medication Safety Self-Assessment for Long-Term Care

### Key Section I



6. If you cannot complete the assessment in one session, make sure you have saved the last page of responses you entered.
7. When you have completed all the Key Element sections, you will be prompted to [Check MSSA For Errors](#). This will identify any incomplete sections.
8. Once data entry is complete, the option to [Submit MSSA Results](#) will appear at the bottom of the page. No changes can be made to your entries once you have submitted the assessment.
9. Once your data has been submitted, you can immediately compare your results to the aggregate dataset. See [Section 3](#) for more details.

### Frequency of Self-Assessment

Your first MSSA-LTC will provide you with a baseline and you will be able to monitor your progress over time.

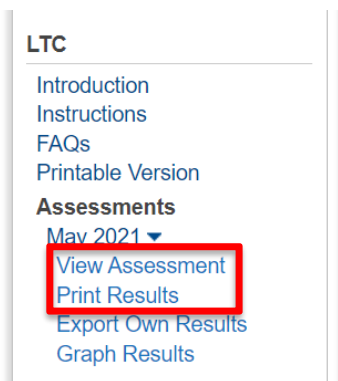
The frequency of completion will be influenced by regulatory requirements as well as your local quality improvement implementation plan.

ISMP Canada recommends completing the MSSA-LTC annually.

# Viewing, Printing and Saving Your Results

## Viewing and Printing Your Results

Once you have submitted your MSSA-LTC responses, you can view and/or print your results. Go to the toolbar on the left side of the screen and select the date of the self-assessment you wish to view or print.



Click **View Assessment** to view a PDF copy of the assessment as you submitted it. Below is an example of the view option showing Core Characteristic 1.

Core characteristic 1: Residents or their substitute decision makers are included as active partners in their care through education about their prescribed medications and ways to prevent harm associated with medication use.					
	N	R	S	O	A
1.1 The medication safety committee includes resident/family caregiver representatives.	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2 During care conferences and other interactions with residents/family caregivers, prescribers and other members of the health care team discuss health priorities (i.e., What matters to you?) and encourage active participation in shared decision-making about medication therapy (for example, using resources such as 5 Questions to Ask About Your Medications).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
1.3 Residents and family caregivers are given the opportunity to learn about their medications and how they can help to prevent errors (e.g., if able, provide their name when asked during medication administration).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
1.4 When a new medication is prescribed, a practitioner (e.g., prescriber, nurse, consultant pharmacist) informs the resident or family caregiver of the name and dose of the medication, the general purpose for use, expected outcomes and important side effects and obtains informed consent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
1.5 All harmful or potentially harmful medication incidents that reach a resident are fully disclosed to the resident and/or family caregivers in a timely manner. <a href="#">FAQ</a>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
1.6 When a resident experiences a medication incident, the resident and/or their family caregivers are given an opportunity to share their perspective as part of the information gathering step of an incident analysis and are invited to provide input into possible preventive actions.	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Click **Print Results** to print the results as a PDF document.

The report will include the date when the MSSA-LTC was finalized, the demographic data entered, a summary of the scores for each of the Key Elements expressed as a fraction of the total score possible and as a percentage of the total score, and your responses and scores for all of the items (example shown below).



**Institute for Safe Medication Practices Canada**

**Medication Safety Self-Assessment for Long-Term Care - Submitted on May 13, 2021**

### Demographics

**1. Province**

Ontario

**2. Which category best describes the size of the community served by your Home?**

Medium population centre (30,000 - 99,999)

**3. Which category best describes your Home?**

Long-Term Care Home/Continuing Care Facility

**4. How many residents live in your Home**

100-299

**5. Is your pharmacy service provider:**

Internal (on-site pharmacy within your organization)?

Core characteristic 1: Residents or their substitute decision makers are included as active partners in their care through education about their prescribed medications and ways to prevent harm associated with medication use.		Response	Score
1.1	The medication safety committee includes resident/family caregiver representatives.	0	3/4
1.2	During care conferences and other interactions with residents/family caregivers, prescribers and other members of the health care team discuss health priorities (i.e., What matters to you?) and encourage active participation in shared decision-making about medication therapy (for example, using resources such as <a href="#">5 Questions to Ask About Your Medications</a> ).	0	3/4
1.3	Residents and family caregivers are given the opportunity to learn about their medications and how they can help to prevent errors (e.g., if able, provide their name when asked during medication administration).	0	3/4
1.4	When a new medication is prescribed, a practitioner (e.g., prescriber, nurse, consultant pharmacist) informs the resident or family caregiver of the name and dose of the medication, the general purpose for use, expected outcomes and important side effects and obtains informed consent.	0	3/4
1.5	All harmful or potentially harmful medication incidents that reach a resident are fully disclosed to the resident and/or family caregivers in a timely manner. <a href="#">FAQ</a>	0	3/4
1.6	When a resident experiences a medication incident, the resident and/or their family caregivers are given an opportunity to share their perspective as part of the information gathering step of an incident analysis and are invited to provide input into possible preventive actions.	0	3/4
Core characteristic 1 - Total		75%	18/24

At the bottom of the report, you will see a total score.

**Medication Safety Self-Assessment for Long-Term Care - Total**

**79%**

**575/732**

## Saving Your Results

If you wish to save the PDF file, right-click anywhere on the report page, select “Print” and then choose the option to “Save as PDF”. We suggest that you rename the file, including the date of the results, to make it easier to retrieve the file.



## Institute for Safe Medication Practices Canada Medication Safety Self-Assessment for Long-Term Care

### Demographics

#### 1. Province

Ontario

#### 2. Which category best describes the size of the community served by your Home?

Medium population centre (30,000 - 99,999)

#### 3. Which category best describes your Home?

Long-Term Care Home/Continuing Care Facility

#### 4. How many residents live in your Home?

100-299

Back Alt+Left Arrow

Forward Alt+Right Arrow

Reload Ctrl+R

Save as... Ctrl+S

Print... Ctrl+P

Cast...

Create QR code for this page

your Home?

5/15/2021 Medication Safety Self-Assessment for Long-Term Care | ISMP Canada MSSA

**ISMP** Institute for Safe Medication Practices Canada  
Medication Safety Self-Assessment for Long-Term Care - Submitted on May 13, 2021

### Demographics

1. Province  
Ontario

2. Which category best describes the size of the community served by your Home?  
Medium population centre (30,000 - 99,999)

3. Which category best describes your Home?  
Long-Term Care Home/Continuing Care Facility

4. How many residents live in your Home  
100-299

5. Is your pharmacy service provider:  
Internal (on-site pharmacy within your organization) *Accomplished or achieved in practice, not just policy*

6. Which medication system technologies have been implemented in your Home? (Check all that apply.)  
Automated Dispensing Cabinets  
Bar Coding for medication selection during dispensing (pharmacy service provider)  
Bar Coding to scan deliveries received by the Home  
Electronic clinical decision support for prescribers - integrated into computerized prescriber order entry (CPOE) or electronic prescribing (e-prescribing)  
Electronic clinical decision support that is integrated with the electronic health record only  
Electronic prescribing (computerized prescriber order entry)

7. How are medication incidents reported in your Home for internal quality improvement?  
By staff and physicians completing an electronic form using an on-site system

8. How is your Home owned?  
Not-for-profit

9. Is your Home part of a larger health care organization or corporate group with common governance?  
No

10. Has your Home previously completed the ISMP Canada Medication Safety Self-Assessment for Long-Term Care?  
No

### Resident and Family Engagement and Partnership

**N** Not Implemented - Select "Not Implemented" for items that are not in use at this time (e.g., medication system technologies). These items are designed to proactively inform safeguards if or when the practice applies in the future.  
**R** Rarely - Select "Rarely" for items that are implemented and in practice less than 25% of the time.  
**S** Sometimes - Select "Sometimes" for items that are implemented and in practice 25-50% of the time.  
**O** Often - Select "Often" for items that are implemented and in practice 50-75% of the time.  
**A** Always - Select "Always" for items that are implemented and in practice more than 75% of the time.

**Core characteristic 1: Residents or their substitute decision makers are included as active partners in their care through education about their prescribed medications and ways to prevent harm associated with medication use.**

	Response	Score
1.1 The medication safety committee includes resident/family caregiver representatives.	O	3/4
1.2 During care conferences and other interactions with residents/family caregivers,	O	3/4

<https://mssa-training.ismp-canada.org/0/printresults/309>

Print

20 pages

Destination

Save as PDF

Pages

All

Layout

Portrait

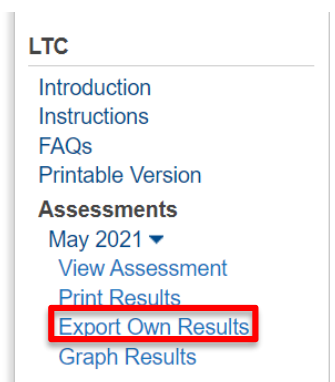
More settings

Save

Cancel

### Exporting Your Results

You will also see an option on the toolbar to **Export Own Results**, which allows your Home to generate an Excel spreadsheet of the information entered into the online program.



Below is a sample of the numerical data extracted from the Excel spreadsheet for a single Home.

1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3
0	3	3	4	4	1	4	4	4

# Section 2:

# Interpretation of Results

## Comparing Your Data to the Aggregate Dataset

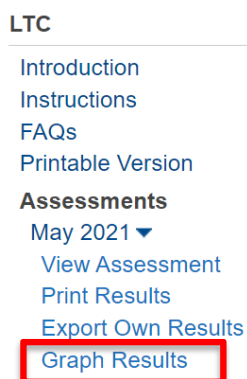
A key feature of the MSSA-LTC online program is the ability to compare an individual Home's results to the aggregate dataset. This feature supports Homes to prioritize opportunities for improvement through understanding where they may be behind their peer group.

### Single Homes

#### Accessing Comparative Graphs

To access comparative graphs of your assessment results, enter the online program with your password. Go to the toolbar on the left side of the screen and select the date of the assessment.

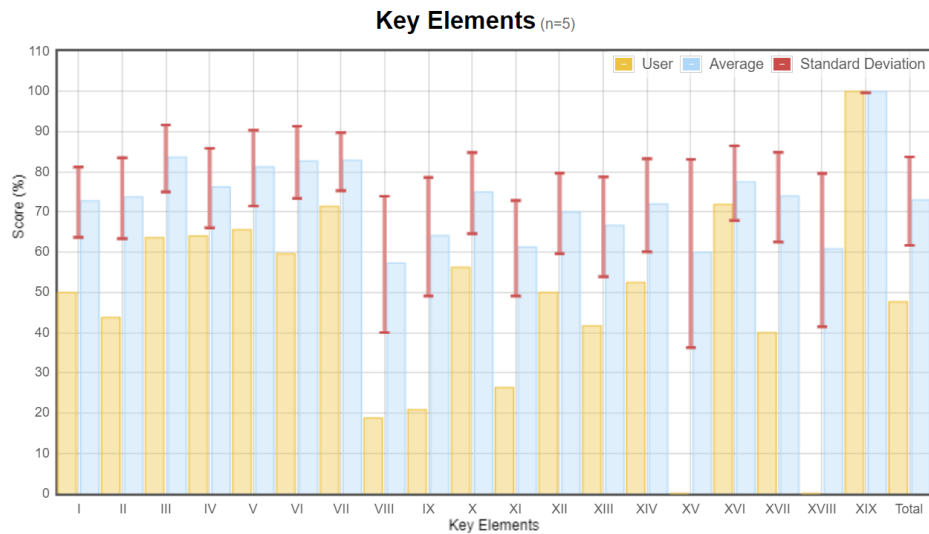
Select the **Graph Results** option. This option will allow you to generate graphs comparing your Home's results with the aggregate scores of all the Homes that have completed and entered their MSSA-LTC results.



When you generate a graph, at the top of the graph you will see “n =”; this is the number of Homes in the aggregate grouping. Your Home's score is represented by the yellow bar (expressed as a percent of the available maximum score for that section). The blue bar is the average aggregate result and the red lines on the graph represent the standard deviation for the data for all the Homes represented by “n”. Your total score for all the Key Element sections is shown in the last bar on the right side of the graph, along with the total aggregate score.

The aggregate score will help you to see areas where you may be ahead or behind your peer group. The standard deviation will help you to understand the range of responses for a particular item. For example, in the graph shown below, the User scored 50% in Key Element I as compared to the average of 73%. The red line indicates that most User scores for Key Element I fall between 63 – 81%.

In the lower right corner of the graph, there is an option to **Save Graph**. By selecting this option, you will be able to save an image file of the corresponding graph.



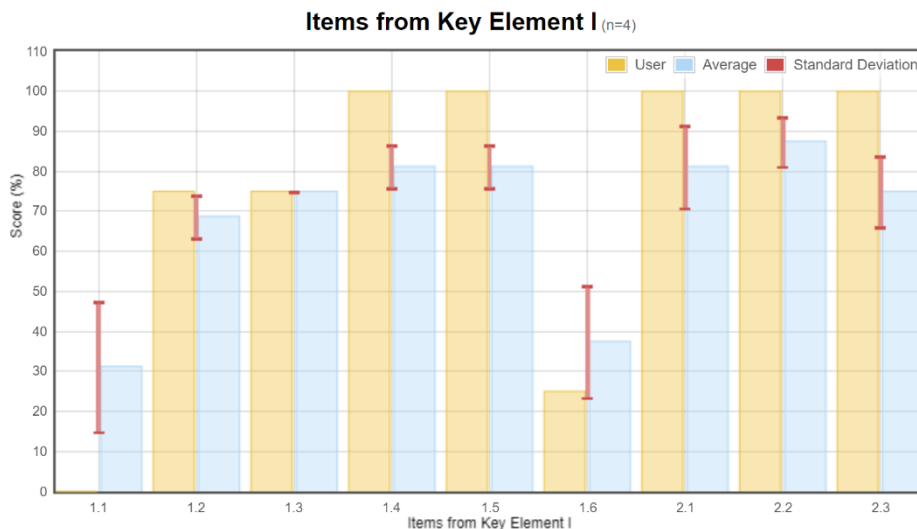
## Analysis of the Findings/Results

### Highs and Lows

Begin by reviewing the graphs for “highs” and “lows”. Look for assessment items where your scores are above or below the aggregate. In the sample graph for Key Element I below, you can see that Items 1.2, 1.4, 1.5, 2.1, 2.2 and 2.3 are all above the aggregate, 1.3 is the same as the aggregate and 1.1 and 1.6 are below the aggregate.

When you hover over the item number in the online program, the text for the assessment item will appear, so you will immediately know which items the bars represent.

If your Home entered an N-Not Implemented response, the graph will not show a yellow bar, since the score for the item is “0”. It will still show the blue bar signifying the average score of the aggregate as well as the standard deviation for that item.



## Developing a Quality Improvement Plan

While every Home wants to be able to identify areas where they are doing well, the key purpose of completing the MSSA-LTC is to identify possible system vulnerabilities and opportunities for improvement. Using the “lows” you find, you will want to consider the next steps to developing a quality improvement plan.

A suggested approach follows:

### *Items with a score of N-Not Implemented*

- Identify if there are formal plans to implement any of these items in the near future or if they are aligned with current quality improvement plans.
- Consider the level of risk represented by the item.

### *Items that are implemented but scores are below the aggregate:*

- Consider whether the score reflects the expected level of implementation (e.g., related to Item 25.1, a policy exists requiring independent double checks of high-alert medications, but in the MSSA-LTC assessment meeting, the team determined the appropriate score for this item was R-Rarely.
- Consider the level of risk represented by the item.

For items that represent a high level of resident risk, for which there are no plans for implementation or the level of implementation is below organizational expectations, an improvement plan should be developed.

### *Considerations:*

- Which items are most critical for resident safety? These should receive top priority for implementation.
- Are any quick fixes possible? Such changes can create momentum and show the value of the MSSA-LTC in the short term.
- Are some items interconnected? If you are working in one area, will it help you to address another opportunity?
- Is there a sequence requirement? Are there activities that must be implemented in a particular order? For example, electronic medication administration records are needed before bar coding for medication administration can be implemented.
- Which items require a longer-term strategy? (E.g., medication safety technologies)

Once you have developed a prioritized list, you will need to develop a project plan. The plan should consider:

- Who should be involved in planning and testing the change?
- Is the change feasible and can it be sustained, if implemented?
- What is the estimated cost?
- How long will it take to implement the change?
- Will the change affect other processes or care team members?
- Is it possible that the change could have unexpected negative consequences? (Failure Mode and Effects Analysis [FMEA] is a proactive risk assessment technique that can help to proactively identify risks in new processes.)

You will not be able to address all the identified vulnerabilities/opportunities at once – it is important to prioritize the highest risks and consider which items will be the easiest to implement as well as which ones will have the greatest impact on resident safety. It is important to establish reasonable timelines for implementing changes and look for opportunities to tie in medication safety improvements with other Home initiatives.

See [Section 4: Understanding the Principles Supporting Resident Safety](#) for help in understanding how human characteristics and limitations can be used to support change management.

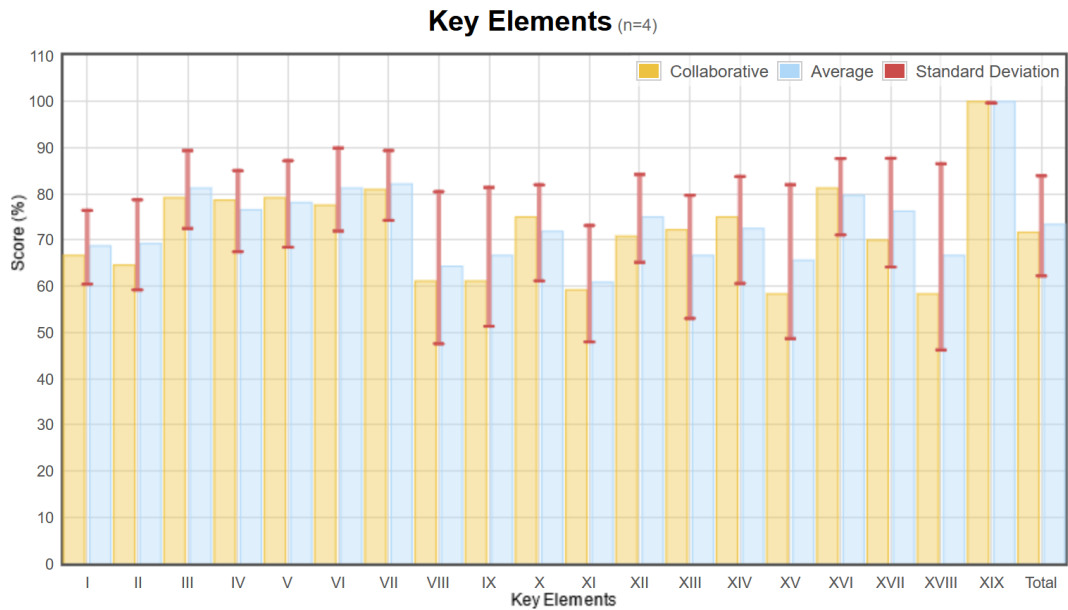
### Multiple Sites - Collaborative Groups

For organizations with multiple Homes, collaborative groups can be established. This feature allows enhanced comparisons for individual Homes and for organizational leadership.

Individual Homes will follow the process for completing the assessment described in [Section 1: Completing the MSSA-LTC](#). Once their responses have been entered, individual Homes within a collaborative group can compare their results to the aggregate dataset for their organization as well as to the full aggregate.

Organizational leadership can compare the aggregate results from their Homes to the total aggregate and can also view individual site level results. This functionality can be used to develop organization-wide improvement plans as well as provide support to Homes that may be struggling in particular areas. Best practices can also be identified to support organizational learning.

In the sample graph below, the yellow bar represents the collaborative group, and the blue bar represents the full aggregate.



Results from the collaborative can be exported in an Excel file, allowing organizational leadership to assess the variation in scores among the Homes in the organization. In this example there are 3 LTC Homes in the collaborative.

Code	1.1	1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3
ltc1	0	2	3	3	3	0	2	3	2
ltc2	2	4	4	4	4	3	4	4	3
ltc3	2	3	3	3	3	2	4	4	3

Organizations interested in setting up a collaborative group will be required to provide ISMP Canada with a list of the Homes, with a key contact for each one, as well as the name and contact information for the collaborative lead. A collaborative group can be set up at any time, even if some Homes have already completed the MSSA-LTC. However, if the organization plans to work as a collaborative group, ISMP Canada can set up a consistent approach to usernames for the group if all sites are registered in advance. For more information, email [mssa@ismpcanada.ca](mailto:mssa@ismpcanada.ca).

To set up a collaborative group, email [mssa@ismpcanada.ca](mailto:mssa@ismpcanada.ca) for required information.

# Section 3:

## Sharing Results

## Sharing Learning

After analyzing the findings from the MSSA-LTC with your team, consider how you can share the results and associated learning within your Home and organization. Sharing your learning is another way to support the development/enhancement of a culture of safety in your Home and organization.

One way to share learning is through presentations to the senior leaders, staff and residents/family caregivers. In an organization with multiple Homes, there may be opportunity to share your findings in group education sessions.

Presenting your findings allows you to tell the story of your Home's medication-use system. You can include updates and additional information, such as medication safety problems that staff have encountered and reported, medication incidents or near misses, issues and accomplishments in preparing for accreditation, or medication system reviews and plans for change.

Your presentation can highlight the positives in your medication-use system and can also describe real or potential safety vulnerabilities and how you plan to address them.

### **Note:**

Graphed data comparing your data to the aggregate dataset can be shared within your home and organization.

If you would like to share this data externally (e.g., through a presentation or publication) permission is required from ISMP Canada - please email [mssa@ismpcanada.ca](mailto:mssa@ismpcanada.ca).

## Presentation Template

A PowerPoint template has been developed to help you to prepare an MSSA-LTC presentation. Screenshots are shown below and the template can be downloaded from ISMP Canada's *Strengthening Medication Safety in Long-Term Care Initiative* webpage: <https://www.ismp-canada.org/LTC/>.


### *When would we use the presentation template?*

- To summarize your findings and present them to staff, safety committee, organizational management.
- To prepare for staff and management meetings intended to resolve medication system issues related to assessment items with low scores.

### *Can we personalize the template? Yes!*


- Add your Home's logo to the title slide.
- Add graphics of your results as generated by the MSSA-LTC online program; see [Section 2: Accessing Comparative Graphs](#).
- Delete any slides from the template that are not needed for the local presentation.

## Sample Slides



[Home Name]  
Medication Safety Self-Assessment® (MSSA) for Long-Term  
Care Results  
[Date]

Strengthening Medication Safety in Long-Term Care




### What is the MSSA-LTC?





The Medication Safety Self-Assessment for Long-Term Care (MSSA-LTC) is a comprehensive tool to:

- Evaluate the safety risks in the medication system in a Home; and
- Identify opportunities for improvement and document changes following implementation of action plans.

Medication Safety Self-Assessment® for Long-Term Care  
Canadian Version III

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Strengthening Med Safety in Long-Term Care

### Canadian MSSA-LTC Program

The web-based MSSA program is stored in a database maintained solely by ISMP Canada ([www.ismp-canada.org](http://www.ismp-canada.org)).

Data is updated in "real-time".



Data is stored anonymously in the database.

Items are not standards; items reflect safety risks.

ISMP Canada is committed to protecting the privacy, confidentiality, and security of any information for which it is responsible ([http://ismp-canada.org/privacy\\_policy.htm](http://ismp-canada.org/privacy_policy.htm)).

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### Key Elements

Section A – GENERAL	Section B – HIGH ALERT MEDICATIONS
I. Resident and Family Engagement and Partnership	XII. General Strategies for Safety with High Alert Medications
II. Care Team	XIII. Anticoagulants
III. Communication of Medication Information	XIV. Insulin
IV. Medication Therapy Monitoring	XV. Methotrexate for Non-Oncologic Use
V. Medication Labelling	XVI. Opioids
VI. Medication Storage and Distribution	XVII. Oral Anti-Cancer Drugs (Chemotherapy)
VII. Medication Administration	XVIII. Parenteral Infusions
VIII. Medication System Technology	
IX. Medication Devices	
X. Work Environment	
XI. Quality Improvement and Risk Management	

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### Scoring the Self-Assessment Items

#### Scoring Your Self-Assessment

**N Not Implemented** – Select "Not Implemented" for items that are not in use at this time (e.g., medication system technologies). These items are designed to proactively inform safeguards if or when the practice applies in the future.

**R Rarely** – Select "Rarely" for items that are implemented and in practice less than 25% of the time.

**S Sometimes** – Select "Sometimes" for items that are implemented and in practice 25-50% of the time.



**O Often** – Select "Often" for items that are implemented and in practice 50-75% of the time.

**A Always** – Select "Always" for items that are implemented and in practice more than 75% of the time.

For self-assessment items with multiple components, full implementation (score of A) is appropriate only if all components are present.

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From the Perspective of  
[Home Name]

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## Why did we decide to do an MSSA?

**Possible reasons:**

- Medication use is a complex, interdisciplinary process.
- Need to assess our current medication-use system to understand and improve processes and safety**
  - From the perspective of various practitioners
- To support meeting accreditation standards**
  - References the MSSA program
  - Incorporates select items within their guidelines and required organizational practices.
- As part of ongoing quality improvement and risk reduction initiatives**
  - Long-Term Care (LTC) Medication Safety Technology Funding Program (MST)

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## Who was on our team?

**Interdisciplinary team members:**

- Name and identify the role of each participant.

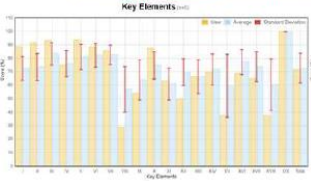
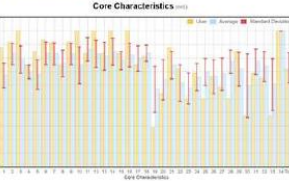
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## Our Results

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## Our Overall Scores

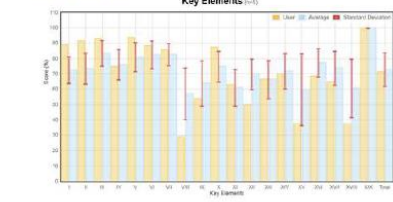
*If this is your first self-assessment, insert graphs generated from Graph Results (examples shown below).*

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## Key Elements with Highest Scores

*Insert bar graph showing Key Element results from Graph Results. Identify and discuss the top scores.*



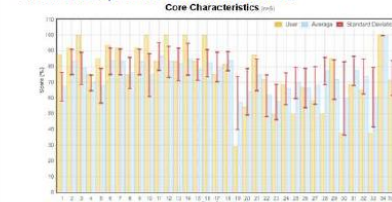
Top scores from:  
II, III, V

Note: Key Element XIX represents the Evaluation.


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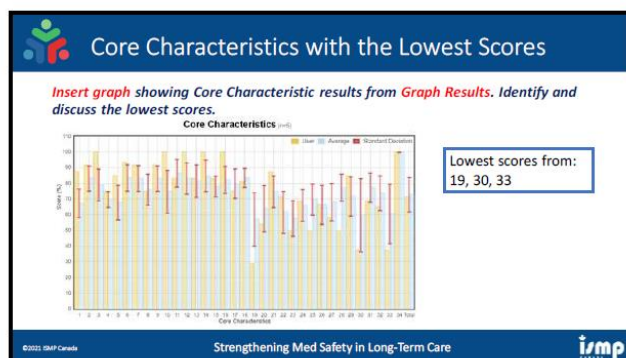
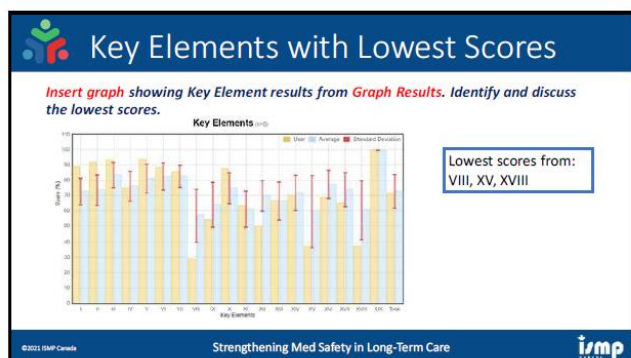
## Core Characteristics with Highest Scores

*Insert bar graph showing Core Characteristic results from Graph Results. Identify and discuss the top scores as illustrated below.*



Top scores from:  
3, 10, 12, 14, 16

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## Medication System Opportunities for Improvement

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## Context

**GOAL:** To reduce risk (improve low scores)

Individual scores are not necessarily a reflection of performance. They indicate the level of risk associated with items.

High scores do not mean there are no medication system problems. There are more safety measures than can be covered in one tool.

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## Findings

**Low Scoring Items**

*List the items with the lowest scores. They can be grouped to identify target areas.*

*Consider the use of the SMART Action Plan Template on the following slide to document your plan.*


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## Action Plan Template

**Action Plan**

Recommendations/ Actions (What are you planning to do?)	Specific (Is the action clear and precise?)	Measurable (How will it be confirmed that the action was implemented? How will it be determined if it was effective?)	Achievable (Is the action attainable with resources and support by a defined date? Have you identified who is responsible to achieve the goal?)	Relevant (Does the action actually address the issue?)	Time-bound (What is the timeframe for implementation?)	Rank Hierarchy of Effectiveness (High, medium, and low?)	Priority	Accountability (Who, or what department is accountable for the implementation?)

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## Potential Next Steps

**Identify** next steps to improve on the low scoring items or groups of items and document them on the Action Plan Template.

Refer to the **Hierarchy of Effectiveness** (in User Guide, p. 30) to plan effective changes.

**Involve** front line staff in planning and change. Cultivate a culture of safety. Maintain a **just culture** - information in User Guide (p. 32).


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## Prioritize Next Steps

**Prioritize** the 'next steps' from the previous slide and include rationale on the order of prioritization (second last column on the Action Plan template).


**Identify areas of high risk** and explain rationale for priority.

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## Timing of Next Steps

<p>What can be done NOW?</p> <p><b>List</b> the actions that can be completed with minimal effort and resources.</p> <p>Identify actions that correspond with current initiatives already underway.</p> <p>Refer to Time-Bound section of the Action Plan Template.</p>	<p>What can wait? What <i>has</i> to wait?</p> <p><b>List</b> the actions that do not represent high risk to resident or staff safety.</p> <p><b>List</b> actions that require more effort, resources, or additional debate and approval.</p> <p><b>Identify</b> what is needed to complete the actions and changes listed in the previous slides, e.g., space, staff, money, time.</p>
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## Communications Strategy

**Who is your audience?**

**How will you deliver information to your audience?**

**What level of detail will be included?**

**List** low scoring items **related to the audience** and solicit their ideas on how to improve the low scores.

This can be done as a series of **workshops or committee presentations**.

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For more information:  
ismpcanada.ca or LTC@ismpcanada.ca



# Section 4:

## Understanding the Principles Supporting Resident Safety

## Understanding Human Factors

Human factors engineering is the discipline concerned with understanding how humans interact with the world around them. It draws upon applied research in many areas, such as biomechanics, kinesiology, physiology, and cognitive science, to define the parameters and constraints that influence human performance. This knowledge can be used to design tools and processes so that they are compatible with human characteristics. Conversely, if systems are not compatible with human characteristics, performance can be negatively affected.

Many things we interact with every day are not designed to consider human limitations, sometimes making us feel inept. Think about some things that you find difficult to use – it's likely that the problem is the product design – not you! If you are interested in learning more about human factors, we recommend a very readable Canadian resource: *The Human Factor*, by Kim Vicente.<sup>3</sup>

Human factors can be summed up as “Fit the task or the tool to the human, not the other way around”!

## What is a “System Approach”

A “system approach” is one in which human factors have been considered in the design. In a system approach, when things go wrong, consideration is given to underlying factors that influenced the actions of the care providers involved, rather than directing attention solely to the providers-resident interface.

There are many elements that influence human performance. Understanding human factors helps to design sustainable processes that reduce the likelihood of human error, thereby enhancing resident safety.

## Hierarchy of Effectiveness

The hierarchy of effectiveness refers to strategies that are more likely to support strong systems, in turn supporting individual providers to take the intended actions in resident care processes. Understanding the types of actions that are more likely to be successful over the long-term can help teams to implement improvements in a successful and sustainable way.

The hierarchy of effectiveness divides possible improvement strategies into 2 categories: *person-based* and *system-based*.

*Person-based strategies* such as education and policy development are necessary, but on their own are unlikely to result in significant process changes because they require individuals to be able to retrieve a particular piece of information from their memory at a future time. Reminders and checklists, while still person-based, help to show individuals the correct pathway at the time they need the

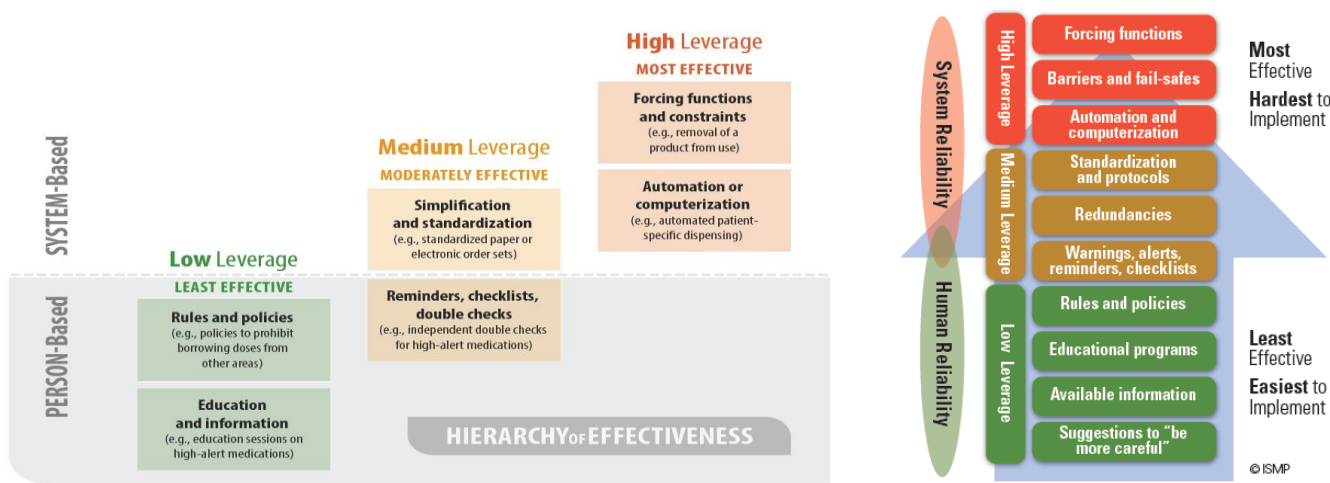
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<sup>3</sup> Vicente K. *The Human Factor: Revolutionizing the Way People Live with Technology*. Toronto, ON: Knopf Canada; 2003.

information. Double checks provide an added layer of safety for high-risk situations (for example, administration of high-alert medications).

*System-based strategies*, begin with simplification and standardization – these are helpful in streamlining processes and supporting all team members following the process to do it in the same way. The highest leverage strategies are automation/computerization and forcing functions and constraints. We know that automation helps us to manage large quantities of information in a more efficient and standardized way -- although of course, automation on its own is not a panacea, and automating a poor process will not be successful. Forcing functions and constraints are intended to force a particular path or prevent an incorrect action.

The two figures below are examples of the hierarchy of effectiveness developed by ISMP Canada<sup>4</sup> (left) and ISMP (US)<sup>5</sup> (right). In these examples, you can see that the strategies at the top are considered most effective (higher leverage actions) and those further down are less effective (lower leverage actions). The ISMP (US) example also highlights that higher-leverage strategies are more difficult to implement.



<sup>4</sup> Designing Effective Recommendations. ISMP Canada, Ontario Critical Incident Learning, Issue 4, April 2013 [cited 2021 Jun 11] Available from: [https://www.ismp-canada.org/download/ocil/ISMPCONCIL2013-4\\_EffectiveRecommendations.pdf](https://www.ismp-canada.org/download/ocil/ISMPCONCIL2013-4_EffectiveRecommendations.pdf).

<sup>5</sup> ISMP. Education is "predictably disappointing" and should never be relied upon alone to improve safety. ISMP Medication Safety Alert! June 4, 2020 [cited 2021 Jun 11]. Available from: <https://www.ismp.org/resources/education-predictably-disappointing-and-should-never-be-relied-upon-alone-improve-safety>.

## Just Culture

Just culture refers to a safety-supportive model of shared accountability, where organizations are accountable for the systems they design, for supporting the safe behavioural choices of care team members, residents and visitors, and for responding to care team behaviours in a fair and just manner. In turn, care team members are accountable for the quality of their behavioural choices and for reporting errors and system vulnerabilities.

A behavioural choice is an intentional act undertaken by the free exercise of one's judgment and represents the purposeful behaviour we intentionally employ while engaging in our day-to-day activities. Human error is not a behavioural choice; it is unintentional behaviour.<sup>6</sup>

The phrase “just culture” was coined by David Marx in the early 2000s.<sup>7</sup> His report *Patient Safety and the “Just Culture”: A Primer for Health Care Executives* outlined the principles for achieving a culture in which frontline personnel feel comfortable disclosing errors—including their own—while maintaining professional accountability. The National Health Service in the United Kingdom has published a Just Culture Guide<sup>8</sup> which is designed to support managers to determine appropriate actions following a patient safety incident. The process of reviewing employee actions through a just culture is reflected in the incident decision tree, shown below.<sup>9</sup> A narrative version of the tree is available from: [https://www.england.nhs.uk/wp-content/uploads/2021/02/NHS\\_0932\\_JC\\_Poster\\_A3.pdf](https://www.england.nhs.uk/wp-content/uploads/2021/02/NHS_0932_JC_Poster_A3.pdf).

Traditionally, health care’s culture has held individual health care providers accountable for all errors or mishaps that occurred during their care. By contrast, a just culture recognizes that individual practitioners should not be held accountable for system failings over which they have no control. A just culture also recognizes that many errors represent predictable interactions between human operators and the systems in which they work. However, in contrast to a culture that touts “no blame” as its governing principle, a just culture does not tolerate conscious disregard of obvious risks to residents or clear misconduct (e.g., falsifying a record or performing professional duties while intoxicated).

In summary, a just culture recognizes that competent professionals make mistakes and acknowledges that even competent professionals will develop unhealthy norms (shortcuts, “routine rule violations”), but has zero tolerance for reckless behavior.

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<sup>6</sup> Adapted from the 2012 ISMP International Medication Safety Self Assessment® for Oncology.

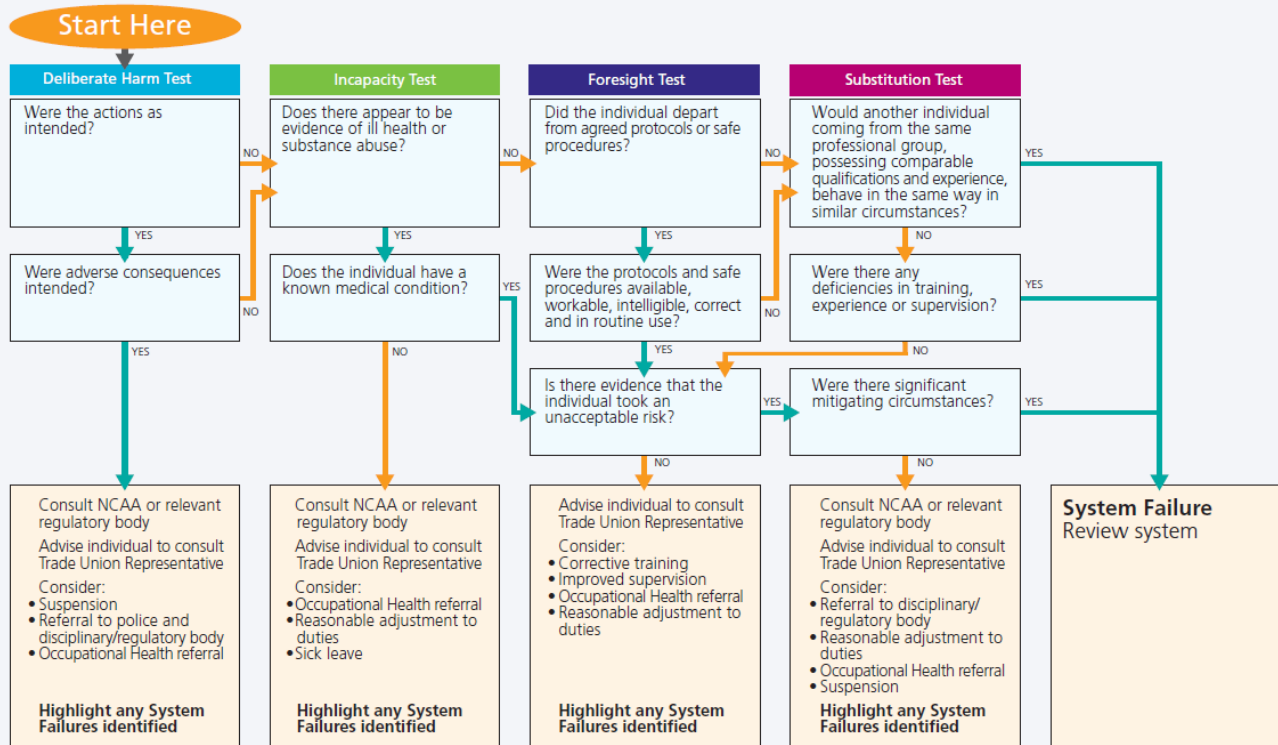
<sup>7</sup> Marx D. *Patient Safety and the “Just Culture”: A Primer for Health Care Executives*. New York, NY: Columbia University; 2001. Available from <http://psnet.ahrq.gov/resource.aspx?resourceID=1582>

<sup>8</sup> National Health Service, United Kingdom. Just Culture Guide. Available from: <https://www.england.nhs.uk/patient-safety/a-just-culture-guide/> [cited 2021 Jun 11]

<sup>9</sup> National Health Service, United Kingdom, National Patient Safety Agency. The Incident Decision Tree: Information and advice on use, 2003 [cited 2021 Jun 24]. Available from: [http://www.suspension-nhs.org/Resources/Safety%20-%20IDT%20\(info%20and%20advice%20on%20use\).pdf](http://www.suspension-nhs.org/Resources/Safety%20-%20IDT%20(info%20and%20advice%20on%20use).pdf)

## INCIDENT DECISION TREE\*

Work through the tree separately for each individual involved



\* Based on James Reason's Culpability Model

For questions about the Medication Safety Self-Assessment for Long-Term Care, or this User Guide, email [mssa@ismpcanada.ca](mailto:mssa@ismpcanada.ca).

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Views expressed in this document are those of ISMP Canada and do not necessarily reflect those of the Province.

