A Study of Leading Indicators for Occupational Health and Safety Management

Background

Approximately $2.5B is spent annually on occupational injuries in healthcare. Key to changing this trend is the effective utilization of leading indicators within an Occupational Health and Safety Management System (OHSMS). The purpose of this study was to evaluate the feasibility of implementing interventions guided by six leading indicators[1] and the effectiveness of these interventions on improving the health and safety climate.

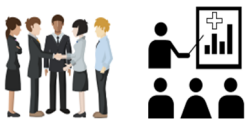
A quasi-experimental longitudinal design was used within two acute care hospitals. Phase I identified facilitators and barriers to changing the current OHSMS, assessed the OHSMS in participating sites using six leading indicators, and identified possible leading indicators to be added or changed. This phase concluded with the development of tailored interventions based on the gaps identified in the assessment. Phase II pilot tested and evaluated the feasibility and effectiveness of the

This is the fourth in a series of summaries highlighting findings from a research study funded by the Ontario Ministry of Labour Research Opportunity Program. Additional information and summaries are available on our website at https://www.queensu.ca/leadingindicatorsforohsms/.

Objective 4A: Pilot Test and Evaluate Feasibility of the Interventions

OHS Objective in the Strategic Plan (Both Sites)

How: Changes occurring at each hospital provided opportunity to add or change OHS objectives in their strategic plan.



Who: Completed by administrative team.

Incident Reporting Flowchart (Site 1)

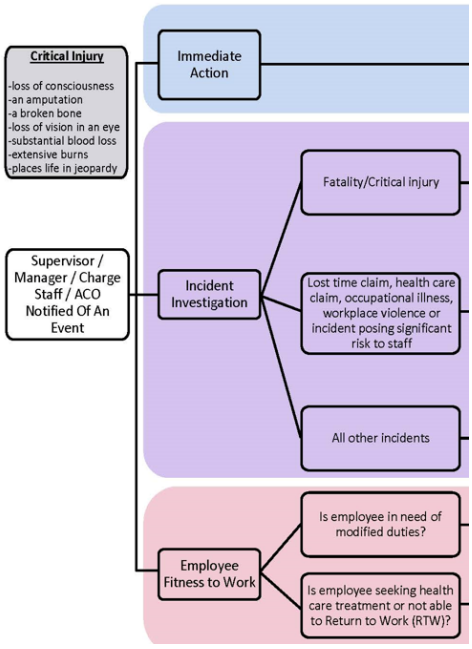
Goals

- To create an easy to use flowchart for managers and staff.
- To improve incident reporting, follow-up and closing the loop in reporting

How

The flowchart was developed in collaboration between the OHS department and research team, based on the 10+ page hospital policy document.

Section of the Incident Reporting Flowchart



Results

A review of the flowchart by managers provided positive feedback on the layout and usefulness. Implementation was delayed due to organizational changes therefore, no additional assessments were completed.

[1] Jonathan Bennett & Patrick Foster. (2005). Predicting progress: The use of leading indicators in occupational safety and health. *Policy and Practice in Health and Safety, 3*(2,) 77-90.

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SAFETY ROUNDS (BOTH SITES)

SITE 1: Rounds were implemented on four pilot units and were led by the unit manager. Safety Rounds were defined as 'short, meaningful discussions with front line staff that provided a regular, structured process to have conversation about quality and safety'.

RESULTS:
33 Safety Rounds were reported over 11 months with 14 observed by research team. The frequency varied from weekly to monthly. On average, 8.4 employees attended the observed rounds with each round lasting an average of 34 minutes (range: 8 to 70 minutes). Attendees included staff, manager, and invited guests (e.g. Ergonomic Specialist). Staff engagement increased over time with concerns moving from mostly patient safety-focused to staff safety.

Examples of concerns raised by staff during Safety Rounds

Category	Examples
Process	Need for streamlined communication between nursing and allied health professionals
Violence / risk of violence	Improper management of patients with difficult behaviors, leading to increase safety risk for patient and staff
Equipment malfunction	Lack/shortage of equipment or supplies, leading to delayed care

SITE 2: Rounds were implemented hospital wide, held in various departments, and led by different members of the senior executive team. Safety Rounds were defined as 'informal discussion of safety topics or debrief around relevant incidents or concerns'.

RESULTS:
Seven Safety Rounds in different areas were observed by research team. On average, the rounds lasted 30 minutes (range: 15 to 45 minutes) with seven attendees per round. Attendees included staff, manager, senior executive, and OHS specialist. Staff were very engaged in the discussion. Senior executives demonstrated a sensitive approach to concerns, asked for more information, and encouraged everyone to participate. Over time, the discussions transitioned from reviewing a checklist to having in-depth conversations.

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If you have any questions or comments about the project,
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