

# Procuring the Preferred Future for Skin and Wound Care



Joyce Black, PhD, RN, FAAN  
University of Nebraska Medical Center  
Omaha, NE

Joyce Black

1

---

---

---

---

---

---

---

---

## Objectives

- ▶ Identify the preferred future for skin and wound care in your setting
- ▶ Discuss how to garner administrative support when articulating the need for resources for optimal pressure injury prevention and wound care
- ▶ Examine how an interdisciplinary team is ideal for implementing evidence-based practices

Joyce Black

2

---

---

---

---

---

---

---

---

## What is the current culture of care?

- ▶ Depends on who you ask...
  - Provider driven by some patients
  - Payer driven by some providers
  - Patient driven by some nurses
- ▶ Or do we have a culture of "cure"?
  - And how much money are we going to spend on it?



Joyce Black

3

---

---

---

---

---

---

---

---

## Extent of the Problem

- ▶ Pri = 2,500,000 <sup>1</sup>
- ▶ DFU = 1,600,000 <sup>2</sup>
- ▶ VLU = 4,600,000 <sup>3</sup>
- ▶ SSI = 157,000 <sup>4</sup>
- ▶ Burns = 40,000 <sup>5</sup>
- ▶ Prostate CA = 288,300 <sup>6</sup>
- ▶ Breast CA = 207,790
- ▶ Lung CA = 120,790
- ▶ Bowel CA = 81,860
- ▶ Melanoma = 58,120

*How much of your facility's resources are being spent on cancer care compared to wound care?*

Patients with Wounds

Patients with Cancer

1 AHRQ; 2 Armstrong, 2023; 3 Lorimer 2003; 4 NHSN, 2024; 5 American Burn Ass'n, 2023; 6 American Cancer Society

Joyce Black

4

---

---

---

---

---

---

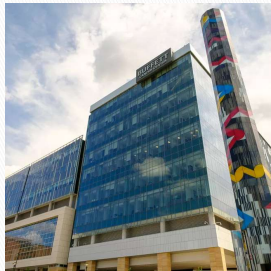
---

---

---

---

## UNMC and Methodist Cancer Centers



Buffet Cancer Center



Estabrook Cancer Center

Joyce Black

5

---

---

---

---

---

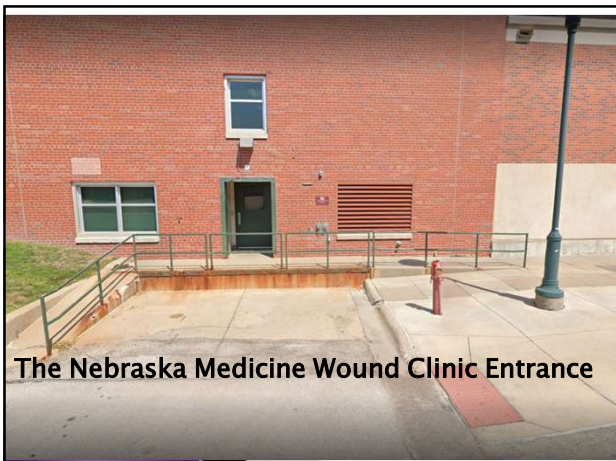
---

---

---

---

---



The Nebraska Medicine Wound Clinic Entrance

6

---

---

---

---

---


---

---

---

---

---



So, what is the preferred future?

Joyce Black

7

---

---

---

---

---

---

---

---

Can we make PI more important?

- ▶ Not without interdisciplinary engagement
- ▶ Who is on your wound team now?
  - If it is just nurses, then your system sees PI as a nursing problem... a nursing quality indicator
  - Is that why the MD notes say nothing about skin or say "no rashes, no lesions" when a PI is present?
- ▶ Can we engage hospitalists for weekend management?
  - If nurses can't stage, then what policy is implemented from 1700 Friday to 0700 Monday?
    - Most are based on wound stage not appearance

Joyce Black

8

---

---

---

---

---

---

---

---

Can we quit setting goals of zero?

- ▶ We will never have zero HAPIs
- ▶ We need to
  - use AI to determine risk accurately
  - get support surfaces that reduce pressure and shear when HOB is up over 45 degrees
  - determine in what patients PI are unavoidable
  - risk adjust patient situations
    - Remove skin failure from our lingo

Jackson, SS et al. Electronically available comorbidities should be used in surgical site infection risk adjustment. *Clin Infect Dis*. 2017; 65 (5) 803-810

Joyce Black

9

---

---

---

---

---

---

---

---

## Can we change our practice?

- ▶ We must have enough WOC nurses to guide prevention in high risk patients
  - ICU, OR, NICU
  - Very high risk patients have 10 times the risk of developing HAPI that minimal risk patients
- ▶ Consider implementation of SPIPP (at npiap.com)
  - Note turn Q 3hrs, leg up position (see infographic)

NPIAP Standardized Patient Report Form (SPIPP) - Version 1.0 (2016)		
ICU	OR	NICU
Patient Name: _____ Bed No: _____ Unit: _____ Date of Birth: _____ Sex: _____ Procedure: _____ Start Time: _____ End Time: _____ WOC Nurse: _____ HAPI: Yes/No _____ Risk Factor: _____ SPIPP Checklist: _____ Comments: _____ Signature: _____ Date: _____		

Joyce Black

---



---



---



---



---



---




---



---

10

## How can get out of the VAC changing business?



- ▶ How can we transfer knowledge to those who will implement once done with training?
  - Can we do the most complex cases only?
- ▶ Examine your job description or expectations
  - IS MWF VAC change in it?
  - Is PIP in it? Is reduce PI incidence in it?

Joyce Black

---



---



---



---



---



---



---



---

11

## It Starts with Leadership

- ▶ Leadership initiatives
  - Recommended WOC/bed ratio 3.8 WOCs/1000 beds
  - Adding one WOC nurse per 1000 hospital beds reduced the rate of HAPI by 17.7%
  - Annual programs to highlight competency and prevention efforts
    - Old NDNQI slides now on NPIAP site
  - Attendance at CE programs - many today by webinar
- ▶ Performance improvements
  - RCA must be done when PI found
    - And discoveries must be addressed at that time

Padula, WV, et al. Investing in Skilled Specialists to Grow Hospital Infrastructure for Quality Improvement. *J Patient Saf* 2021 17 (1), 51-55

Joyce Black

---



---



---



---



---



---



---



---

12

## Telling the story

- ▶ Communication of true pressure ulcer problem
  - C Suite
    - Do they know your numbers?
  - Operating Room
    - Do they know what PIs started in OR?
  - Emergency Room/Department
    - Skin assessments on admission to ED
    - Placing patient into a bed when admission is delayed
    - Collecting data from EMS on position of patients found down in the field –to rule in DTI later
- ▶ Lack of root cause/common cause analysis

Joyce Black

13

---

---

---

---

---

---

---

---

## C Suite: 3 Important First Steps

- ▶ Get Administration By-In
- ▶ Know Your Numbers and Costs
- ▶ Find your weakest areas by looking at cases and doing a root cause analysis
  - Don't rely on your NDNQI data to tell the whole story
    - Especially avoidable and unavoidable HAPI

Joyce Black

14

---

---

---

---

---

---

---

---

## C-Suite Involvement

- ▶ Engages in bi-directional transparent communication.
- ▶ Appoint executive level liaison
- ▶ Identifies PIP clinical program facilitator and outlines reporting structure
- ▶ Supports IDT development
- ▶ Sets clear expectations for outcomes
- ▶ Removes barriers
- ▶ Ensures adequate staffing on unit level
- ▶ Support provision of EB product resources

Joyce Black

15

---

---

---

---

---

---

---

---

## Budget Disparity...

- ▶ C-Suite may be unaware of the entire scope of the problem within the facility.
  - Data (physical harm to patient) + Cost to Treat + Litigation = Investment of the Executive Administration
- ▶ Materials management operates under a budget directed by the goals and scope of the organization.
  - May state, "new dressings are not in the budget."
    - Don't spend more...switch from treatment to prevention

Joyce Black

16

---

---

---

---

---

---

---

---

## Get your numbers/Compute Cost

- ▶ Present the current HAPI/FAPI rates to administration and their cost
  - Stage 1 = \$893.00
  - Stage 2 = \$3560.00
  - Stage 3 (uncomplicated) = \$6550.00
  - Stage 4 (surgical care) = \$129,248.00
  - Data from Padula, 2019; Brem, 2010
- ▶ Annualize the cost data for your unit/hospital
  - Current hospital rate is 2.5% (2% stage 1/2, 0.5% stage 3/4)
  - Annual acute admissions are 24,557
    - 491 stage 1 and 2 at 893/3560 = \$1,081,210
    - 122 stage 3 and 4 x 6550/129,248 = \$8,283,678
  - *Total cost if remains hospitalized is \$9,364,888*

Joyce Black

17

---

---

---

---

---

---

---

---

## The Interdisciplinary Team

- ▶ Members
  - Where do PI start? -ED, ICU, OR, under devices
  - Where are PI cared for? General units, wound clinics
  - Who manages the staff?
  - Who monitors the staff? RCA teams, Quality, Risk managers
  - Who educates, trains?
  - Who diagnoses?
- ▶ The patient should also be a member of their hospital team
- ▶ Consider placing a member on the wound team

Joyce Black

18

---

---

---

---

---

---

---

---

## Oxygen Delivery Devices Have Highest Incidence of MDRPI

- ▶ Airway highest priority
- ▶ Difficult to place
- ▶ Facial contour varied
- ▶ Continuous securement to protect the airway
- ▶ MDRPI classified as nonserious problems



Wilson ME et al. Association of Home Noninvasive Positive Pressure Ventilation With Clinical Outcomes in Chronic Obstructive Pulmonary Disease: A Systematic Review and Meta-analysis. JAMA. 2020;323(5):455-465.

19

---

---

---

---

---

---

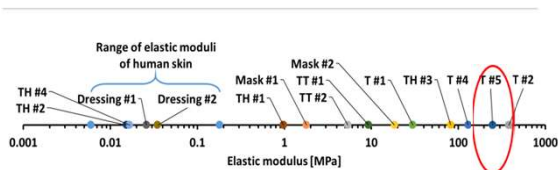
---

---

---

---

## MRD PI is Primarily due to Stiffness of Tubing



TH #2 = ETT holder (anchoring support from front), TH #4 = Trach collar, Dressing #1 = Gel dressing, Dressing #2 = Multilayered foam dressing, TH #1 = ETT holder (cheek support), Mask #1 = BPAP mask, TT #2 = Soft trach plate, TT #1 = Hard trach plate, Mask #2 = Oxygen Mask, T #1 = Soft nasal cannula, TH #3 = Nasal bridge, T #4 = Nasogastric Tube for feeding (NGT), T #5 = Endotracheal Tube (ETT), T #2 = Salem Sump (NGTs) for removal of excess gastric fluid and gas

T #4 = NGT for feeding (NGTR), T #5 = ETT, T #2 = NGT - Salem Sump (NGTs) for removal of excess gastric fluid and gas

Data from Gefen and Solmos, 2023

Joyce Black

20

---

---

---

---

---

---

---

---

---

---

## Respiratory Therapists Must be Team Members

- ▶ Some Facial PI start before admission
  - Patient at home with CPAP on continuously
  - Lexie Carraway, RT presented how she detects early DTPI with thermography on admission at recent NPIAP
- ▶ Possible interventions
  - Place protective dressings in ED and on the RT carts
  - Then the dressing is available to be placed on the face and bridge of the nose for CPAP
- ▶ Alternate responsibility with RT for moving oxygen delivery devices that can be moved

Joyce Black

21

---

---

---

---

---

---

---

---

---

---

## The Patient As A Member of The Team

- ▶ Patient Engagement is Being Recognized by Many
  - But being endorsed?
- ▶ 3 Basic Tenets
  - Education
  - Advocacy
  - Engagement
- ▶ Will still say patients are “noncompliant”
  - Can a demented patient be noncompliant?

Joyce Black

22

---

---

---

---

---

---

---

---

## We Must Have a Lot of Noncompliant Patients ...Or So I Hear

- ▶ This term is used a lot and meant to describe the patient who *does not follow* the prescriptions for care
- ▶ What assumptions are we making when using this term?
  - Has the capacity to comprehend but just won't do what is told
  - Speaks, hears and understands English
  - Fully understands all the big medical words we use
  - Can read and fully understand our written materials
  - Is not too anxious to understand what we are saying
  - Doesn't appreciate all the expertise we are bringing to him/her for care
  - Thinks what is being asked is ridiculous
  - Has plenty of money/insurance to buy meds and supplies
  - Can stay home-- has enough sick leave and family support
  - Has no family obligations that would take priority

Joyce Black

23

---

---

---

---

---

---

---

---

## How Can We Turn This Around?

- ▶ Get to know the patient
  - “If you weren't here with me today, what would you be doing?”
- ▶ Understand the disease from their perspective
- ▶ Understand their social situation which might constrain their capacity
- ▶ Serve as an advocate for the patient and family
  - Communicate with the healthcare team
  - Protect the patient's safety
  - Remove barriers to care
  - Let the patient tell us about their preferred treatment plan
  - If a chronic illness, ask about support group interaction

Joyce Black

24

---

---

---

---

---

---

---

---



## How Can Patients Be Engaged?

- ▶ Organizational Level
  - Patient care surveys
  - Patients used as advisors to the hospital
  - Patients co-lead safety and quality improvement committees
- ▶ Federal Level
  - Focus groups with patients with similar diseases
  - Patient recommendations about research priorities
  - Representation on agency committees

Joyce Black

25

---

---

---

---

---

---

---

---

## The future includes outcome measurement

- ▶ Because the pay for service model was expensive and outcomes were not great
  - US per capita health care cost = \$7598
  - UK per capita health care cost = \$3311
- ▶ Federal payments will be tied to quality of care metrics and population level outcomes
- ▶ Private insurers following suit with value based purchasing models

Flattau, Thompson, Meara, OWM, 2013  
Joyce Black

26

---

---

---

---

---

---

---

---

## Goals for all patients with wounds

- ▶ Return to form and function
  - Seen best in acute wound healing
  - Scar prevents form and function in large wounds and chronic wounds
  - Wound closure in patients at end of life or end stage disease is not the priority for care
- ▶ Patient engagement
  - Management of condition
  - Management of wound



This buttocks ulcer will likely heal due to its shallow tissue loss, but only if the incontinence is controlled and the skin is protected

Joyce Black

27

---

---

---

---

---

---

---

---

## Outcome measures for chronic wounds



- ▶ Expected outcome measures
  - Healing rates in 12 weeks of care
  - Health related quality of life
- ▶ Recent CMS questions addressed when a wound has deteriorated...
  - Is the presence of slough a sign of deterioration?
  - Is the presence of eschar a sign of deterioration?
  - Is the evolution of DTI a sign of deterioration?
  - Is a larger wound a sign of deterioration?
- ▶ Why is CMS looking at these outcomes?
  - Because it is the most common things measured in wounds!  
We have led them to believe that is the outcome of interest!

Cho, SK et al. Development of a model to predict healing of chronic wounds within 12 weeks. Adv Wound Care, 2020 9 (9), 516-524.

28

---

---

---

---

---

---

---

---

---

---

## Benchmarks for Healing

- ▶ Diabetic Foot Ulcers
  - 90% healing with TCC in 12 weeks
  - 65% healing in walker boot in 12 weeks
- ▶ Pressure Ulcers
  - 57-61% Stage II healed in 12 weeks
  - 36% full thickness healed in 12 weeks
  - So be certain the initial stage is recorded
- ▶ VLU
  - 53% healed in 12 weeks

Joyce Black

29

---

---

---

---

---

---

---

---

---

---

## Wound outcomes and goals

- ▶ One goal is a healed wound
  - However, Complex wounds that require a team and several months and several modalities to heal
- ▶ Some wounds will never heal
  - *Could we accept a nonhealed wound as a satisfactory outcome?*

Joyce Black

30

---

---

---

---

---

---

---

---

---

---

## Wounds that will never Heal

- ▶ Inability to control underlying disease
  - Diabetes
  - Malnutrition
  - Venous hypertension
  - Arterial inflow
  - Pressure loading
  - Infection
  - Cancer
  - Paralysis



Joyce Black

31

---

---

---

---

---

---

---

---

## Huge issue: When to Stop?



Joyce Black

32

---

---

---

---

---

---

---

---

Time marches on.. We have to procure our future NOW!



33

---

---

---

---

---

---

---

---