We invite you to join the 5 Million Lives Campaign, a national initiative to dramatically improve the quality of American health care. The Institute for Healthcare Improvement (IHI) and its partners seek to engage thousands of U.S. hospitals in an effort to reduce harm for five million American patients between December 2006 and December 2008. This ambitious work builds upon the great energy and commitment shown by hospitals during the 100,000 Lives Campaign, a national, IHI-led initiative that focused on reducing unnecessary mortality and ran from December 2004 to June 2006. Complete details, including materials, contact information for experts, and web discussions, are on the web at http://www.ihi.org/IHI/Programs/Campaign/.

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The objective of this study was to identify specific demographic, medical, functional status, and nutritional characteristics that predict the development of stage 2 or greater pressure ulcers among patients whose activity is limited to bed or chair. Results suggest that nonblanchable erythema, lymphopenia, immobility, dry skin, and decreased body weight are independent and significant risk factors for pressure ulcers in hospitalized patients whose activity is limited to bed or chair.


A quiz with the objective of improving clinical practice and the quality of patient care by providing a learning opportunity that enhances the participant's understanding of pressure ulcer risk assessment. Specific objectives cited by the authors: 1. Identify the purpose and benefits of using a pressure ulcer risk assessment scale. 2. Evaluate pressure ulcer risk by using the Braden Scale and its subscales. 3. Identify the interventions that can be implemented based on the patient's Braden Scale score.


Despite an increase in pressure ulcer research since the publication of the AHCPR guidelines on pressure ulcers, few quality indicators are supported by substantial evidence. Through a literature search and synthesis coupled with a two-stage expert panel process, the authors identify 11 quality indicators for pressure ulcers. These indicators span pressure ulcer care from prevention and assessment to topical treatments. Although they are not comprehensive, they provide a baseline for measures that may discriminate between quality and substandard care.


An examination of skin health outcomes of an exercise and incontinence intervention. A multifaceted intervention improved four risk factors related to skin health but did not translate into significant improvements in most measures of skin health.


This study sought to determine expert opinion regarding the preventability of pressure ulcers, the resources available to nursing homes for prevention, and the role of negligence lawsuits in pressure ulcer care. The results of this survey demonstrated divergent expert opinion on whether pressure ulcers are preventable. The role of regulations and litigation in pressure ulcer prevention needs to be further defined.


Summary of the recommendations and algorithm presented in the AHCPR Pressure Ulcer Guidelines; the evidence supporting recommendations; and the research reported since the guidelines were written.


The Braden Scale has been translated into Chinese, Japanese, Dutch, French, German, Italian, and perhaps other languages. It has been implemented in many health care settings in the United States and abroad. Perhaps the most significant data come from individual settings, such as the two highlighted earlier, which show that through use of a research-based risk assessment tool and a program of prevention based on the findings of the assessment, pressure ulcer incidence can be reduced. Both sites saw a 50% to 60% decrease in incidence of pressure sores. If the cost projections of Miller and Delozier cited earlier are correct and this decrease could be replicated in hospitals across the country, the cost savings for the nation would exceed $400 million.


A study designed to determine the effect of dietary protein on healing of pressure ulcers in malnourished patients. The authors conclude that high protein diets may improve the healing of pressure ulcers in malnourished nursing home patients.

This article reviews systems theory, presents the steps for process improvement using the PDSA cycle, and references a recent statewide QI study conducted by the authors in collaboration with the Minnesota QIO.


OSF Saint Francis Medical Center (SFMC) initiated the implementation of the Six Sigma methodology—a process that allows for increased focus on developing and delivering near-perfect products and services—in its daily operations.

By incorporating Six Sigma methodologies into SFMC’s treatment process, investigators hoped they could improve treatment methods and reduce further incidences of pressure ulcers. This undertaking ultimately led to the development of the Save Our Skin (SOS) project, an effort that boasted an ambitious goal of reducing the number of hospital-acquired pressure ulcers in adult patients by 50% within one fiscal year.


In this article, the Canadian Association of Wound Care puts forward 12 recommendations for best practices in the prevention and treatment of pressure ulcers that focus on an interdisciplinary patient-centered approach. These recommendations are a synthesis of the Agency for Health Care Policy and Research guidelines, European guidelines, and current literature as interpreted by the Canadian experience and achieved through a national consensus panel. The article concludes that best practice guidelines must be fluid documents that respond to new evidence and experience.


A study designed to assess the effectiveness of low-air-loss beds for the treatment of pressure ulcers in nursing homes. The authors conclude that low-air-loss beds provide substantial improvement compared with foam mattresses, despite other factors in pressure ulcer healing.

This article concludes that those who provide direct care to older individuals who are functionally impaired and immobilized must be constantly vigilant for the potential development of pressure ulcers. Use of the evidence-based guideline, "Prevention of Pressure Ulcers" (Folkedahl et al., 2002), can provide a template for identification of patients at risk and implementation of interventions to prevent their occurrence.


In 2004, as part of Ascension Health's "Healthcare That Is Safe" initiative, St. Vincent's Medical Center, as an alpha site, was charged with defining best practices to eliminate facility-acquired pressure ulcers. A comprehensive plan, including the "SKIN" (Surfaces, Keep the patients turning, Incontinence management, Nutrition) bundle, was developed. The incidence of pressure ulcers decreased from > 2% to < 1% from December 2004 through February 2006. No new Stage III or IV facility-acquired pressure ulcers occurred between August 2004 and February 2006. Weekly SKIN operations meetings and use of the SKIN process tool ensured that all at-risk patients were receiving appropriate interventions. The SKIN program was adopted and is being implemented throughout Ascension Health.


It is estimated that 1.3 million to 3 million adults have a pressure ulcer, with an estimated cost of $500 to $40 000 to heal each ulcer. The incidence of pressure ulcers varies greatly by clinical setting. Incidence rates of 0.4% to 38.0% for hospitals, 2.2% to 23.9% for long-term care, and 0% to 17% for home care have been reported. Incidence rates of less than 2% are ideal. However, the optimal incidence rate may vary depending on patient case mix, severity of illness, and other contextual factors. Pressure ulcers in elderly persons have also been associated with increased mortality rates. Because pressure ulcers are now considered a good indicator of quality of care, the failure to prevent or heal them can lead to litigation.

This guideline makes specific recommendations to identify at-risk adults and to define early interventions for prevention of pressure ulcers. The guideline may also be used to treat Stage I pressure ulcers (nonblanchable erythema of intact skin). These guideline recommendations are not intended as the basis for care of infants and children, nor do they apply to individuals with existing Stage II or greater pressure ulcers or to individuals who are fully mobile.


A pressure ulcer is an area of localized tissue destruction directly related to prolonged pressure. The loss of skin integrity produces significant consequences not only for the individual, but also for the community, with reported costs of $8.5 billion for pressure-ulcer care. Because of these costs, health care providers should be seeking prevention programs that identify high-risk individuals and implement preventive measures before the ulcer begins. Once the individual develops an ulcer, assessment of healing is critical to determine the appropriate treatment. Successful treatment depends on the principles of debridement, cleansing, bacterial control, wound dressing, and occasionally, surgical intervention.


The authors conclude that given current evidence, using support surfaces, repositioning the patient, optimizing nutritional status, and moisturizing sacral skin are appropriate strategies to prevent pressure ulcers. Although a number of RCTs have evaluated preventive strategies for pressure ulcers, many of them had important methodological limitations. There is a need for well-designed RCTs that follow standard criteria for reporting nonpharmacological interventions and that provide data on cost-effectiveness for these interventions.


A study to evaluate the impact of in-hospital pressure ulcer development on mortality among older, high-risk, hospitalized patients up to one year post-hospital discharge, after adjusting for baseline patient characteristics, disease severity, hospital complications, and discharge activity level. The authors conclude that pressure ulcers that develop during acute hospitalization are not associated with reduced 1-year
survival among high risk older persons after adjusting for nutritional and functional status, global measures of disease severity and co-morbidity, and noninfectious hospital complications.


The prevalence of pressure ulcers has remained constant at about 7% over the past 20 years, even though considerable time and money has been invested in various prevention strategies. This literature review explores whether pressure-prevention programmes can reduce the prevalence rate still lower or whether they are working but are limited by an increasingly aged population and rising patient acuity.


Guideline Objectives: (1) To present an evidence-based guideline for pressure ulcer prevention and management; (2) To improve cost-effective patient outcomes as well as increase wound research in the areas where there are gaps between research and practice.


A patient education document regarding how pressure ulcers form and how they can be prevented and treated.


This study examined characteristics of elderly people newly admitted to an acute-care setting who should be included in routine care planning. Use of the nutritional, functional, and cognitive profile developed from this study will enable nurses and medical personnel to better plan care to prevent functional decline and improve nutritional status during hospitalization of elderly patients.
The following is a comprehensive bibliography of articles on Best Practice and Quality Indicators in Pressure Ulcer Prevention, Incidence and Prevalence and Risk Assessment, compiled by the NPUAP.

Best Practice & Quality Indicators in Pressure Ulcer Prevention


**Incidence and Prevalence**


**Risk Assessment**


