

Reducing HAPI in the OR

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Clinical Problem/Significance

The intraoperative environment can make any patient susceptible to Hospital Acquired Pressure Injuries (HAPI). Pressure injuries negatively affect patients not only economically, but physically, and emotionally, as well.¹ Studies report that pressure injuries occur in 69% of inpatients who have undergone a surgical procedure while hospitalized.² Due to the immobility required for procedures, our patients are unable to reposition themselves when they feel uncomfortable and are often unable to communicate to us. Visible signs of pressure damage are not always apparent at the time the patient leaves the OR, and can take up to 72 hours to appear following the incident. Thorough pre- and post-operative skin assessment documentation can assist in evaluating current practices for areas of improvement.

Background: The Intraoperative Nurse Role

Intraoperative nurses should understand their role in skin protection and the effect they can have on patient outcomes.³

Risk Factor Identification: Predisposed and Intraoperative

Predisposed risks are intrinsic factors that affect the ability of the skin to respond to pressure and shear forces. These include advanced age, medications, comorbid diseases, and poor nutritional status.

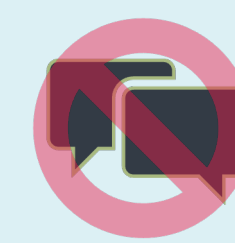
OR Specific Risks Include:



Impaired mobility



Length of procedure³



Inability to communicate

Skin Assessment

Nurses should perform skin assessment to establish a preoperative baseline against which the compare the patient's postoperative status.³

Prevention Strategies

Prevention strategies include support surfaces, padding, and positioning.⁴

Hand-Off Report

The hand-off process is critical in assisting health care personnel to identify injury in the perioperative setting and implement process improvements to reduce the risks of injury for future patients.⁴

Clinical Question

Can staff education and the utilization of a **Skin Assessment Algorithm** tool *improve skin assessment documentation* on *intra-operative adult patients* to reduce HAPI in procedures greater than 180 minutes?

Evidence-Based Protocol

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SKIN ASSESSMENT ALGORITHM

WNL: SKIN WARM, DRY, INTACT. COLOR APPROPRIATE AND EVEN. SKIN FREE OF ANY LESIONS, WOUNDS, BRUISES, BURNS, ABRASIONS, RASHES, & OTHER ABNORMALITIES. PRESSURE POINTS **WITHOUT ERYTHEMA.**

EXCEPTIONS TO WNL:

SKIN COLOR

Compare similar body parts.

Depress discolored areas to see if they blanch.

SKIN CONDITION/TEMPERATURE

Edema: uni- or bilateral? Use back of hand to assess temp.

RASH

Indicate location.

DISCOLORATION

i.e. scars, hyperpigmentation

ECCHYMOSIS

AKA bruises or hematoma. Reddish to bluish/purple discoloration.

ERODED/DENUDED SKIN

Diffuse erythema with patchy areas of friction or moisture erosion. Intact abrasion/scab or small blister.

Check body folds and perineum.

HEALED PRESSURE INJURY

Intact scar tissue. If open, requires LDA.

Check bony prominences and near medical devices.

BLANCHING ERYTHEMA

Pre-pressure injury. Gently press to check for blanching.

Signals to monitor for progression and offload these areas when possible.

LDA

Wounds must be documented under LDAs when they are **significant & require ongoing monitoring & dressings.**

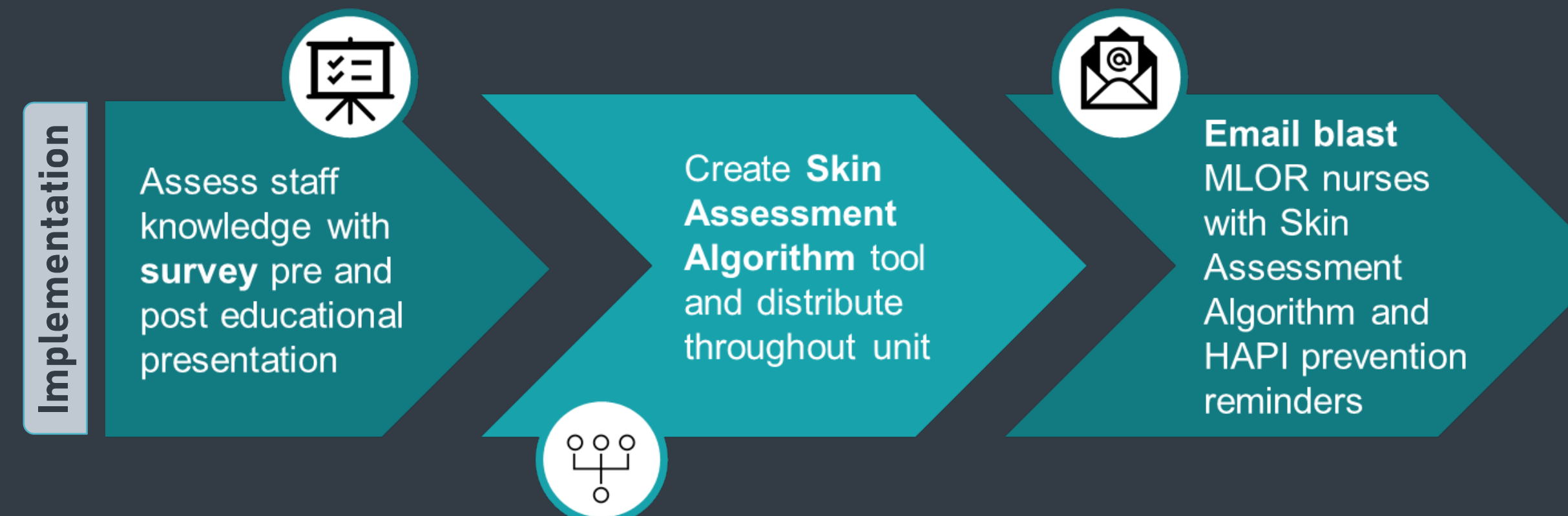
IR

WOUND/PRESSURE INJURY PRESENT?

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        graph TD
            A[WOUND/PRESSURE INJURY PRESENT?] -- YES --> B[PRESENT ON ADMISSION?]
            A -- NO --> C[NO IR NEEDED]
            B -- YES --> C
            B -- NO --> D[IR NEEDED]
            
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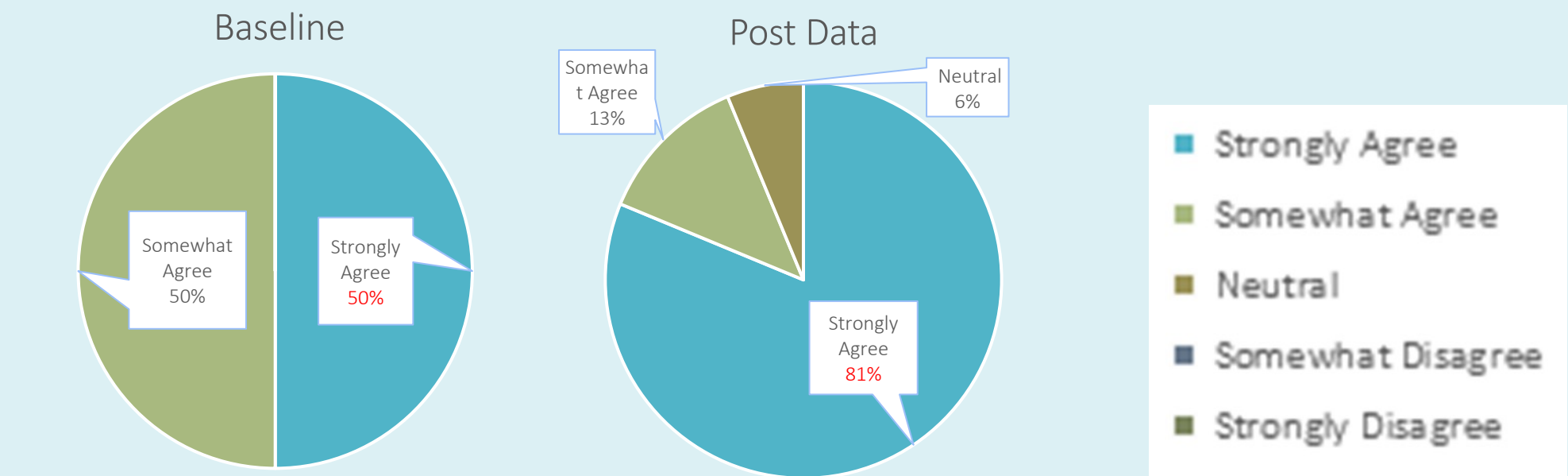
This tool was created to aid nurses to perform a more thorough skin assessment with proper documentation.



A seven-question survey was created to assess staff knowledge and confidence in identifying HAPI. This survey was given pre- and post- educational presentation that was given in-person and virtually. The Skin Assessment Algorithm Tool was developed and distributed throughout the unit and sent by email.

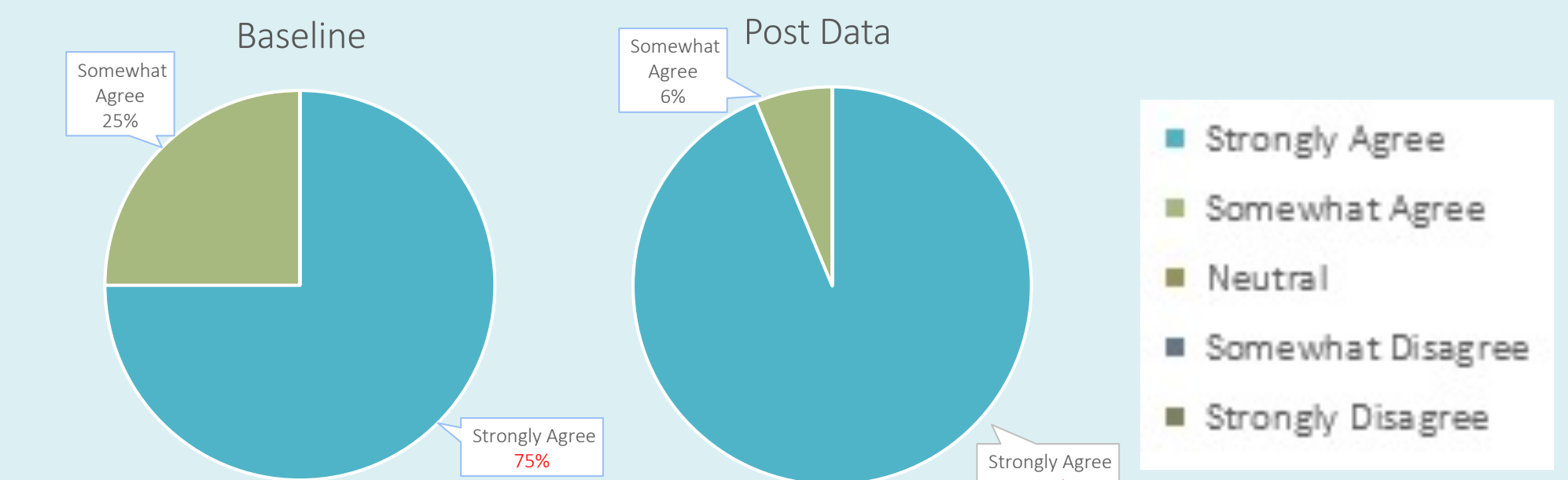
Results

Confidence in ability to identify HAPI **increased from 50% to 81.25%.**



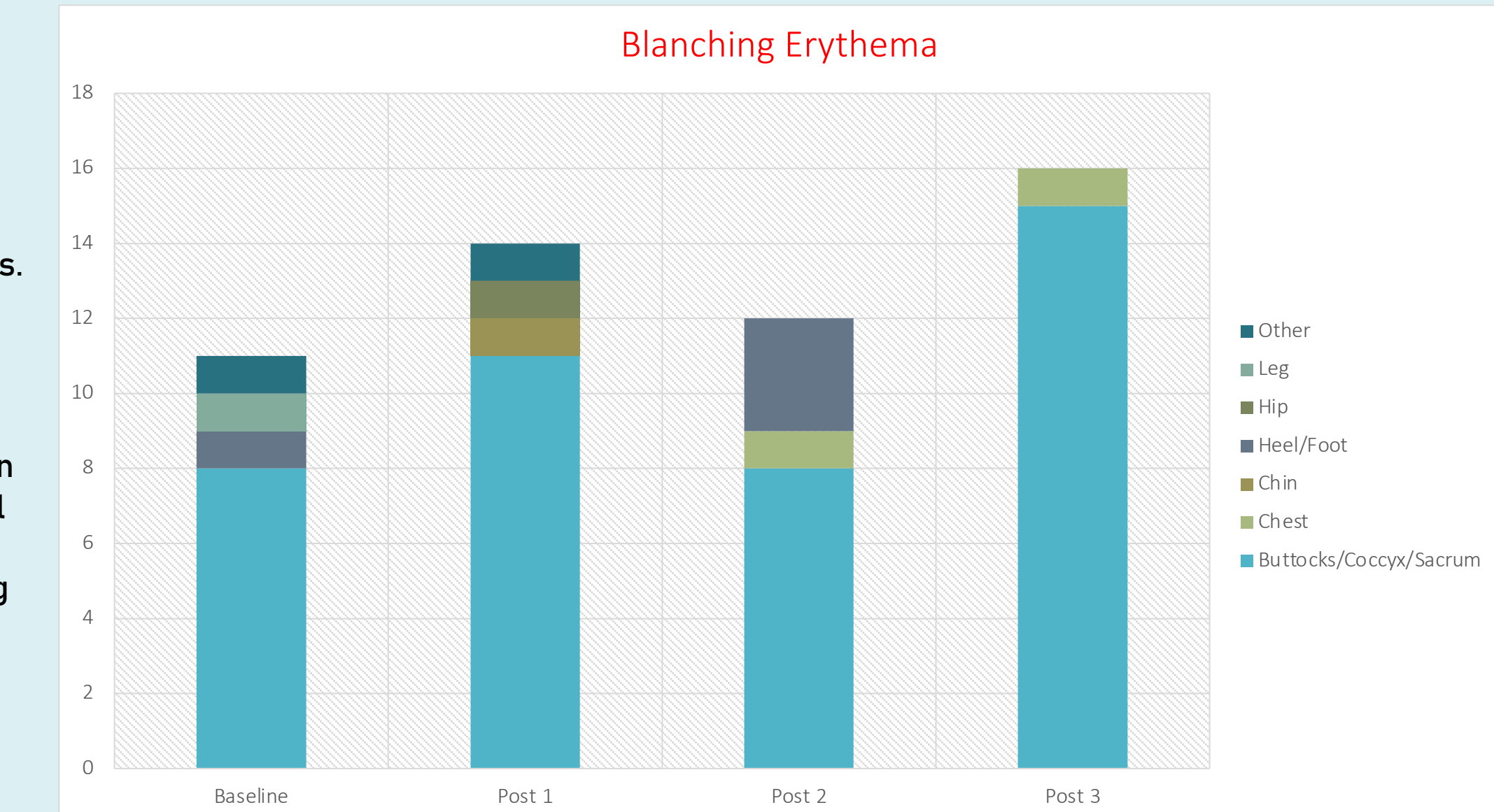
I am confident in my ability to identify HAPI.

Understanding the importance of documenting areas of blanching erythema **increased from 75% to 93.75%.**



I understand the importance of documenting areas of blanching erythema.

This graph shows the documented number of patients with blanching erythema post-procedure. Data was collected during four three-week increments. Baseline collected prior to any intervention. Post 1 is after in-person and Zoom presentations. Post 2 and 3 are after distribution of Skin Assessment Algorithm Tool and Email Blast. Documentation of blanching erythema has increased post-intervention. The number of reports has trended upward after the interventions.



Conclusions/Discussion

Staff education and the Skin Assessment Algorithm Tool proved effective. The data shows a positive impact on nurse confidence in identifying HAPI as well as increased documentation of blanching erythema.

Perioperative Nursing Implications

This project will create data to continually assess and improve our preventative measures to reduce HAPI in the operating room based on strong evidence collected through EMR documentation. These measures will evolve as best practices, technology, and procedures change over time.

References



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