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ISMP Canada Workshop

Medication safety:

Proactive Risk Assessment using Failure Mode and Effects Analysis (FMEA)

This full-day workshop provides healthcare practitioners with background theory and hands-on practice in proactive risk assessment using failure mode and effects analysis (FMEA)

Proactive Risk Assessment using Failure Mode and Effects Analysis (FMEA)

The workshop curriculum is derived from the Canadian Failure Mode and Effects Analysis Framework Version II (2016).¹

Program Abstract:

Failure Mode and Effects Analysis (FMEA) is a technique used to identify process and problems before they occur, with a focus on proactive risk assessment and process redesign.

Through interactive group work, participants will learn how to diagram a process, how to identify potential failures, and how to redesign processes with consideration of human factors principles to decrease the likelihood of a failure impacting a patient.

FMEA is a team-based, structured process. It is forward-looking, in contrast to the retrospective approach of incident analysis and techniques such as root cause analysis. FMEA is based on the premise that all systems and processes contain embedded system failures.

Learning Objectives for FMEA:

On completion of the FMEA portion of the workshop, participants will be able to:

1. Identify processes suitable for analysis using FMEA;
2. Describe the steps required to complete an FMEA;
3. Map out a process and identify potential failure modes;
4. Develop redesign strategies based on systems theory and basic human factors principles; and
5. Apply principles learned to support medication safety activities in their practice setting

Audience:

Pharmacy directors, pharmacists, pharmacy technicians, nurses, pharmacists, risk managers, patient safety officers, medication safety officers, paramedics, and other healthcare practitioners

Workshop Level:

Introductory

¹ ISMP Canada Canadian Failure Mode and Effects Analysis Framework Version II 2016



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AGENDA

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|-------------|----------------------|---|
| A.M. | 8:30 – 9:00 | Registration |
| | 9:00 – 9:15 | FMEA Overview |
| | 9:15 – 9:30 | Group Activity: Everyday FMEA |
| | 9:30 – 10:00 | Conducting an FMEA FMEA Step 1: Select a process to analyze and assemble a team FMEA Step 2: Diagram the process and sub-process(es) |
| | 10:00 – 10:15 | Break |
| | 10:15 – 11:30 | FMEA Activity 1 – Step 1 and Step 2 |
| | 11:30 – 11:45 | FMEA Step 3: Brainstorm potential failure modes |
| | 11:45 – 12:30 | FMEA Activity 2 – Step 3 |
| P.M. | 12:30 – 1:00 | Lunch |
| | 1:00 – 1:30 | FMEA Step 4: Identify the effects and causes of the failure modes FMEA Step 5: Prioritize the failure modes |
| | 1:30 – 2:15 | FMEA Activity 3: Step 4 FMEA Activity 4: Step 5 |
| | 2:15 – 2:45 | FMEA Step 6: Redesign the process(es) FMEA Step 7: Analyze and test the changes Introduction to FMEA Step 8 |
| | 2:45 – 3:00 | Break |
| | 3:00 – 3:30 | FMEA Activity 5: Steps 6 and 7 |
| | 3:30 – 3:45 | Summary |
| | 3:45 – 4:00 | Debrief, Evaluation, Next Steps |