Pressure Sores, a Growing Quality and Safety Problem in Health Care: Micro, Meso and Macro Solutions

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Objectives

By the end of the session the participant will gain perspective on:

- Pressure ulcers as a priority national and local/regional patient safety issue
- The impact of pressure ulcers in the Canadian health care system
- Current clinical and operational realities of pressure ulcers
- Strategies required at the micro, meso and macro levels of the health care system
- An exemplar of a successful pressure ulcer prevention program at one tertiary care centre
Pressure Ulcers
A major **global** quality, safety issue in health care
Pressure Ulcers
A major national quality, safety issue in health care

Retrospective review of pressure ulcer prevalence studies across Canada (gathered between 1990 and 2003)

mean = 26%
(n = 10,911)

......In acute care
mean = 25%
(n = 4,831)

Pressure Ulcers: Burden of Care in Canada

- 43 year old female with Diabetes and fractured hip

**COST TO TREAT**
- $800/day x 3 weeks
- $3,840.00 home care labour
- $22,000.00 “treatments”
- Antibiotics

Total estimate $ 42,500

Cost to prevent while in hospital
($200.00 - $350.00)
Pressure Ulcers
A major patient safety issue in health care
Current Macro/Meso Realities Associated with Pressure Ulcer

- Lack of awareness
- Low uptake and use of best practice guidelines
- Fragmented or absent basic and continuing education in all disciplines
- Lack of infrastructure and financial resources
- Absence of interdisciplinary wound care teams
- Lack of access to wound care clinicians
- Deficiencies in coordinated care across the continuum
- Inadequate technology to build robust data bases

Campbell, Teague, Hurd & King(2006); Graham et al. (2003)
Bridging the Gap
An Integrated Approach
to Reduce Pressure Ulcers

Design, delivery, and evaluation of wound care prevention and treatment that is PERSON/COMMUNITY-CENTRED, SAFE, TIMELY, EFFICIENT, EFFECTIVE & EQUITABLE

(adapted from the Institute of Medicine, 2001)
Macro Level: Government Accountabilities

- Benchmarks set across the continuum of health care
  - Robust data bases collecting facility acquired pressure ulcer outcomes
  - Incentives for facilitates to share and learn from best practice initiatives/innovation
  - Incentives for meeting benchmarks

- Regional Health Networks (eg., LHINs in Ontario)
  - Making pressure ulcer surveillance and prevention a strategic priority
  - Building Inter-professional Teams to build and manage programs across the sectors within each region

- Public Reporting
  - OHA Hospital Report Card – Nurse Sensitive Outcome
Macro Level: Knowledge Transfer

- Research - CIHR/CPSI
- Share practices and evaluation of clinical outcomes
- Partnerships across the health care system
Meso Level
Organizational Accountabilities

• Senior leadership - organizational priority
• Physician/Nursing Leadership
• Governance structures - monitor & evaluate quality improvement (Councils/Committees)
• Human Resources
  – Investment in intellectual capital
    • Advanced Practice Nurse champions
    • Interdisciplinary teams
• Screening/Assessment Tools
• Capital Equipment
• Modern Dressings
• Staff Education
Meso Level
Organizational Accountabilities

Best Practices

• Risk assessment (Braden Scale) on admission - preventive interventions and documentation for all patients admitted

• Right equipment for the right patient at the right time (centralized equipment management)

• Discharge planning for high risk patients

• Annual surveillance- program
Meso Level: Academia

- Review and include content in undergraduate & CE programs for nurses, physicians & chiropody/podiatry
  - Ensure strong basis in pathophysiology of wound healing; differentiation of acute and chronic wounds
- Develop a standardized, interdisciplinary CE curriculum on wound care for on-line delivery
- Expand use of journal articles and clinical practice guidelines as reference material
  - Expand critical review/appraisal of research and clinical decision making content
- Increase cross/adjunct appointments between education & practice for researchers, clinical experts: Advanced Practice Nurses
- Participate in CPG development & testing processes; interdisciplinary collaboration strongly recommended

K. MacMillan, 2006
Micro/SMH Pressure Ulcers
A major local quality, safety issue in health care

Number of patients with pressure ulcers SMH
Total number of patients surveyed in a population at a specific point in time
Accounts for all pressure ulcers, regardless of ‘place’ origin

1997 \[\frac{76}{263} = 29\%\]
Micro Realities Associated with Pressure Ulcer

- Inconsistent skin assessment and documentation on admission
- No risk assessment tool used
- Reactive care vs. proactive prevention
- One modern wound care product on the carts
- Cultural belief that pressure ulcers are caused by poor nursing care
- Pressure redistribution mattress rentals for only the worst case scenarios and for those who have pressure ulcers
Clinical Transformation
Best Practice Implementation

• Braden Scale for Predicting Pressure Sore Risk adopted
• Modern wound care products chosen and made available on all med/surg carts
• Pressure ulcer assessment documentation forms developed
• Poster/enabler developed
• Education program designed, delivered, evaluated, redesigned, delivered, evaluated......
Strategic Investments to Build an Integrated, Inter-professional Infrastructure

• Dedicated human health care resources
  – Interdisciplinary team that includes Advanced Practice Nurses, Chiropodists, Occupational Therapists, Physicians (Medicine and Surgery)

• On-going education of health care staff at SMH
  – Best Practices for prevention of pressure ulcers
  – Best Practices for the treatment of stage I-IV pressure ulcers

• Pressure re-distribution mattresses for all beds
  – Specialty mattresses for treatment

• Annual Surveillance
Clinical Transformation: Surveillance/Evaluation

Annual point prevalence surveillance conducted

- Healthcare staff data collection teams
  - Builds capacity and collaboration
SMH Outcomes

- Prevalence reduced
- Purchase and triage of VAC units
- > 300 staff educated per year
- Pressure redistribution mattresses throughout organization
- Specialty mattresses for the Intensive Care Unit
- Pressure relief surfaces (air loss, gel, pulsation) for critical mass of high risk patients
- 3 clinics dedicated to complex wounds and diabetic foot ulcers, biological treatments and research
- Enhanced discharge planning
SMH Outcomes

Team expansion over 8 years
3 Nursing positions
Chiropody
Occupational Therapy
Internal medicine
Plastic/Orthopedic/General Surgery

Research program – vendor sponsored, non-funded and funded projects (Canadian Nurses Foundation)

Move from sub-program to Corporate Program
- Nursing Fellowship Program
- Wound Care Preceptorship Program
Micro Level: Inter-professional Teams and Evidence Based Care

(Institute of Medicine, 2003)
Bridging the Micro – Meso Gap: Our Partners in Knowledge Translation

PMH  TGH  SMH  SBH
Bridging the Meso - Macro Gap: Our Partners in Knowledge Translation

Local Health Integrated Networks
And
Seamless Wound Care:
The Art and Science of Building Bridges

September 15-17, 2006
Radisson Hotel, Markham, Ontario

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Building Intellectual Capital

…..Provincially

Registered Nurses’ Association of Ontario
L’Association des infirmières et infirmiers autorisés de l’Ontario

NURSING BEST PRACTICE GUIDELINES PROGRAM

Best Practices in Wound Care

MINDING THE GAP

Fall 2007 Institute

Course content development:

Teague, Campbell, Morgan, Hurd and Bajnok
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Thank you