



**Skin
Health**

**At What Cost?
How to
operationalize a
cost-effective skin
and wound care
program**



00-00-00 | MKT190000000

© 2021 Medline Industries, LP
Medline Proprietary and Confidential Information.

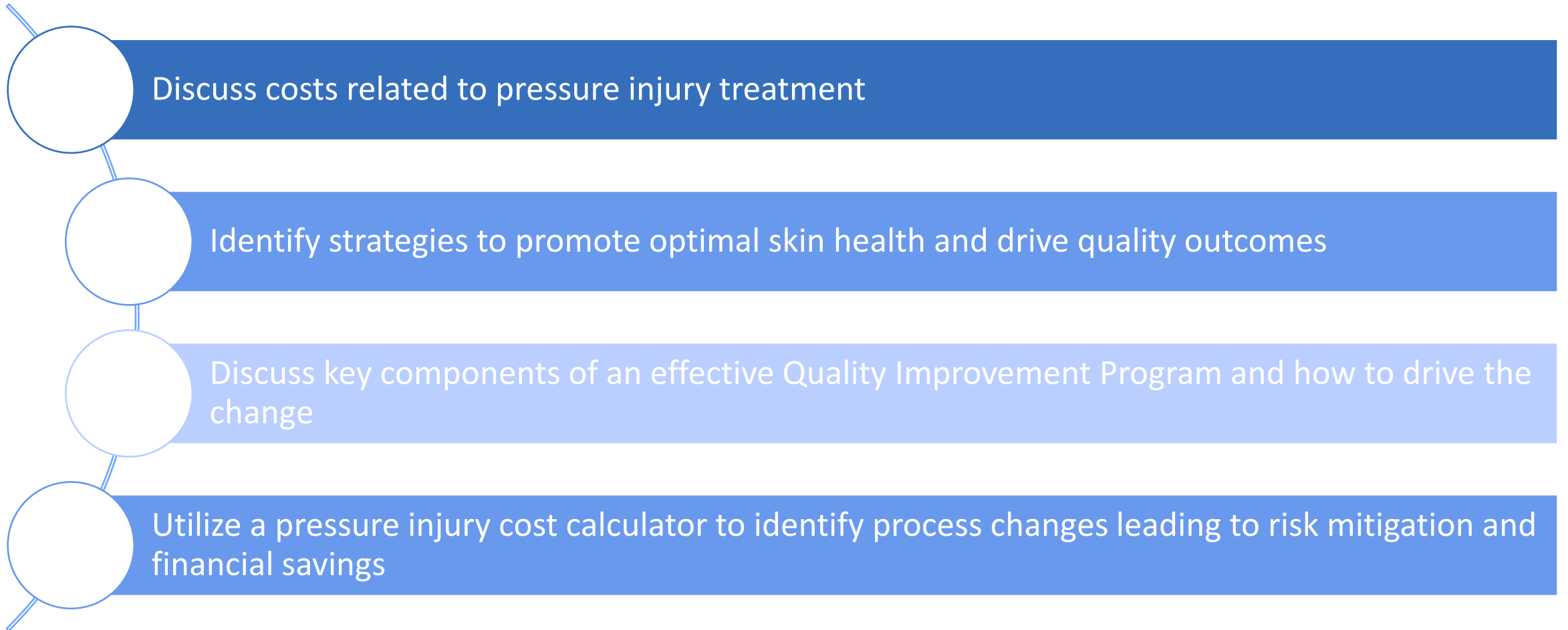


Melissa Morgan, MSN, RN, CWCN

Clinical Resource Manager,
Medline Industries, LP

Please note that this presentation and its content has been developed by Medline Industries, Inc. All content has been approved for use for one year unless otherwise advised. The content of this presentation is proprietary and may not be duplicated or repurposed from its original format without the expressed permission of Medline Industries, Inc. For any questions regarding this information please contact your Medline representative.

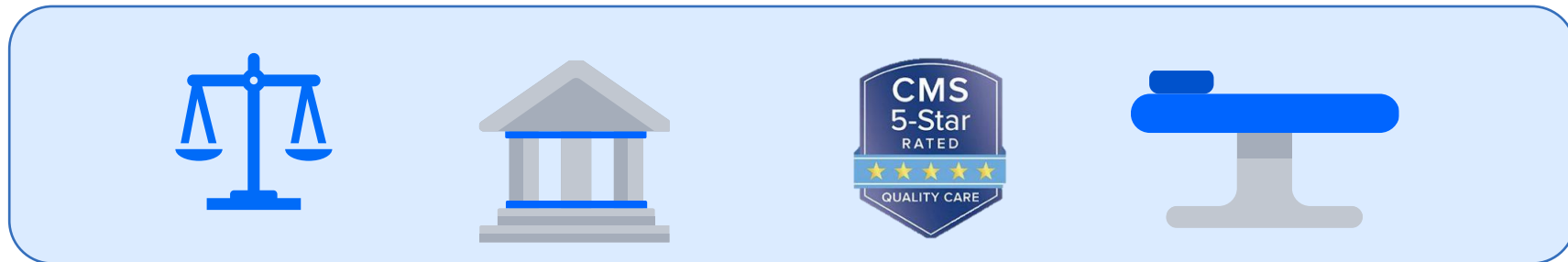
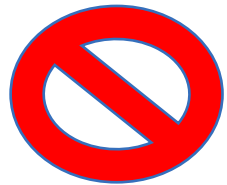
Objectives



What does the
treatment cost
of a pressure
injury include?



Daily costs for treatment



Where do we start?



2.5 million cases per year

60,000 deaths per year

Increased risk to elderly

2021 FACT SHEET: ABOUT PRESSURE INJURIES IN US HEALTHCARE
National Pressure Injury Advisory Panel (NPIAP)
www.npiap.com

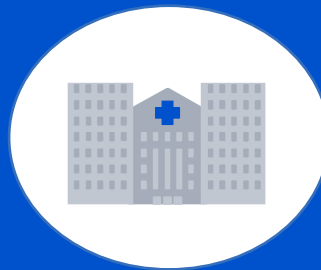
Fact	Comment
2.5 million cases per year ¹	Second most common diagnosis in health system billing records in the U.S.
60,000 deaths per year ²	Would make it the 8 th most frequent cause of death in U.S. based on CDC reporting
High Incidence Rate in Facilities	<ul style="list-style-type: none"> 2.1 per 1,000 average incidence across all acute care facilities² 10-20% average incidence across critical care units 20-30% average incidence across skilled nursing facilities
\$26.6 billion in costs ³	Accounts for 25% of all "wasteful spending" related to failures in healthcare delivery, according to U.S. CMS Director's Office ³
\$75,000-\$150,000 per patient ⁴	Average cost to facility for a stage 3, 4, or unstageable pressure injury
\$250,000 avg. malpractice claim ⁴	The #1 most common malpractice claim in the U.S.; many cases settle for more than \$1 million
\$0	The amount that U.S. CMS will reimburse a hospital for a pressure injury case, based on 2008 passage of reduced payments for hospital-acquired conditions ⁵
\$0	The amount that U.S. CMS will reimburse a hospital to pay for the clinician-time and material resources to prevent a pressure injury ⁵
1% Medicare Penalty ⁶	U.S. CMS will penalize hospitals 1% of total reimbursements if their hospital-acquired condition rates (including pressure injury) fall into the bottom 25 th -percentile of performance
CDC: 0 Cases and 0 Deaths	Currently, the CDC does not track numbers of pressure injury outcomes nationally
increased rate by 6% since 2014	U.S. AHRQ reports an increased pressure injury rate between 2014-2017; it is the only hospital-acquired condition rate currently increasing rather than improving nationwide ⁷
Increased Risk to Under-represented Minorities	Individuals with darker skin tones at increased risk of pressure injury because clinicians do not have resources to accurately identify/differentiate early-stage bruising and erythema ⁸
Increased Risk to Elderly	Elderly individuals, especially those who suffer from malnourishment and other chronic conditions are predisposed to higher risk ²
Increased Risk to Spinal Cord Injury	Individuals living with spinal cord injury have 14-times greater odds of developing a pressure injury than average inpatients ⁹
Increased Risk to Active-Duty Military ¹⁰	<ul style="list-style-type: none"> Operation Iraqi Freedom: 53% of casualties had pressure injuries Military Medicine: 22% incidence rate across most facilities
Increased Risk to Veterans ¹⁰	<ul style="list-style-type: none"> Veterans Affairs (VA) hospitals: pressure injury rate of 4.1 per 1,000, approximately double that of national average Veterans Affairs (VA) Polytrauma Rehabilitation: 38% of patients present with pressure injuries at time of admission Only 57 out of 170 VA Medical Centers (34%) are performing better than non-VA hospitals to prevent/manage pressure injury escalation
COVID-19	There is increased risk of pressure injury in critically ill COVID-19 patients ¹¹
\$50-\$100 per patient per day ¹²	The cost to prevent most pressure injuries in hospital patients by: <ul style="list-style-type: none"> Performing daily risk assessments and skin checks Nursing time to reposition patients side-to-side Manage moisture, incontinence and nutritional issues Offload pressure and reduce shear with beds, dressings and other devices Continually educate clinical staff about clinical practice guideline revisions
International Clinical Practice Guideline ¹³	NPIAP, in partnership with international collaborators, publishes revisions to pressure injury prevention guidelines every 5 years; the latest version (2019) was translated into 17 languages
Need for Federal Government to Prioritize this Issue	<ul style="list-style-type: none"> AHRQ: improve data-tracking so we have reliable data on pressure injury outcomes CMS: provide financial-reward incentives for facilities to prevent pressure injuries, in balance with financial-penalty incentives for poor outcomes CDC: begin tracking pressure injuries as they do other emerging diseases nationally HHS: provide more funding opportunities in support of research on pressure injury care
A Non-Partisan Issue	Pressure injury prevention requires a series of straightforward tasks implemented daily at the bedside, but nonetheless remains a harmful outcome to millions of Americans, particularly our elderly, military, veterans and people of color; this is an issue that we can all agree needs improvement, and therefore something that conservatives, liberals and independents can get behind to support by allocating federal resources in the 2020s to alleviate risk to patients



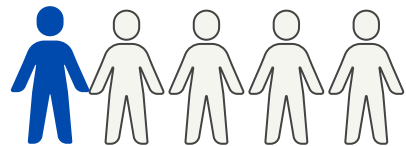
NPIAP (n.d.). 2021 Fact Sheet About Pressure Injuries. Retrieved March 3, 2023, from https://cdn.ymaws.com/npiap.com/resource/resmgr/public_policy_files/npiap_word_fact_sheet_08mar2.pdf

(n.d.). What is the Silver Tsunami? www.Caregivercalifornia.gov. Retrieved March 15, 2023, from <https://www.caregivercalifornia.org/2022/07/26/what-is-the-silver-tsunami-what-an-aging-population-means-for-california/>

Skilled Nursing Facility Statistics



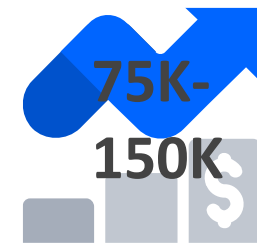
20-30% Incidence
across SNFs



At least 1 in 5
individuals will acquire
a pressure injury in a
SNF

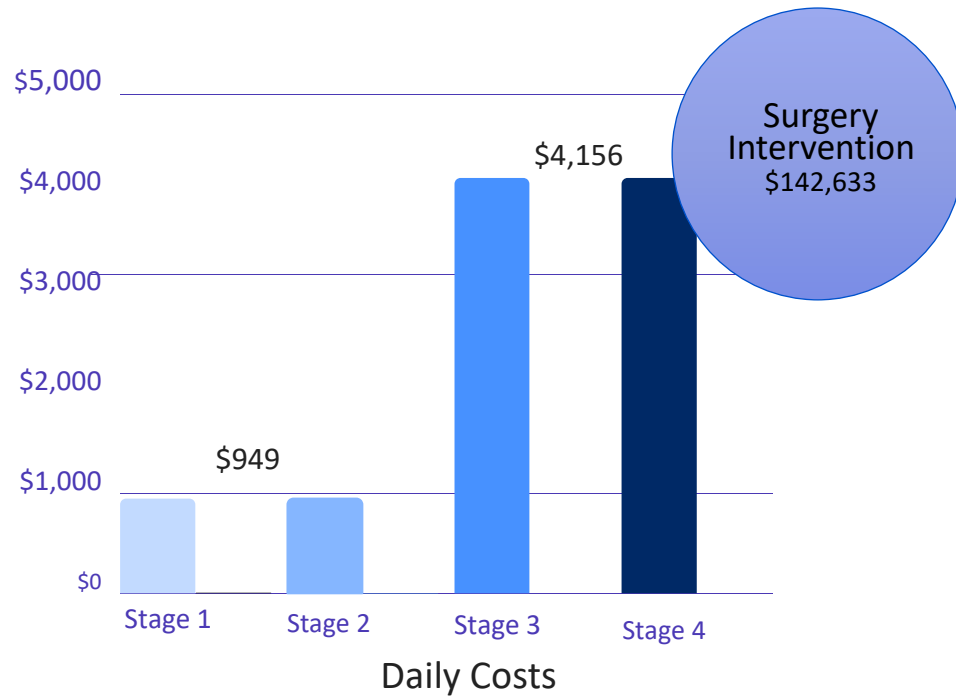


\$250K avg. malpractice claim; with
many cases settling for more than
a million dollars



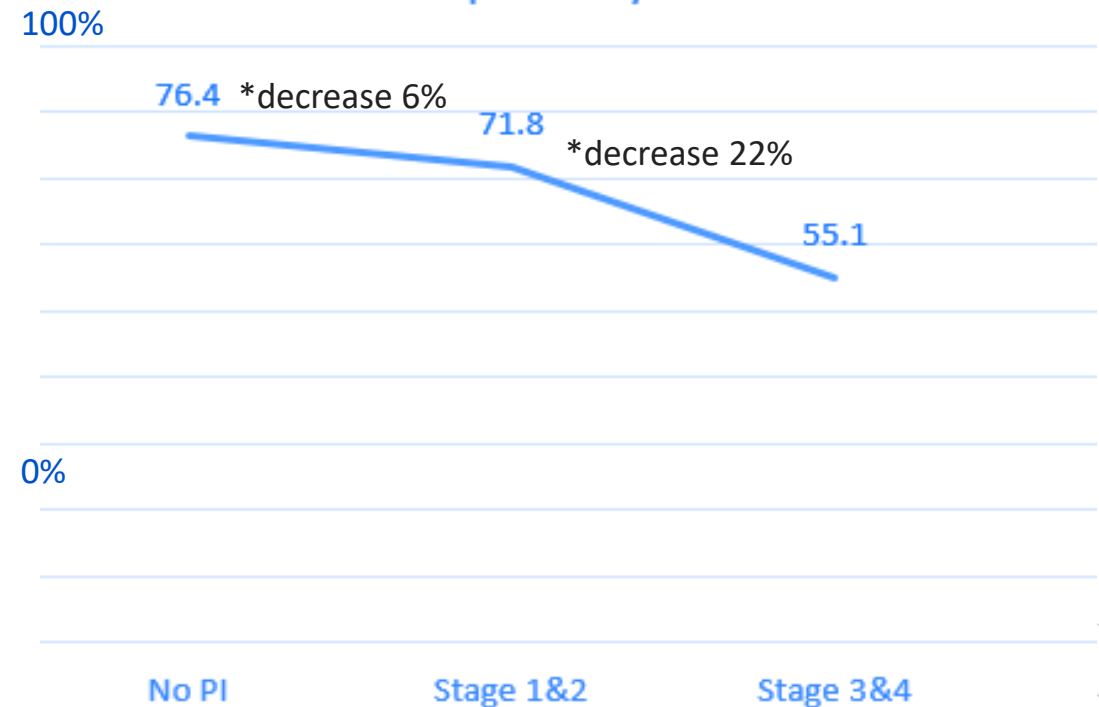
Average cost to facility for
a stage 3, 4 or unstageable
pressure injury, per
patient.

The Cost of Pressure Injuries in US Skilled Nursing Facilities



Includes skin checks, repositioning, support surfaces, nutrition, antibiotics, and unforeseen costs

US Life Expectancy after 55 without a PI



Assisted Living Facility Statistics



More than 810,000 people reside in assisted living facilities¹

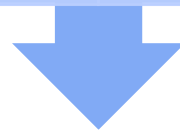
4% less than seniors living in nursing facilities



A total of 535 claims related to pressure injuries were recorded for 2021²

Average total incurred damages of \$254,108

Average total has increased more than 67% since 2018



The population of adults older than 85 will double by 2036 and triple by 2049¹

The number of people over 65 will grow by 42%

The number of people over 85 will grow by 111%

1. Rubin, E. (2023, January 19). *2021 Assisted Living Statistics*. Consumer Affairs. Retrieved March 3, 2023, from <https://www.consumeraffairs.com/assisted-living/statistics.html#:~:text=More%20than%20810%2C000%20people%20reside%20in%20assisted%20living,1%20million%20new%20senior%20living%20units%20by%202040>.

2. Montgomery, A. (2022, March 3). *Average Cost of Assisted Living Liability Claims Tops \$267,000*. Senior Housing News. Retrieved March 3, 2023, from <https://seniorhousingnews.com/2022/03/16/average-cost-of-assisted-living-liability-claims-tops-267000/>

Bill Padula, PhD, MSc, MS



- Assistant Professor of Pharmaceutical & Health Economics at University of Southern California (USC)
- Adjunct appointments at Johns Hopkins
 - Armstrong Institute for Patient Safety & Quality
 - School of Nursing
- Visiting professorships at Oxford, University of York, University of Technology Sydney
- Past President, National Pressure Injury Advisory Panel
- NIH-funded researcher
- Teaches with 'Teaching Vaccine Economics Everywhere Program' funded by Bill & Melinda Gates Foundation
- Fellowship in Health Economics + PhD + MSc Analytics + MS Health Policy + Bachelors Chemical Engineering



There is data out there...



US model data collected from:

- Medicare
- US Department of Health and Human Service (HHS)
- Existing published literature

Padula WV, Chen YH, Santamaria N. Five-layer border dressings as part of a quality improvement bundle to prevent pressure injuries in US skilled nursing facilities and Australian nursing homes: A cost-effectiveness analysis. *Int Wound J*. 2019;16:1263–1272. <https://doi.org/10.1111/iwj.13174>

Received: 16 April 2019 | Accepted: 26 July 2019
DOI: 10.1111/iwj.13174

ORIGINAL ARTICLE

IWJ WILEY

Five-layer border dressings as part of a quality improvement bundle to prevent pressure injuries in US skilled nursing facilities and Australian nursing homes: A cost-effectiveness analysis

William V. Padula^{1,2} | Yutong H. Chen³ | Nick Santamaria⁴

¹Department of Pharmaceutical & Health Economics, School of Pharmacy, University of Southern California, Los Angeles, California

²The Leonard D. Schaeffer Center for Health Policy & Economics, University of Southern California, Los Angeles, California

³Department of Economics, University of Virginia, Charlottesville, Virginia

⁴Department of Nursing, University of Melbourne, Melbourne, Victoria, Australia

Correspondence

Dr. William Padula, USC Schaeffer Center, 635 Downey Way (VPD), Los Angeles, CA 90089-3333.
Email: padula@usc.edu

Funding information

Mohlycke Healthcare, Grant/Award Number: N/A; University of Melbourne

Abstract

The BORDER III trial found that five-layer silicone border dressings effectively prevented pressure injuries in long-term care, but the value of this approach is unknown. Our objective was to analyse the cost-effectiveness of preventing facility-acquired pressure injuries with a quality improvement bundle, including prophylactic five-layer dressings in US and Australian long-term care. Markov models analysed the cost utility for pressure injuries acquired during long-term care from US and Australian perspectives. Models calibrated outcomes for standard care compared with a dressing-inclusive bundle over 18 monthly cycles or until death based on BORDER III outcomes. Patients who developed a pressure injury simulated advancement through stages 1 to 4. Univariate and multivariate probabilistic sensitivity analyses tested modelling uncertainty. Costs in 2017 USD and quality-adjusted life years (QALYs) were used to calculate an incremental cost-effectiveness ratio (ICER). Dressing use yielded greater QALYs at slightly higher costs from perspectives. The US ICER was \$36 652/QALY, while the Australian ICER was \$15 898/QALY, both of which fell below a willingness-to-pay threshold of \$100 000/QALY. Probabilistic sensitivity analysis favoured dressings as cost-effective for most simulations. A quality improvement bundle, including prophylactic five-layer dressings, is a cost-effective approach for pressure injury prevention in all US and Australia long-term care residents.

KEYWORDS

long-term care, nursing home, pressure injury, pressure ulcer, prophylactic dressing, skilled nursing facility

1 | INTRODUCTION

Pressure injuries (Prls) are costly to health care facilities and lethal to patients. Nonetheless, most PrIs are preventable. In the United States, about 2.5 million patients develop PrIs, resulting in over 60 000 deaths per year.¹ This adds up to

\$26.8 billion in the United States annually.² In Australia, the mean prevalence among health systems is 13.6%.³ Although a decreasing trend of PrI prevalence has been observed, the estimated total cost of PrIs reached \$1.8 billion (AUS) in 2013.^{4,5}

US and Australian facilities face reduced reimbursements and penalties when patients develop stages 3 and 4 and

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2019 The Authors. *Interna found Wound Journal* published by Medicalhelpline.com Inc and John Wiley & Sons Ltd.

Int Wound J. 2019;16:1263–1272.

[wileyonlinelibrary.com/journal/10.1111/iwj](https://onlinelibrary.wiley.com/journal/10.1111/iwj) | 1263

Micro-costing approach

- Nursing home time costs based on 2017 data for time spent
 - Repositioning
 - Conducting assessments
- Skin care management based on population
 - Moisture management
 - Incontinence
- Costs of nutritional supplements for managing malnourishment
 - Protein vitamin, zinc, and copper, were
- Costs of support surfaces based on the Medicare daily rental rates
 - Beds, mattress toppers, seat cushions
- Extra 25% of total standard care cost was added to the final amount of both standard care and dressing arms to account for any costs overlooked.

TABLE 1 Estimated values used to estimate the daily cost of prevention using a micro-costing approach

Intervention	Daily cost	Source
Values for Micro-costing of care in US SNFs		
Average hourly rate of registered nurse	\$31.14	39
Risk Assessment (4 minutes)	\$2.08	17,39
Skin Assessment (15 minutes)	\$7.78	17,39
Nutritional Screening (4 minutes)	\$2.08	17,39
Repositioning	\$17.76	17,39
Group II hospital bed	\$24.75	17
Chair cushion	\$0.33	17
Managing moisture/incontinence	\$31.14	17
Nutrition	\$1.30	17
Nursing education	\$0.01	17
Unforeseen costs without dressing (25%)	\$21.81	<i>Assumption</i>
Dressing (3 days per dressing)		
Mepilex Border Sacrum	\$10.90	39
Mepilex Heel	\$24.59	
Cost of Nursing time per dressing application/change (2 minutes)	\$1.04	39

Padula WV, Chen YH, Santamaria N. Five-layer border dressings as part of a quality improvement bundle to prevent pressure injuries in US skilled nursing facilities and Australian nursing homes: A cost-effectiveness analysis. *Int Wound J.* 2019;16:1263–1272. <https://doi.org/10.1111/iwj.13174>

Daily Rates for Treatment

- Treatment cost of stages 1 and 2 per day
 - included skin checks, repositioning, supporting surfaces, nutrition, topical antibiotics, and an extra 25% of the sum of the above cost.
- Additionally, more material and labour costs were involved in acute and chronic care treatment.
- LOS costs increased varied by stage:
 - Stages 1 and 2 was \$8454 per cycle (stay)
 - Stages 3 and 4 and unstageable PI's \$22,852
- Surgery costs were \$142 633, which comprised hospital accommodation, operating room services, pathology, etc.27

TABLE 2 Model parameters

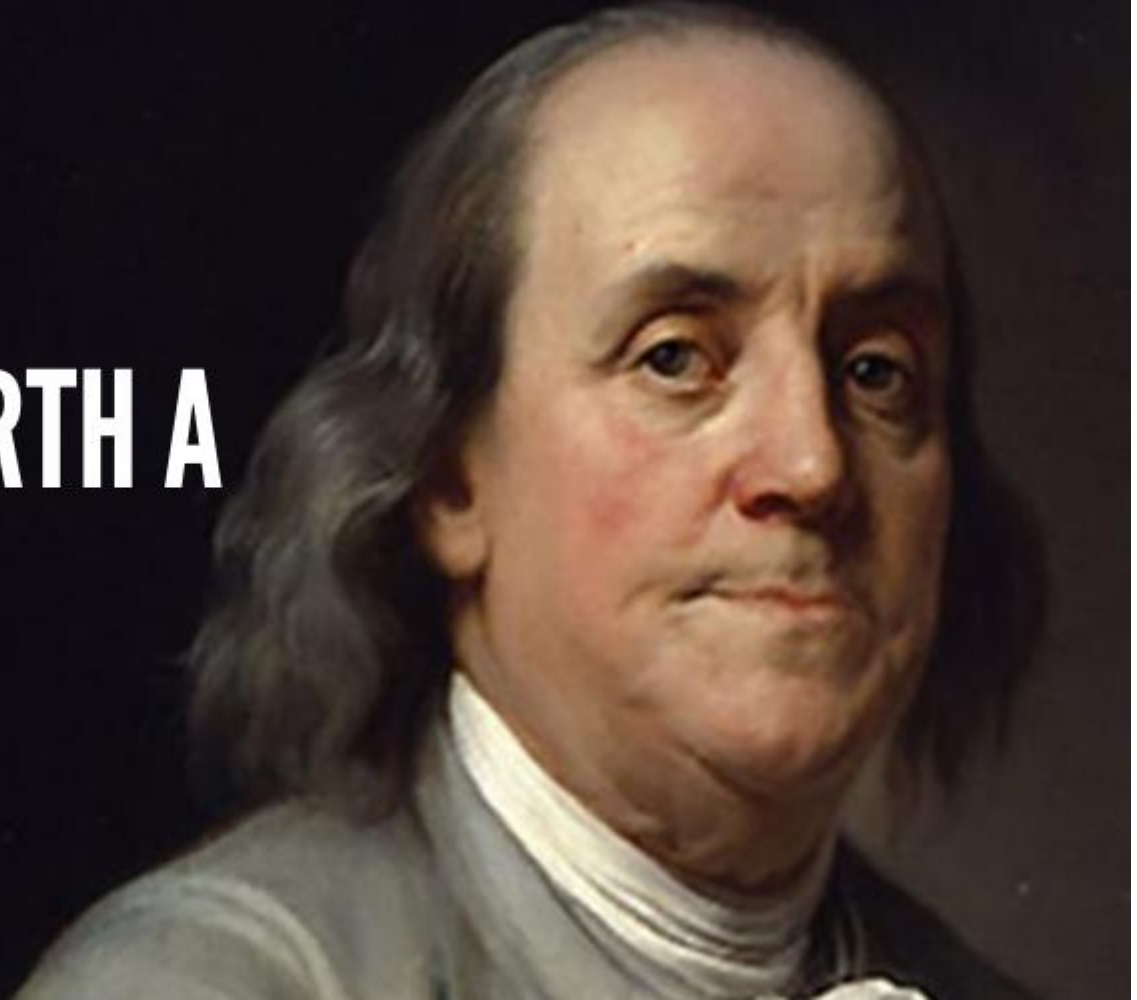
Parameter	Base case value
Costs for pressure injury care in US SNFs	
Daily SNF Stay	\$564
Daily cost of standard prevention	\$109
Daily prevention with Dressings	\$115
Pressure injury cost, per day	
Stage 1 or 2	\$949
Stage 3, 4 or unstageable	\$4156
Daily acute and chronic care	\$1557
Cost of surgery and postoperative care	\$142 633
Paramedic transport	\$387

Skincare and the impact on prevention

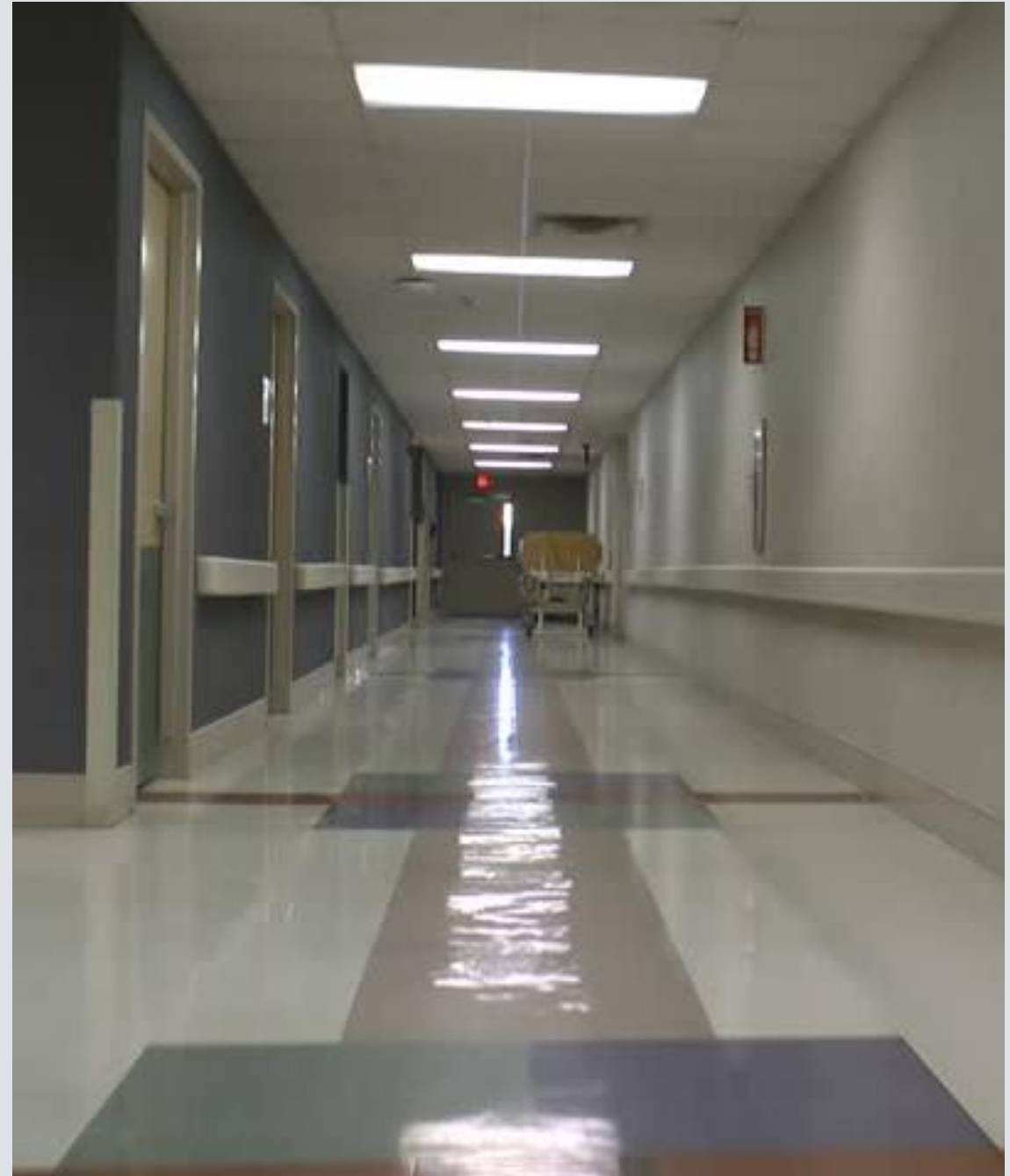


**AN OUNCE OF
PREVENTION IS WORTH A
POUND IN CURE**

Benjamin Franklin



Covid changed things...



But some things remain the same...



Everyone has skin

Back to basics is a
good thing

Sometimes we don't
understand the
basics

Wound Care/Wound
Management begins
with Skin Health

Skin Care Utilization Analysis



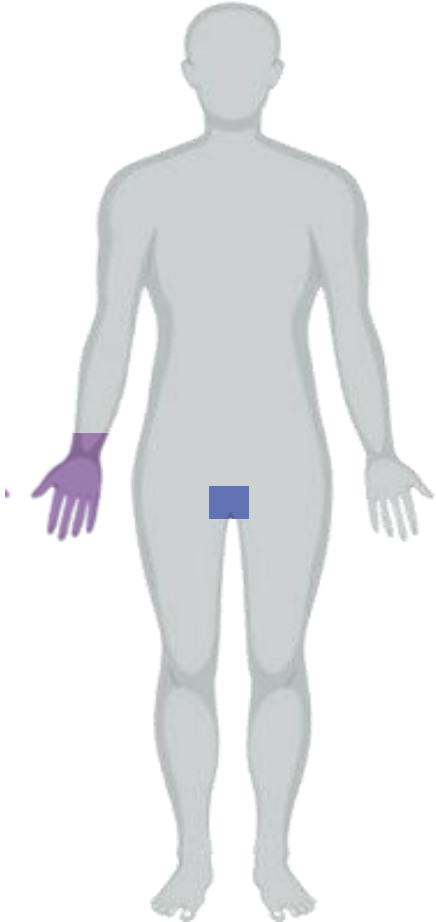
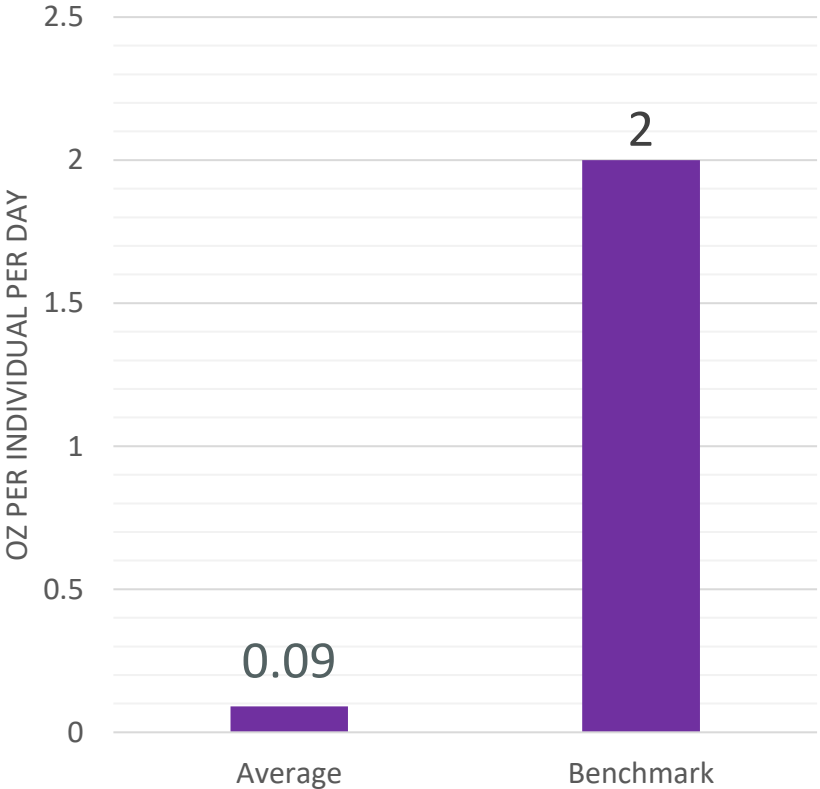
23,590,802

Product Utilization Results



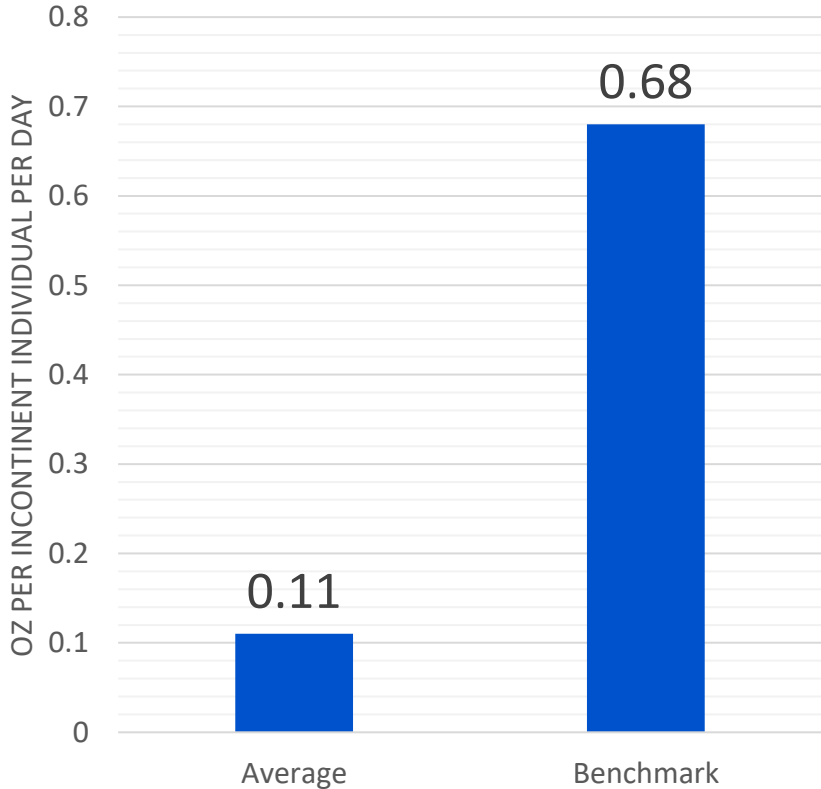
MOISTURIZER

Average vs Benchmark



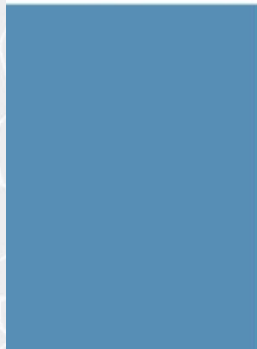
BARRIER

Average vs Benchmark



CARS

Coalition for At-Risk Skin



Co-Chairs

Melissa Morgan - MSN, RN, CWCN

Senior Director of Training, Clinical Implementations & Wound Care –
Scion Health/Kindred Hospitals

Catherine Milne - APRN, MSN, ANP/ACNS-BC, CWOCN-AP

Co-Owner of Connecticut Clinical Nursing Associates

Senior Advisor

Diane L. Krasner – PhD, RN, FAAN, FAWWC, MAPWCA

Wound & Skin Care Consultant

Facilitator

Tom Clopp – BSEd, MSEd

Market Sales Director – Medline Skin Health

Members

Edna Atwater - BSN, RN

Consultant - Duke University Department of Dermatology

Jeanine Maguire - MPT, CWS

Vice President of Skin Integrity & Wound Management - Genesis HealthCare

Dr Maria Goddard - MD, CWS, FAPWCA

CEO- Goddard Medical, LLC

Noreen Heer Nicol - PhD, RN, FNP, NEA-BC

Associate Professor Emerita, former Associate Dean of Academic Programs,
University of Colorado, College of Nursing, Anschutz Medical Campus

Martha R. Kelso - RN, LNC, HBOT

Chief Executive Officer - Wound Care Plus, LLC

Monica Timko-Progar - BSN, RN, ET, CWS, FACCWS

Corporate Sr. Director of Wound Care Practice - Amedisys Home Health & Hospice
Care

Joanne M. Labiak - MSN, CRNP, CWOCN, CWS, DAPWCA

Owner - Certified Wound Care Specialists, LLC

**Dr Jayesh Shah – MD, UHM(ABPM), CWSP, FAPWCA, FCCWS, FUHM,
FACP, FACHM**

President, South Texas Wound Associates, PA, Medical Director NE and Mission Trail
Baptist Wound Healing Center

Kimberly LeBlanc - PhD, RN, NSWOC, WOCC(C), FCAN

KDS Professional Consulting

Kevin Woo – PhD, RN, NSWOC, WOCC(C)

Full Professor – Queen’s University, Faculty of Health Sciences

Consensus Statements Divided



1. Practice Considerations for skin health and At-Risk Skin

- Initial and ongoing assessments, intervention strategies, personalization

2. Moisturizers and their role in Skin Health

- Efficacy, claims made for certain products, creams over lotions

3. Practice Considerations for moisturizers and skin barriers

- Daily moisturization, 1 oz

4. Special Perspectives or Considerations

- PPE and End-of-Life

5. Organization Perspectives or Considerations

- Guidelines, standardized formulary, education, ongoing assessment of the program

Definition of At-Risk Skin



At-risk skin is defined as the potential for impaired barrier function of the skin due to associated intrinsic or extrinsic risk factors, conditions and co-morbidities.

Beeckman D, Campbell J, LeBlanc K et al. Best practice recommendations for holistic strategies to promote and maintain skin integrity. Wounds International. February 8, 2020. Accessed March 7, 2022. <https://www.woundsinternational.com/resources/details/best-practice-recommendations-holistic-strategies-promote-and-maintain-skin-integrity>

Risk Factors Associated with At-Risk Skin*



- Advancing age > 65
- Anticoagulant use
- Atopic dermatitis
- Cognitive impairment
- Dependent/assistance needed for activities of daily living
- Drug/alcohol/tobacco use
- Eczema
- Emotional stress
- Endocrine disease (e.g. Diabetes or Thyroid disorders)
- Frequent handwashing/sanitization
- Genetic and inherited conditions
- History or current topical or systemic steroid use
- Immunocompromised or malabsorption disease or allergy
- Incontinence
- Incontinence Associated Dermatitis
- Lack of quality sleep
- Malnutrition and dehydration
- Mobility
- Moisture Associated Skin Damage (MASD)
- Open wounds or fistulae with drainage
- Physical stress
- Polypharmacy
- Sequella of medical and/or surgery treatments
- Social determinants (affordability, accessibility, literacy, etc.)
- Ultraviolet light or radiation exposure
- Underlying systemic disease (vascular, cancer, diabetes, etc.)
- Use of a medical device in contact with the skin
- Use of personal protective equipment (gloves, masks, and other types of PPE)
- Xerosis

*This list may not be inclusive of all risk factors associated with at-risk skin.

Moisturizers and Their Role in Skin Health



7.

The properties, ingredients, utilization and intended use of skincare products impact their efficacy. This includes moisturizers and skin barriers.

8.

Many skincare products fall under the US Federal Food and Cosmetic Act of 1938. Product claims should be evaluated carefully before selection as therapeutic claims may not be clinically validated or relevant.

9.

For individuals with at-risk skin, creams or ointments are preferred to improve skin barrier function by decreasing transepidermal water loss (TEWL). Lotions may be drying and therefore may not achieve the desired effect.



Therapeutic Properties	Quality ingredients
Skin Protectant	Dimethicone, Zinc Oxide, Petrolatum, Kaolin, Colloidal Oatmeal
Antioxidant	Hydroxyacetophenone, Glycyrrhizic Acid and Derivatives
Anti-Inflammatory	Colloidal Oatmeal, Beta-Glucan, Oat Extracts, Chamomile Extracts, Glycyrrhizic Acid, and Derivatives
Essential Barrier Lipids	Ceramides, Phospholipids, Urea
Emollient	Plant Oils, Fatty Acids, Fatty Alcohols, Squalane, Caprylic/Capric, Triglyceride
Humectant / Skin Conditioning	Glycerin, Propanediol, Allantoin, Lactic Acid, Urea, Sodium, Hyaluronate / Hyaluronic Acid
Natural Moisturizing Factor	Lactic Acid, Urea, Sodium, Hyaluronate / Hyaluronic Acid, Hydrolyzed Soy Protein, Soy Amino Acids
pH buffers	Keratin, Collagen, Hydrolyzed Soy Protein, Soy Amino Acids, Arginine, Glycine
Protein & Protein Rejuvenators	Petrolatum, Dimethicone, Zinc Oxide, Kaolin

Therapeutic Ingredients Guide

*Carbomer ingredients, act as a thickener when added to moisturizers. It makes the moisturizer creamier, however it may not effectively decrease TEWL.

Comparison of Different Vehicles of Moisturizers



VEHICLE	Consistency	Water/Lipid Content	Advantages for At-Risk Skin	Disadvantages for At-Risk Skin
LOTION	<ul style="list-style-type: none"> · Light and non-greasy 	<ul style="list-style-type: none"> · High concentration of water 	<ul style="list-style-type: none"> · May have a role in end-of-life skin care 	<ul style="list-style-type: none"> · Increased TEWL · May contain more dehydrating ingredients
CREAM	<ul style="list-style-type: none"> · Viscous and non-greasy 	<ul style="list-style-type: none"> · Similar parts oil and water 	<ul style="list-style-type: none"> · Spreads easily · Creams with quality ingredients can decrease TEWL · Aesthetically pleasing 	<ul style="list-style-type: none"> · Washes off easily · Creams without medical grade silicones may not prevent TEWL as well as ointment
OINTMENT	<ul style="list-style-type: none"> · Thick and greasy 	<ul style="list-style-type: none"> · 8 parts oil to 2 parts water 	<ul style="list-style-type: none"> · Can hold moisture into the skin for prolonged periods of time · Can protect open skin 	<ul style="list-style-type: none"> · More difficult to spread · Can stain clothing · Feels greasy · Non-compliance of application

Practice Considerations For Moisturizers And Skin Barriers



10.

For individuals with at-risk skin, a moisturizer should be applied daily at a minimum and always after bathing. Twice daily moisturization has been demonstrated to show additional benefits.

11.

The approximate amount needed for a single application of moisturizer to the entire standard sized adult body is 30 grams or 1 ounce.

12.

Skin barrier products are recommended when moisture, microclimate, friction, and shear are contributing factors to at-risk skin.

13.

Skin barrier ingredients and individual risk factors, comorbidities, and conditions may vary and therefore impact selection and frequency of application.

14.

Moisturizers and skin barrier products may have a positive impact on reducing medical device-related pressure injury (MDRPI) and medical adhesive-related skin injury (MARS). More study is warranted.

Beeckman, D., Campbell, KE, LeBlanc, K. Campbell, J, et al (2020). Best Practice Recommendations for Holistic Strategies to Promote and Maintain Skin Integrity: 2020 Recommendations from an Expert Working Group. Wounds International, 2020

Gefen A, Alves P, Ciprandi G, Coyer F, Milne CT, Ousey K, Ohura N, Waters N, Worsley P. Device-related pressure ulcers: SECURE prevention. J Wound Care. 2020 Feb 1;29(Sup2a):S1-S52. doi: 10.12968/jowc.2020.29.Sup2a.S1. PMID: 32067552

Practice Considerations for Moisturizers and Skin Barriers



An entire medicine cup



4 packs of ketchup



Three coffee creamers



A travel toothpaste

Organization Perspectives Or Considerations



17.

Organizations seeking best practice should educate staff, individuals, families, and caregivers on indications, contraindications, application, and frequency of skincare product use to mitigate at-risk skin.

18.

Organizations should commit to ongoing performance improvement strategies related to at-risk skin.

19.

Organizations should use comprehensive skin health guidelines with a focus on at-risk skin to improve clinical and operational outcomes. These may reduce negative financial, regulatory, and legal consequences.

20.

Organizations seeking best practice can mitigate risk of at-risk skin through provision and promotion of a quality standardized formulary with access to non- formulary products if individual needs dictate.

Beeckman, D., Campbell, KE, LeBlanc, K. Campbell, J, et al (2020). Best Practice Recommendations for Holistic Strategies to Promote and Maintain Skin Integrity: 2020 Recommendations from an Expert Working Group. Wounds International, 2020.

Skin Health is Important for Everyone



21.

Everyone should be empowered to perform or receive care to promote optimal skin health.

Improving quality and driving change



Identify Strategies to Promote Optimal Skin Health



People

- Residents At Risk
- Staff
- Providers

Process

- Policy & Procedure
- Guidelines for Care
- Ongoing Education

Products

- Type
- Amount per application
- Utilization per patient days





People: Organizational Culture



Patient safety culture is a cornerstone of healthcare quality. Fostering patient safety culture requires an understanding of an organization's values, beliefs, and norms. Furthermore, it requires an understanding of the appropriate attitudes and behaviors related to patient safety (AHRQ, 2009).

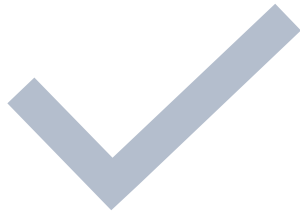
Process: Guidelines



The Institute of Medicine (IOM) defines clinical practice guidelines as "statements that include recommendations, intended to optimize patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options"



Products: Formulary Standardization



Right Product



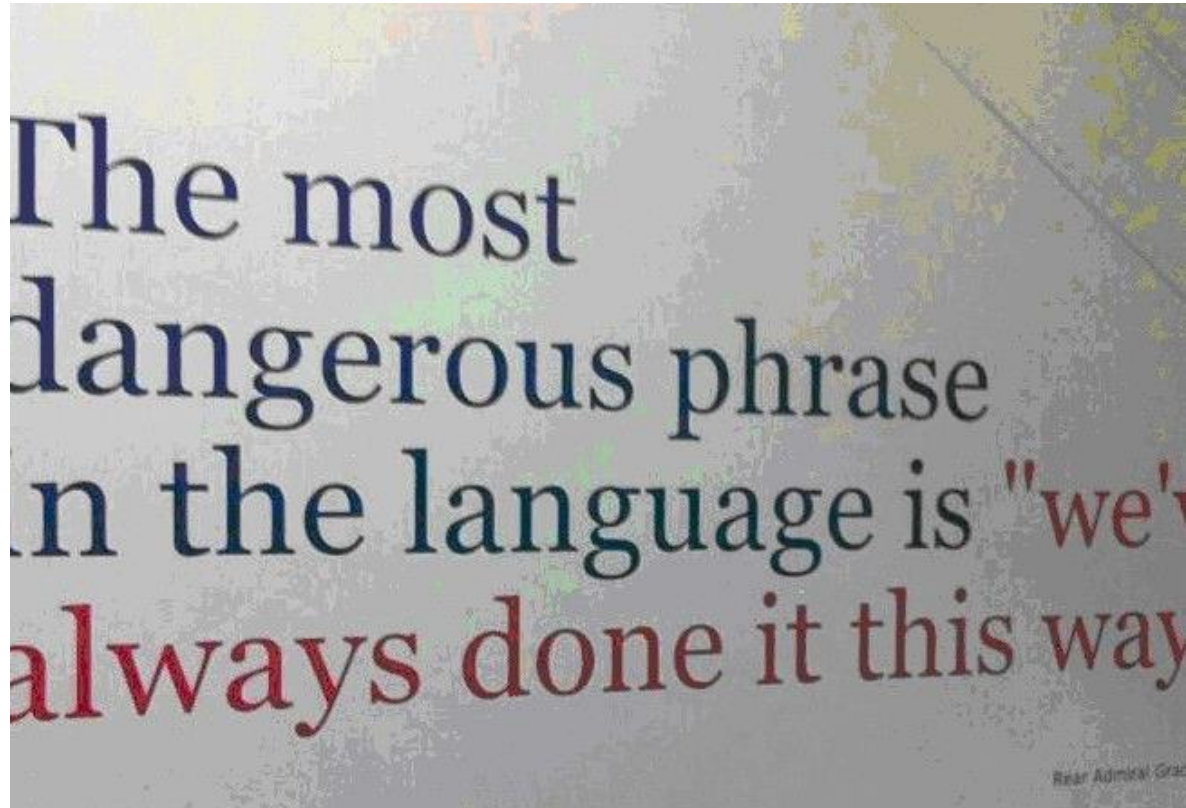
Right Place



Right Time

Bringing it to the “bedside”

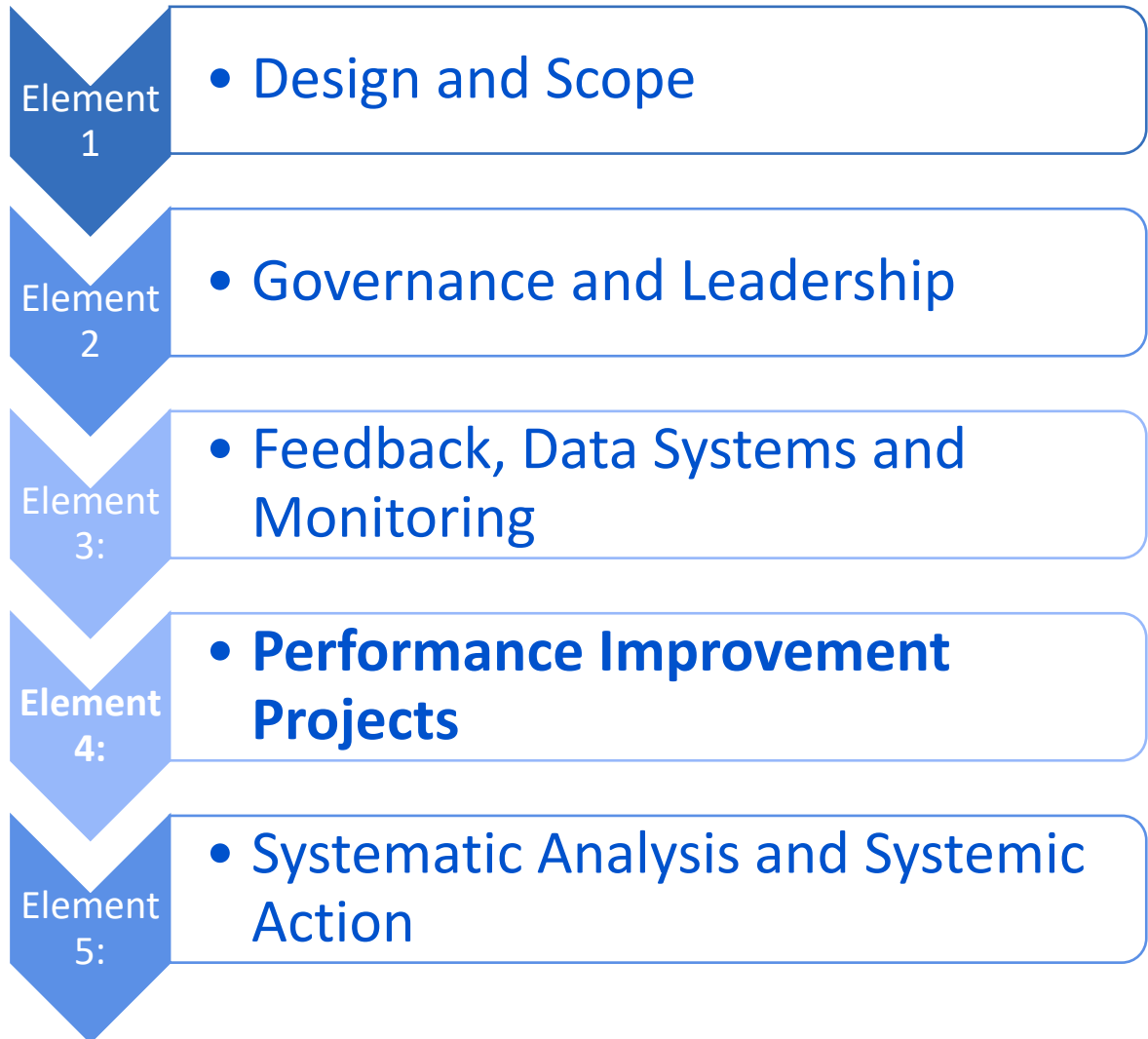
Streamlining Staff Processes



- Sizing of skin care products
 - Dispensers in shower rooms/resident rooms
- Promoting Best Practice
 - “How to” posters in shower rooms, supply room, nursing stations
 - Tent cards at the patient/resident bedside
- Engaging Activities
 - Spa Day
 - Simon Says



Key features of an Effective QAPI Related to Skin and Wound Care



Element 4: Performance Improvement Projects (PIPs)



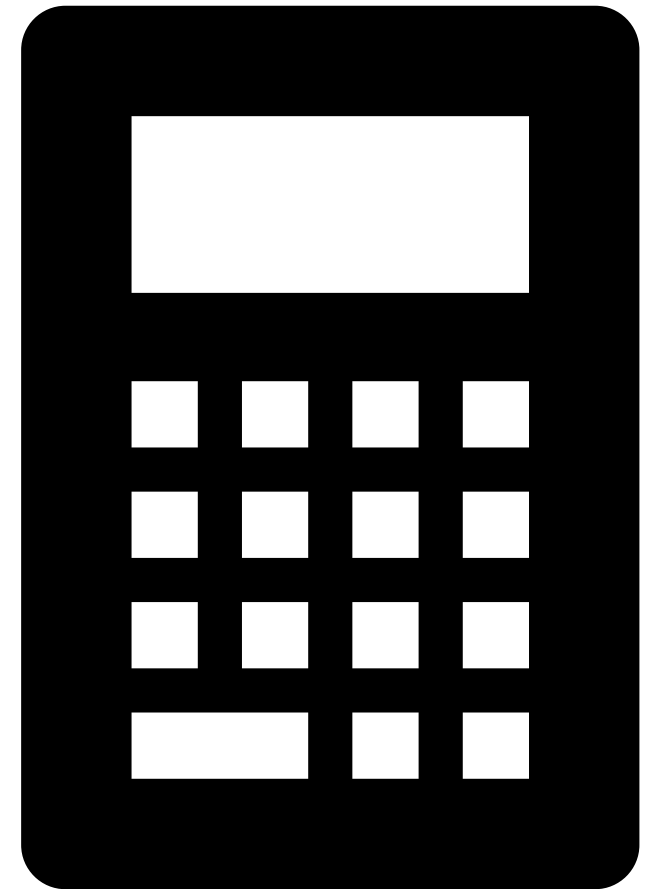
A **Performance Improvement Project (PIP)** is a concentrated effort on a particular problem in one area of the facility or facility wide; it involves gathering information systematically to clarify issues or problems and intervening for improvements. The facility conducts PIPs to examine and improve care or services in areas that the facility identifies as needing attention.



<https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/qapifiveelements.pdf>



Showing the value...





The Cost: Treatment vs Prevention

Do you know the pressure injury
incidence rate for your facility?

YES or NO



First Option: Known # of Pressure Injuries



1. Census per day
2. Number of pressure injuries
 1. Stage 1 & 2 \$949
 2. Stage 3 & 4 and unstageable \$4156
3. Total cost of treatment for PI per day ***
4. Percent at risk (National Average 63%)
 1. Cost per day \$109
 2. Cost per day with dressing \$115
5. How much does standard bundle reduce? Total incidence rate 10.6%
6. How much does standard bundle with dressing reduce risk? Total incidence rate 2.1%
7. Total cost of treatment
8. Total cost of prevention

Known Number of Pressure Injuries	
Cost of Treatment for Pressure Injuries by Facility	
Census on Patients Per Day	100
Number of Pressure Injuries Stage 1 & Stage 2	10.00
Number of Pressure Injuries Stage 3, 4 & Unstageable	0.00
Average Cost of a Stage 1 & Stage 2 per day \$949	\$ 20,720
Average Cost of a Stage 3, Stage 4, or Unstageable Pressure Injury per Day \$4156	\$ 0.00
Average Treatment Cost of Pressure Injuries per Day	\$ 20,720

Prevention with Standard Prevention Bundle	
Percentage Patients/Residents at Risk	63%
Prevention Costs Standard Bundle \$109 per individual per day	\$ 109
Daily Facility Cost of Prevention for At-Risk Population with Standard Prevention Bundle	\$ 6,967
Daily Facility Cost of pressure injuries with 10% incidence rate	\$ 10,760
Cost Effectiveness with Standard Prevention Bundle	\$ 28,900

Prevention with Standard Bundle and Prevention Dressing	
Percentage Patients/Residents at Risk	63%
Prevention Costs Standard Bundle and Prevention Dressing \$115 per individual per day	\$ 115.00
Daily Facility Cost of Prevention for At-Risk Population Standard Prevention Bundle with Prevention Dressing	\$ 7,245.00
Daily Facility Cost of pressure injury with 2% incidence rate	\$ 1,090.00
Cost Effectiveness Standard Prevention Bundle with Prevention Dressing	\$ 11,200.00

Second Option: Unknown # of Pressure Injuries



1. Census per day (100)
2. Number of pressure injuries *NPIAP rate 20-30% SNF with CMS 41% increase=28% to 42%
 1. Stage 1 & 2 \$949 (90%)
 2. Stage 3 & 4 and unstageable \$4156 (10%)
3. Total cost of treatment for PI per day ***
4. Percent at risk (National Average 63%)
 1. Cost per day \$109
 2. Cost per day with dressing \$115
5. How much does standard bundle reduce? Total incidence rate 10.6%
6. How much does standard bundle with dressing reduce risk? Total incidence rate 2.1%
7. Total cost of treatment
8. Total cost of prevention

National Number of Pressure Injuries	
Cost of Treatment for Pressure Injuries by Facility	
Census of Patients Per Day	100
Number of Pressure Injuries, Stage 1 & Stage 2	28.00
Number of Pressure Injuries, Stage 3, 4 & Unstageable	4.00
Average Cost of a Stage 1 & Stage 2 per day \$949	\$ 28,772.00
Average Cost of a Stage 3, Stage 4, or Unstageable Pressure Injury per day \$4156	\$ 16,624.00
Average Treatment Cost of Pressure Injuries per Day	\$ 45,396.00

Prevention with Standard Prevention Bundle	
Percentage Patients/Residents at Risk	63%
Prevention Costs Standard Bundle \$109 per individual per day	\$ 6,957.00
Daily Facility Cost of Prevention for At-Risk Population with Standard Prevention Bundle	\$ 4,392.00
Daily Facility Cost of pressure injuries with 10% incidence rate	\$ 4,548.00
Cost Effectiveness with Standard Prevention Bundle	\$ 21,904.00

Prevention with Standard Bundle and Prevention Dressing	
Percentage Patients/Residents at Risk	63%
Prevention Costs Standard Bundle and Preventative Dressing \$115 per individual per day	\$ 7,245.00
Daily Facility Cost of Prevention for At-Risk Population Standard Prevention Bundle with Preventative Dressing	\$ 4,569.00
Daily Facility Cost of pressure injuries with 2% incidence rate	\$ 1,299.00
Cost Effectiveness Standard Prevention Bundle with Preventative Dressing	\$ 11,204.00



Unknown Number of Pressure Injuries	
Cost of Treatment for Pressure Injuries by Facility	
Census or Patients Per Day	80
NPIAP rate 20-30% SNF	20%
Number of Pressure Injuries Stage 1 & Stage 2	14.40
Number of Pressure Injuries Stage 3, 4 & Unstageable	1.60
Average Cost of a Stage 1 & Stage 2 per day	\$949
Average Cost of a Stage 3, Stage 4, or Unstageable Pressure Injury per Day	\$4156
Average Treatment Cost of Pressure Injuries per Day	\$20,315

Prevention with Standard Prevention Bundle	
Percentage Patients/Residents at Risk	63%
Prevention Costs Standard Bundle \$109 per individual per day	\$109
Daily Facility Cost of Prevention for At-Risk Population with Standard Prevention Bundle	\$5,494
Daily Facility Cost of pressure injuries with 10% incidence rate	\$7,592
Cost Effectiveness with Standard Prevention Bundle	\$7,230

Prevention with Standard Bundle and Prevention Dressing	
Percentage Patients/Residents at Risk	63%
Prevention Costs Standard Bundle and Preventative Dressing \$115 per individual per day	\$115.00
Daily Facility Cost of Prevention for At-Risk Population Standard Prevention Bundle with Prevention Dressing	\$5,796.00
Daily Facility Cost of pressure injuries with 2% incidence rate	\$1,518.40
Cost Effectiveness Standard Prevention Bundle with Prevention Dressing	\$13,000.80

Let's take a closer look



Who are the stakeholders?



Clinical Leadership



**Wound Care
Treatment Nurse
Influencer**

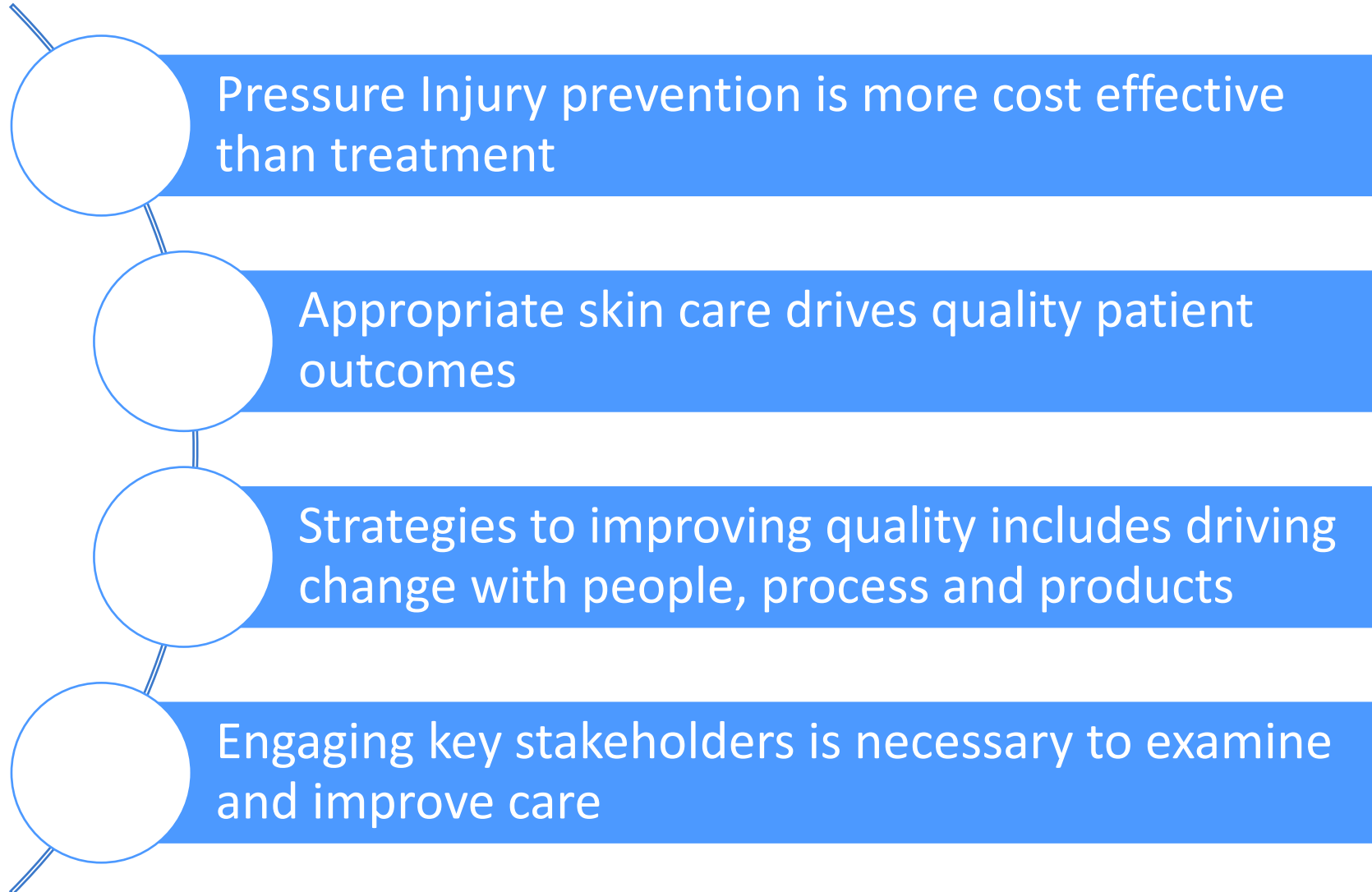


Supply Chain



Administrator

Summary





Thank You!

