Massachusetts DDS | Quality & Risk Management Brief

Quality Is No Accident

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DID YOU KNOW?

- Ninety-five (95%) of pressure ulcers develop on the lower body. Common sites are the tail bone, hip bone, heel, ankles, elbows, and spine, as well as the back, back of head, or ears.

- People with pressure ulcers are at 2-6 times greater mortality risk than people without.

- People with a history of pressure ulcers are more than five times as likely to develop another pressure ulcer as people with no such history.

- People who cannot move themselves and/or feel parts of their body are also at great risk.

Managing Pressure Ulcers

A pressure ulcer, also called a "decubitus ulcer" or a "bed sore," is an injury to the skin or underlying tissue as a result of lying or sitting in one position for too long. Serious damage to the skin and muscle can occur in as little as 1 hour in a chair and in as little as 2 hours in a bed!

How do pressure ulcers develop?

Muscles and other soft tissues in the body are squeezed between one of the bones on the body and an outside hard surface like a chair or bed. This pressure slows or stops the blood from flowing to the skin and muscles, causing damage. Pressure ulcers can also form from **shearing** or **friction.** This is when delicate skin tissue is dragged across (shearing), or rubbed against (friction), a hard surface such as sheets.

What are the effects of pressure ulcers?

Pressure ulcers initially cause the skin to redden. The skin may feel spongy and the person may complain of pain or itch in the affected area. If left untreated, the ulcer can open, become larger and deeper, and be difficult to heal. This causes great pain for the individual, bone infection, and even sepsis. This can lead to hospitalization or death.

Ulcer Stages

Pressure sores are grouped by the severity of symptoms and start with the mildest Stage 1 and progress to the most severe Stage IV.
Stage I: A reddened, painful area on the skin
Stage II: The skin blisters or forms an open sore. The area around the sore may be red and irritated.

Stage III: The skin now develops an open, sunken hole called a crater and the underlying tissue skin is damaged.
Stage IV: The pressure ulcer has become so deep that there is damage to the muscle and bone.

Content in this Brief was adapted, with permission, from "Pressure Ulcers Prevention" by Lorraine L. Murphy and Meredith Kaulback.

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Risk Assessment

Early recognition of pressure ulcers and risk factors associated with the development of pressure ulcers is critical to successful prevention and management. The following factors may increase a person's risk of developing pressure ulcers:

- History of pressure ulcers.
- Being in poor health or having chronic health conditions, esp. diabetes or vascular disease.
- Lying or sitting for extended periods of time. This could be a result of limited mobility, paralysis, or a recent surgery.
- Having fragile skin that tears easily, skin problems, or excessively dry or moist skin.
- Loss of feeling or sensation to a body part.
- Weight loss, especially during a prolonged illness, being over or under weight, or having generally poor nutrition and/or poor hydration.
- Bowel or urinary incontinence; steroid use.

Identification Strategies

In the early stages, skin appears red or inflamed. In Stage II, the skin begins to open (see picture). To identify pressure ulcers early:

A Stage 2 pressure ulcer

Look at the person's skin at close range and at a distance to check for differences in skin tones. Pressure ulcers will appear reddened and will not blanch (lose color briefly when pressed down and released).

Listen to the person's reports of soreness or pain.

Feel - touch the person's skin and check for warmth, coolness, mushiness, and firmness. Skin temperature is often warmer in a pressure ulcer. The skin will also probably feel firmer or softer.

Darkly Pigmented Skin

Research suggests that Stage 1 pressure ulcers are under-detected in people with dark skin because it may be harder to see the ulcer at early stages. Dark skin rarely shows the blanch response and areas of redness are not easily identified. However, the affected skin may appear darker than the surrounding skin and be an eggplant (purplish-blue or violet) color. Additionally, the area may be painful, firm, soft, warmer or cooler as compared to surrounding skin.

Braden Scale

The Braden Scale for Predicting Pressure Score Risk is frequently used to assess a person's risk for developing pressure ulcers. It assesses sensory perception (the ability to respond meaningfully to pressure-related discomfort), the degree to which skin is exposed to moisture, physical activity, mobility, nutrition, and expected friction and shear from moving.

Each category is rated for risk and a lower score indicates a higher risk. The level of risk indicates the intervention strategies that should be used.

Full Braden Scale: www.bradenscale.com/images/bradenscale.pdf

Braden Assessment: www.woundrounds.com/wound-care-technologies/what-is-the-braden-scale

Prevention and Management

Prevention Best Practices

Positioning and Repositioning

- DO teach and encourage people to shift their weight every 15 min, assisting as necessary, while seated.
- DO turn and/or reposition people every 1-2 hours, at minimum, if they are not able to do this themselves.
- DON'T drag heels, hip, or tail bone when lifting someone off a bed. Place a sheet under the person and use it to lift the person.
  - Use socks or heel protectors to protect heels.
  - Use elbow protectors or long sleeves for elbows.

Skin Protection

- DO inspect the person's skin regularly for changes in color, temperature and firmness.
- DO apply lotion to bony areas (hips, heels, tailbones, elbows, shoulder blades) and to dry, flaky skin.
- DO use moisture barrier ointment on skin that tends to get wet frequently (i.e. due to incontinence).
- DON'T use incontinent pads over wheelchair cushions. It will interfere with the pressure-relieving properties of the cushion. Use sheets or pillowcases instead.

Support Services

- DO use foam, pressure-reducing mattresses on beds.
- DO use pressure-reducing cushions on chairs.
- DO use a pillow under the calves to elevate heels when lying on a bed.

Staff Response

- DO immediately report red or broken skin to the nurse or supervisor and make sure the person is seen by their HCP as soon as possible.
- DO listen carefully for complaints of pain, especially in areas that are frequently in contact with hard services like chairs, beds, oxygen tubing or eyeglasses!
- DO ensure people get enough protein and water to keep their skin healthy. Consult with nutritionists to help assess nutritional status and develop guidelines.

Individualized Plans Should Include:

- Daily, thorough skin exams.
- Processes for keeping skin clean, dry, and moisturized.
- Repositioning for the person at least every 1-2 hours.
- Identified nutritious foods, especially protein, and water.
- Keeping as active as possible.
- Strategies for not dragging skin across sheets or surfaces, for using pillows to protect bony parts, and for floating heels off the bed or chair by placing a pillow under calves.
- Applying barrier cream to intact skin if incontinent.
- When, to whom, and how to report observations.

Management

Pressure ulcers can be generally managed by 1) identifying who is at most at risk for developing them; 2) assessing people regularly and recognizing ulcers early; 3) treating early pressure ulcers promptly; 4) monitoring and reporting conditions; 5) implementing prevention strategies to avoid new pressure ulcers; and 6) regularly reassessing for new ulcers. Contact Program Directors or DDS Area Office nurses for assistance with managing this process.

MA DDS Guidelines and Resources

DDS Guidelines for Managing Pressure Ulcers

DDS released the following guidance in June 2017 for how to best manage pressure ulcers. These guidelines apply to the care of any person who has a pressure ulcer or is at risk for a pressure ulcer in any service setting, and it applies to all staff:

- It is the expectation of the Department of Developmental Services that pressure ulcers are managed in the individual's environment(s) with as little disruption as possible to their routine.
- Standard and/or Universal Precautions must be followed as it relates to management of the wound.
- All individuals with risk factors for developing a pressure wound should be evaluated, using a standardized screening tool.
- An individualized protocol for the prevention and management of pressure ulcers must be created for any person determined to be at risk.
- All wound care is to be managed or overseen by a Certified Wound and Ostomy Nurse under the order of the person's Health Care Provider.
- Information regarding the individual's status relative to this issue is to be protected and handled in the same manner as any medical information according to HIPAA regulations.
- Notify the DDS Area Office Nurse, immediately, of a new diagnosis or change in diagnosis regarding this issue by contacting your Area Office and asking to speak to the nurse.
- All agencies should have a pressure ulcer management policy or guidelines for their staff, and train their staff in its use.

http://www.mass.gov/eohhs/docs/dmr/reports/fs-pressure-ulcers-protocol.pdf

Resources

1. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Developed by the National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance.
   https://www.npuap.org/wp-content/uploads/2014/08/Updated-10-16-14-Quick-Reference-Guide-DIGITAL-NPUAP-EPUAP-PPPIA-16Oct2014.pdf
2. The National Pressure Ulcer Advisory Panel: http://www.npuap.org/
3. Society for Post-Acute and Long-Term Care Medicine: http://paltc.org/

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For more information on assessment and treatment options for people with signs of pressure ulcers contact:
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