

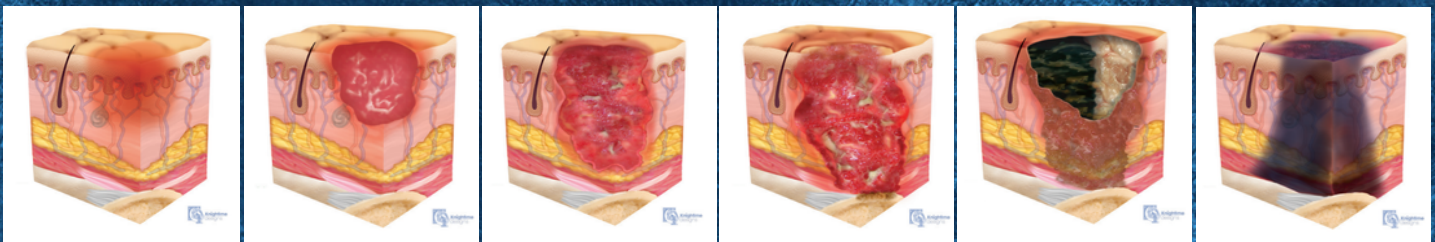


THE HEALING ADVANTAGE NEWSLETTER

Pressure Injury Prevention

What Is a Pressure Injury?

A Pressure Injury (PI) is a localized area of damage to the skin and/or underlying soft tissue as the result of pressure or pressure in combination with shear.² PIs are usually located over bony prominences but may also be found beneath medical devices or other objects applying pressure to the body. PIs can present with intact skin or as an open ulcer and may be painful. PIs in their early stages are easily healable with proper offloading; however, deeper stages of pressure injuries may take many months to heal or may never heal in patients who are elderly or immunocompromised. In some cases, pressure injuries can lead to secondary infection, which can lead to death.²



Images Courtesy of the NPIAP

Pressure Injury Impact

PIs can negatively impact patients' quality of life by causing pain, increasing dependence on caregivers, and increasing the cost and length of care.⁶ On a larger scale, they put a substantial financial strain on the healthcare system. In 2016, it was estimated that \$26.8 billion dollars were spent in acute costs related to PIs.⁵ It's approximated that there are 2.5 million cases per year, and that 60,000 of these cases will result in death.⁵ PIs are the number one most common malpractice claim in the U.S., with many cases settling for more than one million dollars.³



Pressure Injury Prevention Techniques

Per the International PI Guidelines and Centers for Medicare and Medicaid Services (CMS), there are six key elements to a successful pressure injury prevention program:

- 1. Prompt PI risk assessment using a validated risk tool*
- 2. Prompt comprehensive skin assessment*
- 3. Routine repositioning and mobility*
- 4. Skincare and microclimate control*
- 5. Support surfaces and pressure redistribution for patients with PI and high-risk patients*
- 6. Nutritional support or supplementation*

Risk Factor Assessment

Prevention of PIs begins with risk assessment and identification of risk factors using a validated tool and clinical judgement. A structured risk assessment tool, like the Braden Scale, is not only used to identify an individual's risk for PI development but can also be used to develop specific care plan interventions for each high-risk factor. High-risk individuals, once identified through risk assessment, can be more closely monitored by the care team. Generally, bedfast and chairfast individuals should be considered at higher risk for PI development. Other high-risk factors include geriatric or fragile skin, existing PI, history of PIs, incontinence, blood flow impairments, and multiple co-morbidities. The risk assessment should be repeated at regular intervals and with any change of condition.⁴

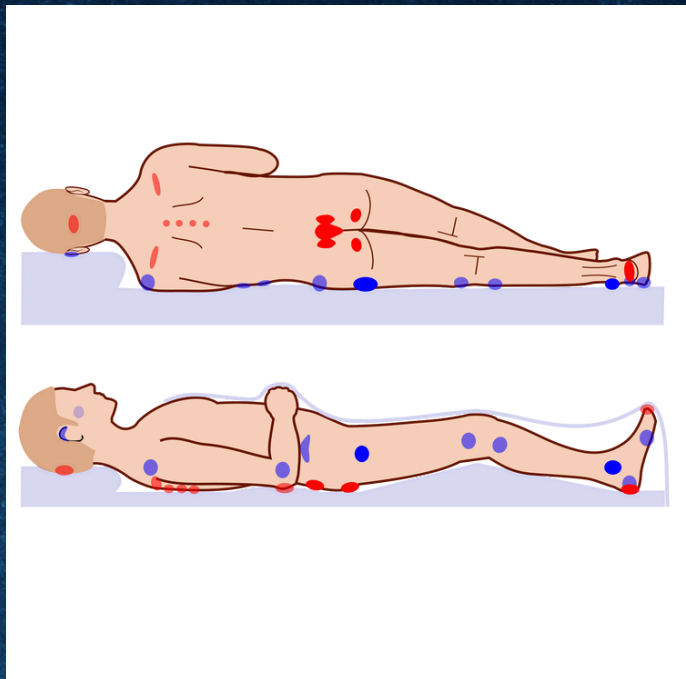
*Scan here for the
Braden Scale II*



Skin Assessment and Skin Care

In addition to assessing risk, a comprehensive skin assessment should be conducted as soon as possible but no later than eight hours of admission to a healthcare facility. The skin should be evaluated thoroughly for wounds and changes in skin integrity, color, temperature, and moisture. Skin should be inspected at least daily for signs of pressure injury, especially for nonblanchable erythema. Assessment should be focused on pressure points, including the sacrum, coccyx, buttocks, heels, ischium, trochanters, elbows and beneath medical devices. The skin should be assessed daily and documented weekly using a structured assessment tool. Skin should be cleansed after each episode of incontinence with skin cleansers that are pH balanced. During hygiene care, be careful with fragile skin or areas with moisture-associated skin damage and avoid rubbing vigorously during hygiene care. Skin moisturizers should be applied daily on dry skin.⁴





Pressure Points/Skin Assessment

Care of Darkly Pigmented Skin

Special care should be taken when assessing darkly pigmented skin, as racial disparities exist with regard to PI development and healing.¹ This is partially due to the fact that visual skin assessment can be especially challenging in patients with dark skin tones. When inspecting darkly pigmented skin, changes in skin tone, skin temperature and tissue consistency compared to adjacent skin should be identified. Dry skin can hide skin changes; moistening of skin using saline can assist in determining skin color changes or deep tissue pressure injuries.⁴ A greater representation of diverse skin colors/tones in educational material is needed to help better prepare nurses to identify pressure injuries in those with darkly pigmented skin.¹

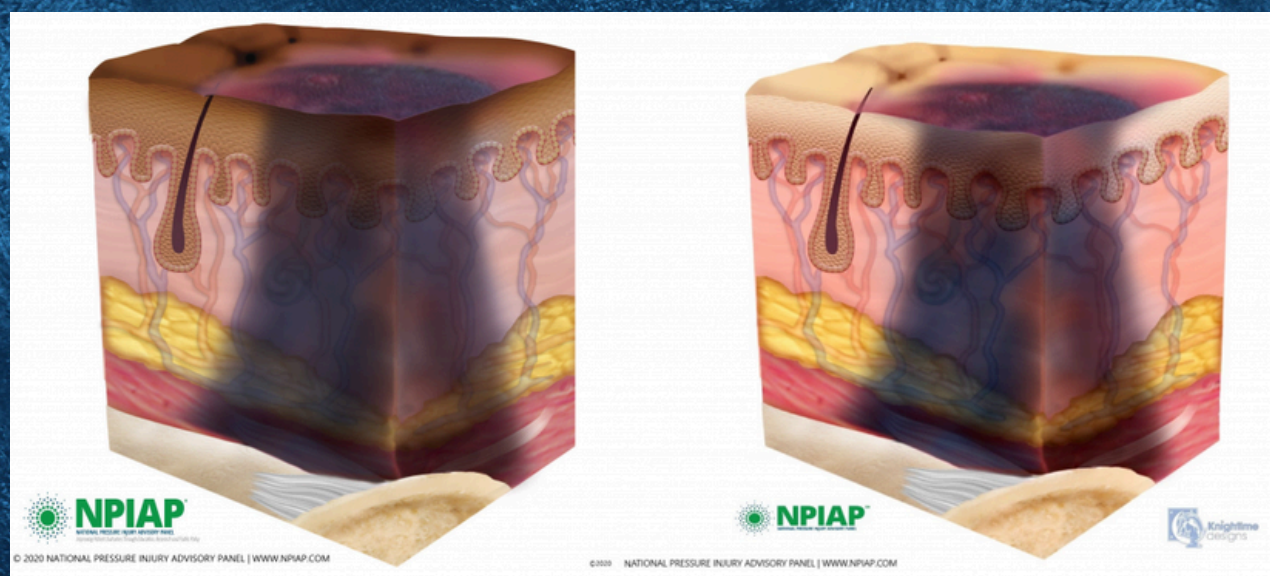


Image Courtesy of the NPIAP



Repositioning and Mobilization

All individuals at risk for pressure injury should be turned and repositioned unless contraindicated due to medical conditions or medical treatments. The frequency for turning should be based on the support surface in use, the skin's tolerance for pressure, and the individual's preferences. The turn schedule may be lengthened at night to allow for uninterrupted sleep. When resting in bed, the head of the bed should be elevated no greater than 30 degrees unless medically contraindicated. A 30-degree side lying position should be utilized, using a hand to determine whether the sacrum is off the bed. Positioning the patient on an area with a pressure injury should be avoided.⁴

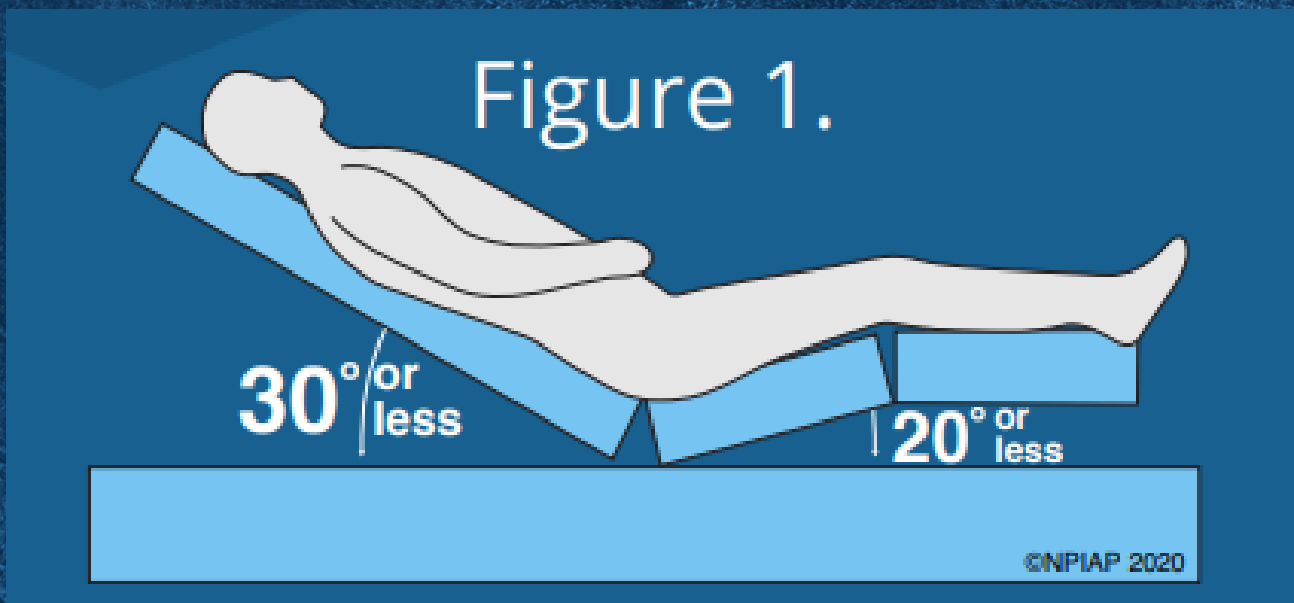


Image Courtesy of the NPIAP

Support Surfaces

Level of immobility, exposure to shear, skin moisture, perfusion, body size and weight of the individual should be considered when choosing a support surface.⁴ Remember that repositioning of the patient will continue when placed on any support surface. Microclimate management surfaces have settings that are based on weight, not comfort. When using microclimate management surfaces, a breathable incontinence pad must be used. If a plastic-backed incontinence pad must be used, use it for dignity when the individual is ambulating but remove it once the individual has returned to bed. The rule of thumb is that “less is best” when it comes to the number of layers used on microclimate management surfaces.²



Heel Offloading

The heel is covered with a small volume of subcutaneous fat and mechanical loads are transmitted directly angular to the bone, making the heel one of the two most common anatomical sites for pressure injury.² Heels should be kept free from the bed.⁴ This can be done in a few ways. The most common heel offloading technique is to “float” the heels by using pillows. Heel suspension devices may also be used if they support the calf region and have a hollow area within the boot to keep the heels free floating. There are some other creative heel floating devices on the market that may be used, as long as the heels are suspended in mid-air and are not touching the device directly.

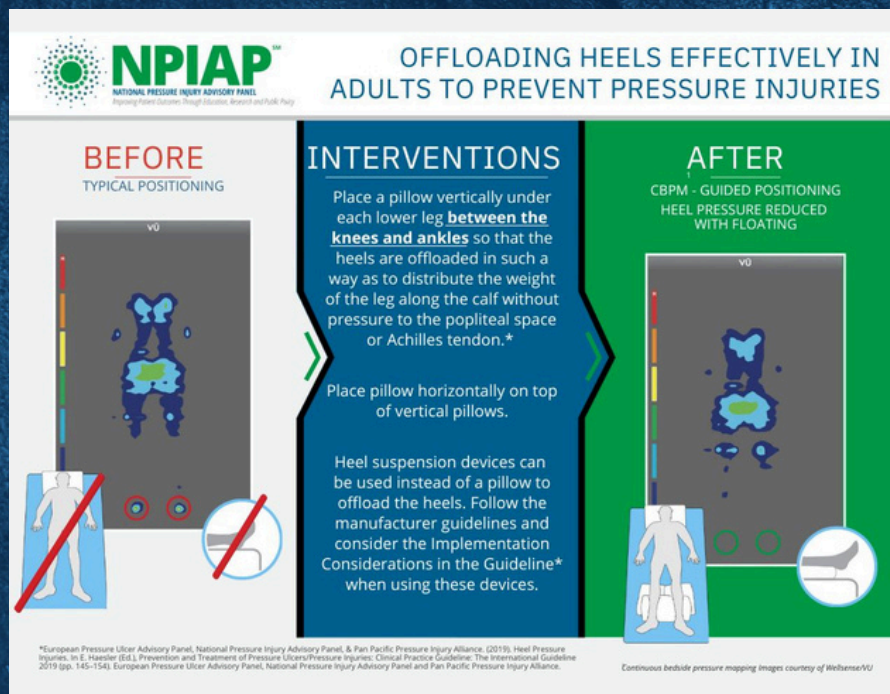


Image Courtesy of the NPIAP

Nutrition



Scan here for the
MNA

Nutrition is an important part of PI prevention, because all organ systems (including the skin) require macro and micronutrients to meet nutrient requirements for growth, development, maintenance, and repair of body tissues.² A valid and reliable screening tool, such as the Mini Nutritional Assessment (MNA), should be used to determine the risk of malnutrition (scan the QR code below to access the MNA!). All individuals at risk for malnutrition should be referred to a registered dietitian/nutritionist. Adequacy of oral, enteral, and parenteral intake should be monitored. Weight changes should be monitored closely. Nutritional supplements should be provided between meal and with oral medications unless contraindicated.⁴



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Proper nutrition can help support strong skin and muscles, which can help prevent pressure injuries and promote healing if a pressure injury occurs.

Quality nutrition is comprised of:



Calories

Adequate calories help maintain muscle mass and weight.



Protein

Protein repairs and maintains tissue and muscle, which can help pressure injuries heal.



Amino Acids

Arginine is a conditionally essential amino acid that is critical for wound healing.



Water

Proper hydration carries nutrients throughout the body.



Vitamins & Minerals

Many vitamins and minerals are associated with healing.

The 2019 International Clinical Practice Guideline (CPG)¹ highlights 4 keys to prevention & treatment of pressure injuries via good nutrition

1. PREVENTION

- Validated malnutrition screening
- Early intervention
- Flexible nutrition planning

2. INTERVENTION

- Food first
- Fortified foods for increased nutrients
- Oral nutritional supplements (ONS)

3. COLLABORATION

- Timely collaboration
- Plan to achieve clinical goals
- Adapt to medical changes

4. ACTION

- Albumin or prealbumin are **NOT** sensitive measures of nutrition status
- Provide high-protein snacks
- Expand flavors to increase intake

Images Courtesy of the NPIAP



Scan here to see our references page.

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