Complete Summary

GUIDELINE TITLE

Risk assessment & prevention of pressure ulcers.

BIBLIOGRAPHIC SOURCE(S)

Registered Nurses Association of Ontario (RNAO). Risk assessment & prevention of pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 80 p. [70 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Registered Nurses Association of Ontario (RNAO). Risk assessment and prevention of pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Jan. 56 p.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Pressure ulcers, also known as pressure sores, bedsores, and decubitus ulcers

GUIDELINE CATEGORY

Evaluation
Management
Prevention
Risk Assessment

CLINICAL SPECIALTY

Dermatology
Family Practice
Geriatrics
Internal Medicine
Nursing
Physical Medicine and Rehabilitation
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Nurses

GUIDELINE OBJECTIVE(S)

- To present nursing best practice guidelines for risk assessment and prevention of pressure ulcers
- To assist nurses who work in diverse practice settings to identify adults who are at risk of pressure ulcers and provide direction to nurses in defining early interventions for pressure ulcer prevention, and to manage Stage I pressure ulcers

TARGET POPULATION

Adults from diverse practice settings who are at risk of developing pressure ulcers

INTERVENTIONS AND PRACTICES CONSIDERED

Evaluation/Risk Assessment

1. Skin assessment with particular attention to bony prominences
2. Assessment of a client's risk for the development of pressure ulcers using the "Braden Scale for Predicting Pressure Sore Risk"
3. Identification and staging of all pressure ulcers using the National Pressure Ulcer Advisory Panel (NPUAP) criteria
4. Assessment for pressure, friction, and shear in all positions and during lifting, turning, and repositioning
5. Documentation of assessment/reassessment

Prevention/Management

1. Planning: Individualized care planning according to assessment data, identified risk factors, and the client's goals; in collaboration with the client, significant others, and health care professionals; use of clinical judgment to interpret risk
2. Positioning, transferring, and turning techniques (e.g. use of schedule; postural alignment; devices allowing independent positioning; head of bed positioning)
3. Avoid massage over bony prominences

4. Monitor level of pain and use measures to control pain
5. Assess risk for skin breakdown
6. Use of pressure-relieving surfaces, as needed
7. Measures to protect and promote skin integrity (e.g., hydration, bathing schedule, avoidance of hot water, pH balanced non-sensitizing skin cleanser and moisturizer, and protective barriers to reduce friction injuries)
8. Protect skin from excessive moisture
9. Assess nutritional deficits and provide support as needed
10. Institute a rehabilitation program, as needed
11. Discharge/transfer of care assistance
12. Refer to occupational therapist/physiotherapist, as needed
13. Educational programs for prevention of pressure ulcers

MAJOR OUTCOMES CONSIDERED

- Factors that predict risk for pressure ulcers
- Incidence and prevalence of pressure ulcers
- Sensitivity and specificity of risk assessment tools
- Symptoms associated with pressure ulcers
- Quality of life

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Original Guideline: January 2002

In January 2000, a panel of clinicians, educators, and researchers with expertise in the practice and research of pressure ulcer prevention from institutional, community and academic settings was convened under the auspices of the RNAO. The panel identified a set of five existing guidelines for the prevention of pressure ulcers. The five guidelines were then evaluated using the *Appraisal Instrument for Canadian Clinical Practice Guidelines* which is an adapted tool from Cluzeau, Littlejohns, Grimshaw, Feder & Moran (1997). The panel subsequently selected two guidelines to adapt and modify.

An additional review of systematic review articles and pertinent literature was conducted to update the existing guidelines. The scope of this guideline and the focus on risk assessment and prevention of pressure ulcers in adults was established.

Update: March 2005

A database search for existing literature related to pressure ulcer prevention was conducted by a university health sciences library. An initial search of the Medline, Embase, and CINAHL databases for guidelines and studies published from 2001 to

2004 was conducted in August 2004. The search was structured to answer the following questions:

1. What are the risk factors/contributing factors or predictors for the development of pressure ulcers in the adult population?
2. What is the evidence for pressure ulcer prevention?
3. What interventions do nurses need to initiate to prevent pressure ulcers?
4. How effective are the following in the prevention of pressure ulcer:
    - Assessment of risk factors
    - Pressure relief
    - Pressure reduction
5. What education do nurses need around strategies for the prevention of pressure ulcers?
6. What support does the organization need to provide to ensure nurses have the knowledge and skills for pressure ulcer prevention?
7. What supports are needed for successful implementation of a pressure ulcer prevention program?

One individual searched an established list of Web sites for content related to the topic area in July 2004. This list of sites, reviewed and updated in May 2004, was compiled based on existing knowledge of evidence-based practice web sites, known guideline developers, and recommendations from the literature. Presence or absence of guidelines was noted for each site searched as well as date searched. The Web sites at times did not house a guideline but directed to another Web site or source for guideline retrieval. Guidelines were either downloaded if full versions were available or were ordered by phone/email.

A Web site search for existing practice guidelines on pressure ulcer risk assessment and prevention was conducted via the search engine "Google", using key search terms. One individual conducted this search, noting the results of the search, the Web sites reviewed, date, and a summary of the results. The search results were further reviewed by a second individual who identified guidelines and literature not previously retrieved.

Additionally, panel members were asked to review personal archives to identify guidelines not previously found through the above search strategy. Results of this strategy revealed no additional clinical practice guidelines.

The search strategy described above resulted in the retrieval of 1,818 abstracts on the topic of pressure ulcers. These abstracts were then screened by a Research Assistant in order to identify duplications and assess for inclusion/exclusion criteria. A total of 106 abstracts were identified for article retrieval and quality appraisal. The quality appraisal was conducted by a Masters prepared nurse with expertise in critical appraisal. The tool used to conduct this work was one developed by the Effective Public Health Practice Project (EPHPP) for appraising quantitative studies.

In addition, three recently published clinical practice guidelines were identified for review and critical appraisal by the panel, using the *Appraisal of Guidelines for Research and Evaluation* (AGREE Collaboration, 2001) instrument.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Ia Evidence obtained from meta-analysis or systematic review of randomized controlled trials

Ib Evidence obtained from at least one randomized controlled trial

IIa Evidence obtained from at least one well-designed controlled study without randomization

IIb Evidence obtained from at least one other type of well-designed quasi-experimental study without randomization

III Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

IV Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Original Guideline: January 2002

In January 2000, a panel of clinicians, educators, and researchers with expertise in the practice and research of pressure ulcer prevention from institutional, community, and academic settings was convened under the auspices of the Registered Nurses Association of Ontario (RNAO). Through a process of discussion and consensus, recommendations for nursing care were developed.

Update: March 2005

In September of 2004, a panel of nurses with expertise in pressure ulcer prevention from a range of practice settings (including institutional, community, and academic sectors) was convened by the RNAO. This group was invited to participate as a review panel to revise the guideline that was originally published in January 2002. The panel was comprised of members of the original panel, as well as other recommended specialists, including representation from the pilot implementation site. The panel members were given the mandate to review the guideline, focusing on the currency of the recommendations and evidence, keeping to the original scope of the document. Through a process of consensus, recommendations for revision to the guideline were identified.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

Original Guideline: January 2002

A formal cost analysis was not performed and published cost analyses were not reviewed.

Update: March 2005

Published cost analyses were reviewed.

METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing
External Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

The final draft was submitted to a set of external stakeholders for review and feedback (see Appendix A in the original guideline document for stakeholder profile). The completed nursing best practice guideline was further refined after a pilot implementation phase in selected practice settings in Ontario (see "Acknowledgement" in the original guideline document for a listing of implementation sites). Pilot implementation practice settings were identified through a "request for proposal" process conducted by Registered Nurses Association of Ontario (RNAO).

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The levels of evidence supporting the recommendations (Ia, Ib, IIa, IIb, III, IV) are defined at the end of the "Major Recommendations" field.

Practice Recommendations

Assessment

Recommendation 1.1

A head-to-toe skin assessment should be carried out with all clients at admission, and daily thereafter for those identified at risk for skin breakdown. Particular attention should be paid to vulnerable areas, especially over bony prominences.

(Level of Evidence = IV)

Recommendation 1.2

The client's risk for pressure ulcer development is determined by the combination of clinical judgment and the use of a reliable risk assessment tool. The use of a tool that has been tested for validity and reliability, such as the *Braden Scale for Predicting Pressure Sore Risk*, is recommended. Interventions should be based on identified intrinsic and extrinsic risk factors and those identified by a risk assessment tool, such as Braden's categories of sensory perception, mobility, activity, moisture, nutrition, friction, and shear. Risk assessment tools are useful as an aid to structure assessment.

(Level of Evidence = IV)

Recommendation 1.3

Clients who are restricted to bed and/or chair, or those experiencing surgical intervention, should be assessed for pressure, friction, and shear in all positions and during lifting, turning, and repositioning.

(Level of Evidence = IV)

Recommendation 1.4a

All pressure ulcers are identified and staged using the National Pressure Ulcer Advisory Panel (NPUAP) criteria.

(Level of Evidence = IV)

Recommendation 1.4b

If pressure ulcers are identified, utilization of the Registered Nurses Association of Ontario (RNAO) best practice guideline *Assessment and Management of Stage I to IV Pressure Ulcers* is recommended.

(Level of Evidence = IV)

Recommendation 1.5

All data should be documented at the time of assessment and reassessment.

(Level of Evidence = IV)

Planning

Recommendation 2.1

An individualized plan of care is based on assessment data, identified risk factors, and the client's goals. The plan is developed in collaboration with the client, significant others. and health care professionals.

(Level of Evidence = IV)

Recommendation 2.2

The nurse uses clinical judgment to interpret risk in the context of the entire client profile, including the client's goals.

(Level of Evidence = IV)

Interventions

Recommendation 3.1

For clients with an identified risk for pressure ulcer development, minimize pressure through the immediate use of a positioning schedule.

(Level of Evidence = IV)

Recommendation 3.2

Use proper positioning, transferring, and turning techniques. Consult Occupational Therapy/Physiotherapy (OT/PT) regarding transfer and positioning techniques and devices to reduce friction and shear and to optimize client independence.

(Level of Evidence = IV)

Recommendation 3.3a

Consider the impact of pain. Pain may decrease mobility and activity. Pain control measures may include effective medication, therapeutic positioning, support surfaces, and other non-pharmacological interventions. Monitor level of pain on an on-going basis, using a valid pain assessment tool.

(Level of Evidence = IV)

Recommendation 3.3b

Consider the client's risk for skin breakdown related to the loss of protective sensation or the ability to perceive pain and to respond in an effective manner (e.g., impact of analgesics, sedatives, neuropathy, etc.)

(Level of Evidence = IV)

Recommendation 3.3c

Consider the impact of pain on local tissue perfusion

(Level of Evidence = IV)

Recommendation 3.4

Avoid massage over bony prominences

(Level of Evidence = IIb)

Recommendation 3.5

Clients at risk of developing a pressure ulcer should not remain on a standard mattress. A replacement mattress with low interface pressure, such as high-density foam, should be used.

(Level of Evidence = Ia)

Recommendation 3.6

For high risk clients experiencing surgical intervention, the use of pressure-relieving surfaces intraoperatively should be considered.

(Level of Evidence = Ia)

Recommendation 3.7

For individuals restricted to bed:

- Utilize an interdisciplinary approach to plan care.
- Use devices to enable independent positioning, lifting, and transfers (e.g., trapeze, transfer board, bed rails).
- Reposition at least every 2 hours or sooner if at high risk.
- Use pillows or foam wedges to avoid contact between bony prominences.
- Use devices to totally relieve pressure on the heels and bony prominences of the feet.
- A 30 degree turn to either side is recommended to avoid positioning directly on the trochanter.
- Reduce shearing forces by maintaining the head of the bed at the lowest elevation consistent with medical conditions and restrictions. A 30 degree elevation or lower is recommended.
- Use lifting devices to avoid dragging clients during transfer and position changes.
- Do not use donut type devices or products that localize pressure to other areas.

(Level of Evidence = IV)

Recommendation 3.8

For individuals restricted to chair:

- Use an interdisciplinary approach to plan care.
- Have the client shift weight every 15 minutes, if able.
- Reposition at least every hour if unable to shift weight.
- Use pressure-reducing devices for seating surfaces.
- Do not use donut type devices or products that localize pressure to other areas.
- Consider postural alignment, distribution of weight, balance, stability, support of feet, and pressure reduction when positioning individuals in chairs or wheelchairs.
- Refer to OT/PT for seating assessment and adaptations for special needs.

(Level of Evidence = IV)

Recommendation 3.9

Protect and promote skin integrity:

- Ensure hydration through adequate fluid intake.
- Individualize the bathing schedule.
- Avoid hot water and use a pH balanced, non-sensitizing skin cleanser.
- Minimize force and friction on the skin during cleansing.
- Maintain skin hydration by applying non-sensitizing, pH balanced, lubricating moisturizers and creams with minimal alcohol content.
- Use protective barriers (e.g., liquid barrier films, transparent films, hydrocolloids) or protective padding to reduce friction injuries.

(Level of Evidence = IV)

Recommendation 3.10

Protect skin from excessive moisture and incontinence:

- Assess and manage excessive moisture related to body fluids (e.g., urine, feces, perspiration, wound exudates, saliva)
- Gently cleanse skin at time of soiling. Avoid friction during care with the use of a spray perineal cleaner or soft wipe.
- Minimize skin exposure to excess moisture. When moisture cannot be controlled, use absorbent pads, dressings, or briefs that wick moisture away from the skin. Replace pads and linens when damp.
- Use topical agents that provide protective barriers to moisture.
- If unresolved skin irritation exists in a moist area, consult with the physician for evaluation and topical treatment.
- Establish a bowel and bladder program.

(Level of Evidence = IV)

Recommendation 3.11

A nutritional assessment with appropriate interventions should be implemented on entry to any new health care environment and when the client's condition changes. If a nutritional deficit is suspected:

- Consult with a registered dietitian. *(Level of Evidence = IV)*
- Investigate factors that compromise an apparently well nourished individual's dietary intake (especially protein or calories) and offer him or her support with eating. *(Level of Evidence = IV)*
- Plan and implement a nutritional support and/or supplementation program for nutritionally compromised individuals. *(Level of Evidence = IV)*
- If dietary intake remains inadequate, consider alternative nutritional interventions. *(Level of Evidence = IV)*
- Nutritional supplementation for critically ill older clients should be considered. *(Level of Evidence = Ib)*

Recommendation 3.12

Institute a rehabilitation program, if consistent with the overall goals of care and the potential exists for improving the individual's mobility and activity status. Consult the care team regarding a rehabilitation program.

(Level of Evidence = IV)

Discharge/Transfer of Care Arrangements

Recommendation 4.1

Advance notice should be given when transferring a client between settings (e.g., hospital to home/long-term care facility/hospice/residential care) if pressure reducing/relieving equipment is required to be in place at time of transfer (e.g., pressure relieving mattresses, seating, special transfer equipment). Transfer to another setting may require a site visit, client/family conference, and/or assessment for funding of resources to prevent the development of pressure ulcers.

(Level of Evidence = IV)

Recommendation 4.2

Clients moving between care settings should have the following information provided:

- Risk factors identified
- Details of pressure points and skin condition prior to discharge
- Type of bed/mattress the client requires
- Type of seating the client requires
- Details of healed ulcers
- Stage, site, and size of existing ulcers
- History of ulcers, previous treatments, and products used

- Type of dressing currently used and frequency of change
- Adverse reactions to wound care products
- Summary of relevant laboratory results
- Need for on-going nutritional support

(Level of Evidence = IV)

Education Recommendations

Recommendation 5.1

Educational programs for the prevention of pressure ulcers should be structured, organized, and comprehensive and should be updated on a regular basis to incorporate new evidence and technologies. Programs should be directed at all levels of health care providers including clients, family, or caregivers.

(Level of Evidence = III)

Recommendation 5.2

The educational program for prevention of pressure ulcers should be based on the principles of adult learning, the level of information provided, and the mode of delivery. Programs must be evaluated for their effectiveness in preventing pressure ulcers through such mechanisms as quality assurance standards and audits. Information on the following areas should be included:

- The etiology and risk factors predisposing to pressure ulcer development
- Use of risk assessment tools, such as the *Braden Scale for Predicting Pressure Sore Risk*. Categories of the risk assessment should also be utilized to identify specific risks and ensure effective care planning
- Skin assessment
- Staging of pressure ulcers
- Selection and/or use of support surfaces
- Development and implementation of an individualized skin care program
- Demonstration of positioning/transferring techniques to decrease risk of tissue breakdown
- Instruction on accurate documentation of pertinent data
- Roles and responsibilities of team members in relation to pressure ulcer risk assessment and prevention

(Level of Evidence = III)

Organization & Policy Recommendations

Recommendation 6.1

Organizations need a policy with respect to providing and requesting advance notice when transferring or admitting clients between practice settings when special needs (e.g., surfaces) are required.

(Level of Evidence = IV)

Recommendation 6.2

Guidelines are more likely to be effective if they take into account local circumstances and are disseminated by ongoing educational and training programs.

(Level of Evidence = IV)

Recommendation 6.3

Nursing best practice guidelines can be successfully implemented only when there is adequate planning, resources, organizational and administrative support, as well as appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:

- An assessment of organizational readiness and barriers to education
- Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process
- Dedication of a qualified individual to provide the support needed for the education and implementation process
- Ongoing opportunities for discussion and education to reinforce the importance of best practices
- Opportunities for reflection on personal and organizational experience in implementing guidelines

In this regard, RNAO (through a panel of nurses, researchers, and administrators) has developed the *Toolkit: Implementation of Clinical Practice Guidelines* based on available evidence, theoretical perspectives, and consensus. The Toolkit is recommended for guiding the implementation of the RNAO guideline *Risk Assessment and Prevention of Pressure Ulcers.*

(Level of Evidence = IV)

Recommendation 6.4

Organizations need to ensure that resources are available to clients and staff. These resources include, but are not limited to, appropriate moisturizers, skin barriers, access to equipment (therapeutic surfaces), and relevant consultants (Occupational Therapy [OT], Physical Therapy [PT], Enterostomal Therapy [ET], wound specialists, etc.)

(Level of Evidence = IV)

Recommendation 6.5

Interventions and outcomes should be monitored and documented using prevalence and incidence studies, surveys, and focused audits.

(Level of Evidence = IV)

Definitions:

Levels of Evidence

Ia Evidence obtained from meta-analysis or systematic review of randomized controlled trials

Ib Evidence obtained from at least one randomized controlled trial

IIa Evidence obtained from at least one well-designed controlled study without randomization

IIb Evidence obtained from at least one other type of well-designed quasi-experimental study without randomization

III Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies, and case studies

IV Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- Accurate identification of at-risk individuals who need preventive interventions and of the specific factors that place them at risk
- Protection and promotion of skin integrity
- Protection against the forces of pressure, friction and shear
- Reduction of the incidence of pressure ulcers through educational programs for health professionals and clients
- Nurses, other health care professionals, and administrators who are leading and facilitating practice changes will find this document valuable for the development of policies, procedures, protocols, educational programs, assessment, and documentation tools, etc.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- These best practice guidelines are related only to nursing practice and not intended to take into account fiscal efficiencies. These guidelines are not binding for nurses and their use should be flexible to accommodate client/family wishes and local circumstances. They neither constitute a liability nor discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor Registered Nurses Association of Ontario (RNAO) give any guarantee as to the accuracy of the information contained in them nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omission in the contents of this work. Any reference throughout the document to specific pharmaceutical products as examples does not imply endorsement of any of these products.
- This nursing best practice guideline is a comprehensive document providing resources necessary for the support of evidence-based nursing practice. The document needs to be reviewed and applied, based on the specific needs of the organization or practice setting/environment, as well as the needs and wishes of the client. Guidelines should not be applied in a "cookbook" fashion but used as a tool to assist in decision making for individualized client care, as well as ensuring that appropriate structures and supports are in place to provide the best possible care.
- The RNAO panels strongly acknowledge that successful pressure ulcer prevention requires an interdisciplinary team effort. The purpose of this guideline is to assist nurses with the provision of evidence-based quality care to those adults at risk for developing pressure ulcers. Nurses, working in partnership with the interdisciplinary health care team and individuals at risk for pressure ulcers, have an important role in risk assessment and prevention. The panel recognizes however that prevention and management of pressure ulcers are intertwined in practice, and therefore recommends the use of the RNAO Nursing Best Practice Guideline *Assessment and Management of Stage I to IV Pressure Ulcers* in conjunction with this guideline.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

Toolkit: Implementing Clinical Practice Guidelines

Best practice guidelines can only be successfully implemented if there are: adequate planning, resources, organizational, and administrative support as well as appropriate facilitation. Registered Nurses Association of Ontario (RNAO) through a panel of nurses, researchers, and administrators has developed the *Toolkit: Implementation of Clinical Practice Guidelines* based on available evidence, theoretical perspectives, and consensus. The *Toolkit* is recommended for guiding the implementation of any clinical practice guideline in a health care organization.

The *Toolkit* provides step-by-step directions to individuals and groups involved in planning, coordinating, and facilitating the guideline implementation. Specifically, the *Toolkit* addresses the following key steps in implementing a guideline:

1. Identifying a well-developed, evidence-based clinical practice guideline
2. Identification, assessment and engagement of stakeholders
3. Assessment of environmental readiness for guideline implementation
4. Identifying and planning evidence-based implementation strategies
5. Planning and implementing evaluation
6. Identifying and securing required resources for implementation

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The *Toolkit* is one key resource for managing this process.

Evaluation and Monitoring

Organizations implementing the recommendations in this nursing best practice guideline are recommended to consider how the implementation and its impact will be monitored and evaluated. A table found in the original guideline document, based on a framework outlined in the RNAO *Toolkit: Implementation of clinical practice guidelines* (2002), illustrates some indicators for monitoring and evaluation.

Implementation Strategies

The RNAO and the guideline revision panel have compiled a list of implementation strategies to assist health care organizations or health care disciplines who are interested in implementing this guideline. A summary of these strategies can be found in the original guideline document.

IMPLEMENTATION TOOLS

Chart Documentation/Checklists/Forms
Foreign Language Translations
Patient Resources
Quick Reference Guides/Physician Guides
Tool Kits

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Registered Nurses Association of Ontario (RNAO). Risk assessment & prevention of pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 80 p. [70 references]

ADAPTATION

The Registered Nurses Association of Ontario (RNAO) panel selected the following guidelines to adapt and modify for the current guideline:

Original Guideline: January 2002

- Agency for Health Care Policy and Research (1992). Pressure ulcers in adults: Prediction and prevention. Clinical practice guideline. [Online].
- Clinical Resource Efficiency and Support Team (1998). Guidelines for the prevention and management of pressure sores. [Online].

Update: March 2005

- Folkedahl, B.A., Frantz, R.A. & Goode, C. (2002). Prevention of pressure ulcers evidence-based protocol. In M.G. Titler (Series Ed.), Series on Evidence-Based Practice for Older Adults, Iowa City, IA: The University of Iowa College of Nursing Gerontological Nursing Interventions Research Center, Research Translation and Dissemination Core.
- National Institute for Clinical Excellence (2001). Pressure ulcer risk assessment and prevention. [Online].
- Wound Ostomy and Continence Nurses Society (2003). Guideline for the prevention and management of pressure ulcers. Glenview, IL: Wound, Ostomy, and Continence Nurses Society.

DATE RELEASED

2002 Jan (revised 2005 Mar)

GUIDELINE DEVELOPER(S)

Registered Nurses Association of Ontario - Professional Association

SOURCE(S) OF FUNDING

Funding was provided by the Ontario Ministry of Health and Long Term Care.

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Declarations of interest and confidentiality were requested from all members of the guideline revision panel. Further details are available from the Registered Nurses Association of Ontario (RNAO).

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Registered Nurses Association of Ontario (RNAO). Risk assessment and prevention of pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Jan. 56 p.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site. This document is also available in French from the RNAO Web site.

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines Project, 158 Pearl Street, Toronto, Ontario M5H 1L3.

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Summary of recommendations. Risk assessment & prevention of pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 6 p. Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site.
- Toolkit: implementation of clinical practice guidelines. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Jan. 91 p. Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario RNAO Web site.
- Repositioning Techniques. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 6 p. Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site
- Appendix C: Braden scale for predicting pressure sore risk. Risk assessment & prevention of pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 2 p Electronic copies: Available in Portable

Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site

- Appendix I: Monitoring tools. Risk assessment & prevention of pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2005 Mar. 3 p Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines Project, 158 Pearl Street, Toronto, Ontario M5H 1L3.

PATIENT RESOURCES

The following is available:

- Health education fact sheet. Taking the pressure off: preventing pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2003 Nov. 2 p. Electronic copies: Available in Portable Document Format (PDF) from the Registered Nurses Association of Ontario (RNAO) Web site. (This document is also available in French from the RNAO Web site.)

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines Project, 158 Pearl Street, Toronto, Ontario M5H 1L3.

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Registered Nurses Association of Ontario (2005). Risk assessment and prevention of pressure ulcers (revised). Toronto, Canada: Registered Nurses Association of Ontario.

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