New Medication Safety Assessment Program for Long Term Care

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The Institute for Safe Medication Practices (ISMP) Canada's mission is to enhance the safety of medication use. A recent initiative was one intended to increase medication system safety in long term care settings: the development of a Medication Safety Self-Assessment (MSSA) for Long Term Care (LTC). Since the launch of the new Program in September 2007 to all nursing Homes in Ontario, a number of Homes have requested the tool and are planning to complete it this year. Pharmacists will likely be asked to assist the teams to complete the survey.

The MSSA for LTC was modeled on similar ones for hospital, complex continuing care and community pharmacy. ISMP Canada's Hospital Medication Safety Self-Assessment®, a program designed to assist hospitals to review their current processes for medication safety and determine areas for improvement, has been available for over 5 years. The MSSA has raised awareness of system risks and prompted improvement in many hospitals in Ontario. The Canadian Council on Health Services Accreditation (CCHSA) has referenced ISMP Canada's Medication Safety Self- Assessment Program in their new guidelines.

DEVELOPMENT PROCESS

The MSSA for Long Term Care was developed with the assistance of a group of staff working in long term care in a variety of roles and of the Long Term Care Medication Safety Advisory Group whose membership included nursing, pharmacy, medicine, quality/risk and management representatives from Complex Continuing Care and Rehabilitation facilities, Nursing Homes, Ontario Long Term Care Associations, and ISMP staff members. External expert review and pilot testing of the tool followed.

The LTC pilot was completed by January 26, 2007. An invitation was sent to all Homes with the assistance of the LTC Medication Advisory Group, the Ontario Long Term Care Association and the Ontario Association of Non-Profit Homes and Services for Seniors. Each participating Home formed a multidisciplinary team to complete the MSSA. On completion, the results were entered into a secure confidential web-based program. Sites could see and print their own results in tabular and graphic form immediately and, once sufficient numbers of sites had entered data, comparison to aggregate results was also available.

DESCRIPTION OF PROGRAM

The MSSA for LTC is divided into 10 key elements of safe medication use and the key elements are further divided into 20 core distinguishing characteristics. Under each characteristic multiple self assessment items are listed and Homes participating in the pilot project were asked to rate their compliance to each of the individual self assessment items.

Each response is assigned a weighted score based on an assessment of the impact of the item on resident safety and its ability to ensure sustained improvement. Higher weighted scores indicate a greater impact on the safety of the medication use system. Some of the self-assessment items represent innovative practices

and system enhancements that are not widely implemented in most Homes today. However, their value in reducing errors is grounded in research and expert analysis of medication errors and their causes and should be goals to strive for if not in place.

Evaluation of the pilot took the form of feedback regarding clarity of the survey content, relevance of each question, value of the program, information on the process used, and interest in continuing to use the program. In addition analysis of the data entered assisted ISMP Canada to understand interpretation issues. Further data analysis of the results entered offers insight into potential areas of strengths and those requiring attention.

RESULTS OF MSSA FOR LTC PILOT

Twenty-two Homes representing different types of ownership and size completed the MSSA pilot program and entered their scores at the ISMP Canada website. Of the participating Homes, 19 submitted evaluations of their experience. In addition several Homes communicated by e-mail during the process of completing the assessment for clarification of items. This feedback provides useful information as to the perceptions of the participants and their willingness and acceptance of the Program.

FEEDBACK ON TOOL AND PROCESS

- **Meeting Time Required** by the multidisciplinary

teams were reported to range from less than 3 hours to 5 hours.

- **Relevance of Self-Assessment Items** was considered appropriate and reflected issues identified in medication incident reports and audits. No items were suggested to be deleted. A few participants commented on items that were identified as not relevant to their Home but could be to others, e.g., IV therapy items.

- **Survey Helpful in Providing Ideas That Will Be Very Beneficial** was ranked high. See Figure 1 at left for details.

- **Continue to Use This Program as Part of Quality Improvement Process** was supported and respondents indicated an interest in resurveying at a regular frequency ranging from 6 months to annually.

- **Recommend to Other Homes** was reported by all participants.

- **Areas That Participants Identified for Enhancement/Improvements in their Homes**

  Not all Homes have the same medication systems and there may be other client and service provision variables amongst the types of Homes and bed size. ISMP Canada asked the Homes to share whether participating in the pilot project had identified areas for enhancements or improvements within their medication systems. Participants identified the following initiatives that could be taken to enhance the safety of current systems (see Figure 2).

DISCUSSION

Looking at the data there is a common pattern across the aggregate scores, scores by Home size and scores by Home type in respect to core characteristics that provide opportunities for improvements to system safety. Taking any one of these core characteristics and choosing a self-assessment item as a quality activity would empower a Home to start a risk management process to address weaknesses in the medication system and to immediately begin to increase staff awareness and improve resident safety. Those areas that stand out as requiring attention include:

- **Resident Information** is the basis for medication reconciliation, an activity supported by the Canadian Council on Health Care Services Accreditation (CCHSA) standards for long term care, and monitoring of therapeutic outcomes. The pre-admission assessment provided to the clinical team, while the most current/recent known, may not be the most accurate. This is a systemic problem common to most Homes and Chronic Care/ Rehabilitation facilities; significant lapses in information sharing occur at transfer from one level of care to another.

- **Quality Processes and Risk Management** includes three core characteristics that focus on a non-punitive, system-based approach to error reduction supported by the administration team; an environment that encourages staff to detect and report errors that can be analyzed to support the redesign of systems; and a system of independent double checks of high alert drugs to detect and correct potentially serious errors before they occur.

- **Communication of Drug Orders and Other Drug Information** implies clarity in physicians' orders, clinical indication for a drug's use on medication orders known by treatment team, no use of dangerous abbreviations and use of computer generated Medication Administration Record (MAR) sheets.

- **Environmental Factors** such as lighting, work space, appropriate storage including refrigeration and a work area free of distractions would enhance the safety of the system.

- **Staff Competence and Education** has been addressed by one of the pilot project Homes as a result of participating in the program. This is an area where the multidisciplinary team, including the contracted pharmacy service, can contribute to the knowledge of registered staff.

CONCLUSION

Based on the feedback ISMP Canada received during the pilot project, the Homes reported that the Medication Safety Self-Assessment® for Long Term Care provides a Program specific to the needs of long term care Homes that they were willing to continue to use. The tool addresses the key elements of a safe medication system and can be used by Homes of varying bed size, organizational structure and geographic area. The logistics to complete the tool and process for results entry were considered reasonable and feasible. The Program assists in guiding a Home to identify opportunities for improvement in their medication use system as part of their effort to decrease the risk to patients. ⓒᴾ