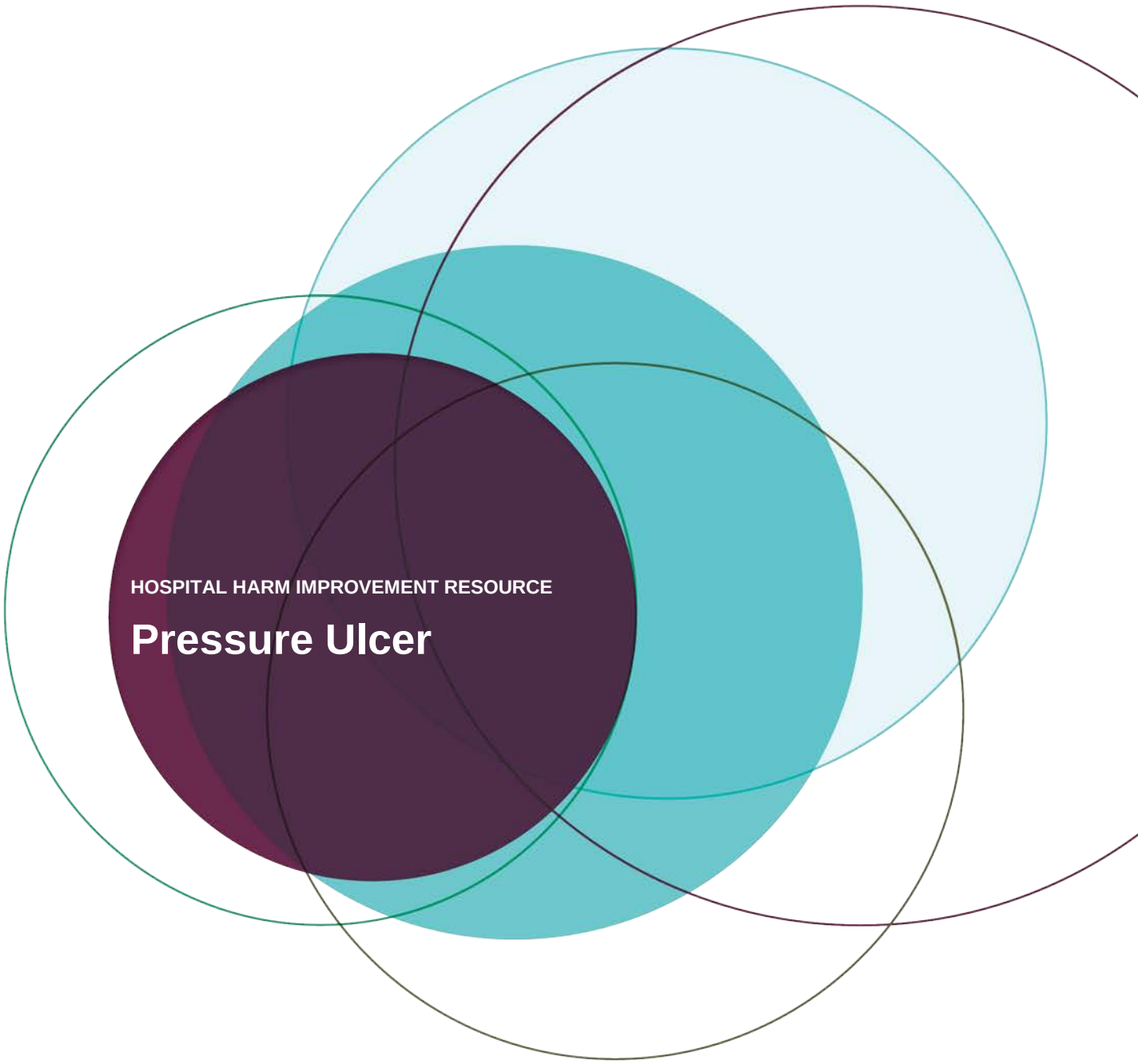

HOSPITAL HARM IMPROVEMENT RESOURCE

Pressure Ulcer

cpsi icsp
Canadian Patient Safety Institute
Institut canadien pour la sécurité des patients

CIHI ICIS
Canadian Institute for Health Information
Institut canadien d'information sur la santé

ACKNOWLEDGEMENTS

The Canadian Institute for Health Information and the Canadian Patient Safety Institute have collaborated on a body of work to address gaps in measuring harm and to support patient safety improvement efforts in Canadian hospitals.

The Hospital Harm Improvement Resource was developed by the Canadian Patient Safety Institute to complement the Hospital Harm measure developed by the Canadian Institute for Health Information. It links measurement and improvement by providing evidence-informed resources that will support patient safety improvement efforts.

The Canadian Patient Safety Institute acknowledges and appreciates the key contributions of the Registered Nurses' Association of Ontario and Karen E. Campbell, RN, MSCN, PhD for the review and approval of this Improvement Resource.

DISCHARGE ABSTRACT DATABASE (DAD) CODES INCLUDED IN THIS CLINICAL CATEGORY:

A08: Pressure Ulcer		
Concept	Any stage of pressure ulcer identified during a hospital stay.	
Selection criteria	L89.–	Identified as diagnosis type (2)
Codes	**Code descriptions**	
L89.–	Decubitus (pressure) ulcer and pressure area	

Overview

A pressure ulcer is a localized injury to the skin and/or underlying tissue, usually over a bony prominence as a result of pressure, or pressure in combination with shear. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated (National Pressure Ulcer Advisory Panel et al, 2014). Pressure ulcers cause considerable harm to patients, hindering functional recovery, frequently causing pain and the development of serious infections. Pressure ulcers have also been associated with an extended length of stay, sepsis, and mortality (IHI, Pressure Ulcers). Accreditation Canada recognizes the importance of effective prevention strategies in the reduction of pressure ulcers and has identified pressure ulcer prevention as a Required Organizational Practices (ROP) (Accreditation Canada).

Implications

Pressure ulcers continue to be a significant health concern as the population ages and the complexity of care increases across all care settings (RNAO, 2011). A literature review done in Canada in 2004 found that the overall prevalence of pressure ulcers across all institutions studied was 26 per cent. Although 50 per cent of these were Stage 1 ulcers, this data is still disturbing (Woodbury & Houghton, 2004). Pressure ulcer incidence rates vary considerably by clinical setting — ranging in the Unites States from 0.4 per cent to 38 per cent in acute care, from 2.2 per cent to 23.9 per cent in long-term care, and from 0 per cent to 17 per cent in home care. It is estimated that pressure ulcer prevalence (the percentage of patients with pressure ulcers at any one point in time) in acute care is 15 per cent, while incidence (the rate at which new cases occur in a population over a given time period) in acute care is seven per cent. It is estimated that 2.5 million patients are treated for pressure ulcers in U.S. acute healthcare facilities each year. The estimated cost of managing a single full thickness pressure ulcer is as high as $70,000, and the total cost for treatment of pressure ulcers in the U.S. is estimated at $11 billion per year (IHI, 2011).

Goal

To reduce the incidence of pressure ulcers.

Importance to Patients and Families

Patients and families are aware that pressure ulcers are painful and slow to heal; and that ulcers are often seen as an indication of poor quality of care. When caregivers practice the best care every time, patients can avoid needless suffering (IHI, 2012).

The Swans' Story (patient video)

Richard developed an avoidable pressure ulcer during respite at a nursing home. The experience has inspired him, together with his caregiver and wife Doreen, to help inform and educate in the hope that together we can eliminate avoidable pressure ulcers.

Evidence-Informed Practices

Key Changes for Improvement

(IHI, 2011)

Steps for preventing pressure ulcers:

1. Conduct a pressure ulcer admission assessment for all patients.
2. Reassess risk for all patients daily.
3. Inspect skin daily.
4. Manage moisture on skin.
5. Minimize pressure, friction and shear:
    a. Turn/reposition patients every two hours.
    b. Use pressure-redistribution surfaces.
6. Optimize nutrition and hydration.

Additional Elements

1. Maximize activity and mobility, reducing or eliminating friction and shear (Keast et al., 2006).
2. Avoid skin massage.
3. Barrier creams (NICE, 2014).
4. Emerging therapies for prevention of pressure ulcers:
    - Microclimate control.
    - Prophylactic Dressings.
    - Fabrics and Textiles.
    - Electrical Stimulation of the Muscles for Prevention of Pressure Ulcers (National Pressure Ulcer Advisory Panel, et al., 2014).

Measures

Vital to quality improvement is measurement, and this applies specifically to implementation of interventions. The chosen measures will help to determine whether an impact is being made (primary outcome), whether the intervention is actually being carried out (process measures), and whether any unintended consequences ensue (balancing measures).

Below are some recommended measures to use, as appropriate, to track your progress. In selecting your measures, consider the following:

- Whenever possible, use measures you are already collecting for other programs.
- Evaluate your choice of measures in terms of the usefulness of the final results and the resources required to obtain them; try to maximize the former while minimizing the latter.
- Try to include both process and outcome measures in your measurement scheme.
- You may use different measures or modify the measures described below to make them more appropriate and/or useful to your particular setting. However, be aware that modifying measures may limit the comparability of your results to others.
- Posting your measure results within your hospital is a great way to keep your teams motivated and aware of progress. Try to include measures that your team will find meaningful and exciting (IHI, 2011).

For more information on measuring for improvement, contact the Canadian Patient Safety Institute Central Measurement Team at measurement@cpsi-icsp.ca

Outcome Measure

1. Incidence of Pressure Ulcers.

Process Improvement Measures

1. Percentage with Pressure Ulcer Risk Assessment Completed on Admission.
2. Percentage of At-Risk Patients Receiving Full Pressure Ulcer Preventive Care Admission.
3. Percentage of Patients Receiving Daily Pressure Ulcer Risk Reassessment.
4. Percentage of Patients with Pressure Ulcer Risk Reassessed Following Change in Clinical Status (NICE Audit Tool, 2014).
5. Percentage of At-Risk Patients Repositioned Every Six Hours (Self or With Assistance) (NICE Audit Tool, 2014).
6. Percentage of At-Risk Patients with High-Specification Foam Mattress (NICE Audit Tool, 2014).
7. Percentage of At-Risk Patients who Received an Individualized Care Plan (NICE Audit Tool, 2014).

Standards and Required Organizational Practices

Accreditation Canada Required Organizational Practice

- Requires an assessment of clients' risk of developing pressure ulcers and the implementation of preventative interventions.

Global Patient Safety Alerts

Global Patient Safety Alerts provides access and the opportunity to learn from other *organizations about specific patient safety incidents including alerts, advisories,* recommendations, and solutions for improving care and preventing incidents. Learning from the experience of other organizations can accelerate improvement.

Recommended search terms:

- Bed sore
- Decubitus ulcer
- Deep tissue injury
- Pressure area
- Pressure injury
- Pressure ulcer

Success Stories

Implementation of Turning Clocks for Pressure Ulcer Prevention and Management

The use of an individualized repositioning schedule is a recommended strategy for prevention and management of pressure ulcers. As individuals' needs differ, it is often a challenge to communicate specific repositioning schedules to care staff, which may result in inconsistent positioning. The literature suggests that using a visual cue, or diagram with body positions, may be a helpful reminder of resident positioning schedules (Accreditation Canada, Leading Practices Database).

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PRESSURE ULCER RESOURCES

Professional Associations and Helpful Websites

British Columbia Provincial Nursing Skin and Wound Committee. https://www.clwk.ca/communities-of-practice/skin-wound-community-of-practice/

National Pressure Ulcer Advisory Panel. http://www.npuap.org/

Registered Nurses' Association of Ontario (RNAO). http://rnao.ca/bpg/guidelines/risk-assessment-and-prevention-pressure-ulcers

Stop the Pressure. http://nhs.stopthepressure.co.uk/index.html

Pressure Ulcer Clinical Practice Guidelines

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