

Preventing Skin Injuries in an ICF/IID

Identification

- Skin is the largest body system. It provides protection against infection and damage to underlying body structures.
- Skin injuries can be caused by pressure, friction, or moisture.

Identification

- Identifying the type of skin breakdown as well as the cause will guide staff in treating it today and preventing it tomorrow.

Identification

- The regulations W334 - W337 require a licensed nurse to complete and document a "direct physical examination" of individuals on a quarterly and on an as-needed basis.
- The interpretive guidance at W334 states, "A direct physical examination means a visual review of the body as well as examination/assessment of body systems."

Identification

- The direct physical examination includes an examination of the individual's skin by the licensed nurse, looking for any abnormalities, including, pressure ulcers.
- Direct Care Staff should be trained to alert nursing personnel to any abnormalities as they occur, rather than waiting for the next quarterly examination (W192, W340 and W342).

Identification

PRESSURE

- Pressure ulcers occur when there is constant pressure on a body part, especially over a bony area, causing the skin to be compressed against another surface. This compression decreases blood flow to the tissues and causes cells to die.
- A pressure ulcer may appear as a reddened area, a blister, or an open area.

Identification

Several studies show an important factor to consider when dealing with skin breakdown is the "microclimate" of the skin, which is the tissue temperature and the relative humidity or tissue moisture.

Identification

MOISTURE

- Moisture Associated Skin Damage, or MASD, is caused by constant contact of the skin with moisture from sweat, urine, or stool.
- This type of skin damage is usually found in skin folds and in the perineal area.
- Constant exposure to moisture can decrease skin strength and can lead to breakdown.

Identification

FRICITION

- Friction or "shearing" skin injuries occur when the skin moves one direction and the underlying tissue and bone move in the opposite direction. Small blood vessels are broken and the top layer of skin is actually scraped off.
- This can happen when a person slides down in their chair or when they are pulled across the surface of a bed, chair, or floor while being repositioned.

Treatment

If a pressure ulcer or other skin breakdown is identified, care must be provided in a timely manner (W331). This may include:

- Consultation with a physician and/or wound care specialist to obtain orders to treat the wound (W338).
- Adjusting the individual's Active Treatment programs and schedules to promote healing (W260 and W250).

Assessment and Prevention

However, preventative measures, based on a comprehensive assessment of the individual's current status and needs, will help ensure the individual's risk of developing a pressure ulcer is minimized.

Assessing Risk

One widely accepted tool for assessing an individual's risk for skin breakdown is the Braden Scale. This tool can be found online at <http://www.bradenscale.com/>

The Braden Scale assesses risk factors and categorizes the individual's level of risk.

High Risk

Impaired cognitive or sensory capabilities (W218 and W222):

- This includes persons who are non-verbal, have dementia, or have an altered level of consciousness due to medications.
- This also includes persons with an increased loss of feeling due to diabetes or neurological disorders.

High Risk

Moisture (W216 and W224):

- This includes persons whose skin is continuously damp from perspiration, urine, or stool.
- In addition to the moisture, exposure to caustic or irritating agents (such as ammonia in urine or fecal bacteria) can cause dermatitis (inflammation and irritation of the skin). This is also known as incontinence associated dermatitis and can lead to skin breakdown.

High Risk

Decreased mobility/activity (W216 and W218):

- This includes persons who are bedbound or wheelchair bound, or who have a decreased ability to move all body parts such as persons with quadriplegia and paraplegia.
- The application of splints to prevent contractures and other orthotic devices can also decrease mobility and add pressure to the skin. These devices must be assessed, be of proper size, and used appropriately (W218, W243, W244, W245 and W436).

High Risk

Decreased mobility and increased pressure can also result from restraint devices.

- Physical restraint is "any manual hold or mechanical device that the client cannot remove easily, and which restricts the free movement of, normal functioning of, or normal access to a portion or portions of a client's body" (W280).
- When restraint devices are used, restraints must be removed to provide the opportunity for motion and exercise for a period of no less than 10 minutes during each two-hour period in which restraint is employed (W306).

High Risk

This includes mechanical restraints which are medically necessary and specifically ordered by a physician.

- Restraints for immobilization of bones or joints for medical reasons may not need released every 2 hours but would require monitoring for skin breakdown (W306 and W331).
- If medical mechanical restraints are used during sleeping hours, it is not always necessary to wake the individual every 2 hours. However, the restraints must still be checked frequently during the night to ensure that the restraint is still properly applied, the individual is comfortable, and skin integrity is maintained (W306 and W331).

High Risk

Nutrition (W217):

- Individuals who do not eat well, have low protein intake, and/or poor fluid intake are at a higher risk of skin breakdown.

High Risk

Elderly (W211):

- As a person ages, their skin becomes thin and fragile. There is a decrease in the amount of muscle and fat available for cushioning the skin.

Prevention

Pressure ulcers are prevented by decreasing the duration and intensity of pressure and should be incorporated into each individual's IPP (W227, W240, W250 and W260). This includes:

- Frequently repositioning of persons who cannot reposition themselves.
- Providing surfaces that do not create pressure such as gel or air mattresses and wheelchair cushions.

Prevention

Moisture Associated Skin Damage can be prevented by cleansing frequently with water or a pH balanced cleanser:

- Using an emollient moisturizer that replaces the skin's natural lipid barrier.
- Protect the skin by keeping it dry. This may include the use of pads and briefs that wick moisture away from the skin, or the non-use of briefs at night. Options must be based on the individual's assessed needs and preferences (W247).

Prevention

Friction/shear skin damage can be prevented by staff training in proper lifting and moving techniques (W189):

- Always lift the person's weight completely off the surface before moving them sideways or positioning them in their chair or bed.
- Use lifting aids such as a Hoyer sling or lift sheet and always have two people assist with lifting.

Prevention

Other preventive actions may include:

- Keep the person in a comfortable temperature range. An increase in the microclimate of the skin (temperature + moisture) can decrease the strength of the skin and cause perspiration, which increases the potential for damage (W429).

Prevention

Keep the person well-nourished and well hydrated (W460):

- A well balanced diet will strengthen tissue and aid in healing tissues that have been damaged.

Prevention

Maintain a healthy weight. Obesity can contribute to skin damage by:

- Decreasing circulation
- Creating more skin folds to collect moisture
- Increasing body temperature
- Making mobility and repositioning more difficult
- Increasing pressure to sensitive areas

Resources and References

- Chatham, N. & Carls, C. (2012). *How to Manage Incontinence-Associated Dermatitis*. Retrieved from <https://woundcareadvisor.com/how-to-manage-incontinence-associated-dermatitis/>
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