Letter from Home for Direct Care Providers

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Recognizing Skin Conditions and Changes

Skin is considered an organ, just like the heart, liver, lungs or kidneys. In fact, skin is considered the largest organ in the body. Changes in skin can indicate an area that is breaking down, or can be a sign of infection, a blood clot, excess fluid, an allergy, or an indication of a worsening disease process. Our skin protects our body from injury and infection and if compromised, can cause a number of ill effects. The skin also contains nerves that help a person feel pressure, pain, and temperature; all necessary to detect injury or a potential problem developing. As a direct care provider, it will be important to be able to recognize changes in skin condition for your clients.

There are many skin changes that happen with normal aging.

As a person ages, the epidermal cells become thinner and flatter causing the skin to become almost transparent. When the cells flatten, they become less effective in functioning as a barrier and are more likely to allow moisture to be released instead of kept in the skin. This is one reason the elderly have drier skin. Dry skin may be considered "just a normal change with aging" and can be overlooked. But overly dry skin can not only become itchy and painful, but it can become cracked and scaly, which can make a person more susceptible to infections and skin breakdown. According to Mayoclinic.org, dry skin is likely to cause one or more of the following:

An average adult's skin length is 21 square feet, weighs nine pound, and hold more than 11 miles of blood vessels.

Those at Risk For Skin Problems:

-Those who don't move much or who lay/sit for long periods

-Those who are dehydrated

-Those who are cognitively impaired or depressed

-Those with circulatory issues, diabetes or heart disease

-Incontinent individuals

-Those who are dependent for nutrition

-Those who are obese

-Those with dry skin

-Older individuals

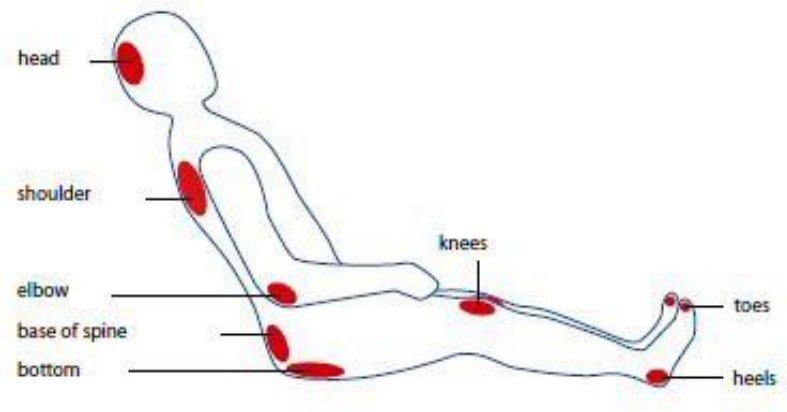
-Those at the end-of-life

- A feeling of skin tightness, especially after bathing
- Skin that feels and looks rough
- Itching (pruritus)
- Slight to severe flaking, scaling or peeling
- Fine lines or cracks
- Gray, ashy skin
- Redness
- Deep cracks that may bleed

Clients with dry skin can usually see improvement by cleansing with gentle soaps or PH balanced cleansers and then patting dry. When bathing, make sure the water is not too hot, as this can further dry out the skin. Apply moisturizing creams or lotions after bathing to be most effective (make sure this is on the service plan/care plan). Any change in the skin's appearance from visit to visit should be reported to your supervisor, particularly if their skin is reddened, painful, has developed open sores or skin breaks from itching or cracking.

Also, with age the actual number of epithelial cells decreases by about 10% per decade and also divide more slowly, making our older client's wound healing much slower. In fact, according to one study, an older client's wounds take 4 times longer to heal. Another issue affecting our older clients is a decrease in the blood flow to the skin. As circulation decreases, it can affect the sensitivity of our touch receptors and nerve endings. Therefore, our older clients often do not have as strong a reaction to pain, temperature or touch. This can cause severe consequences for the elderly. If a client has decreased pain and touch sensitivity, they may not be aware that their shoes are rubbing or that they have an injury. This can create the conditions necessary for a pressure ulcer or skin breakdown to occur without the client's knowledge. Pressure ulcers are also known as pressure sores, bedsores, or decubitus ulcers and are localized damage to the skin and/or underlying tissue that usually occur over bony prominences as a result of pressure or pressure in combination with shear (pulling) and/or friction (rubbing). Many clients are not able to ambulate or transfer easily. This often means that they do not change position as often as they should and this further complicates their susceptibility to developing a pressure ulcer. Therefore, pressure ulcers usually develop over bony prominences or pressure points when the body's pressure squeezes the tissues in between the bone and the surface the person is lying or sitting on (see photo). As a result, blood flow to the area decreases which causes less oxygen and nutrients to get to the area and the skin begins to break down.

Bony prominences are the areas below in red where bones are closer to the skin. Pressure on these areas may make the development of a pressure ulcer more likely.



Often, this damage occurs as quickly as hours, particularly in those who already have circulatory issues or other disease processes that may prevent tissues from receiving oxygen and nutrients. Also, friction and shearing forces can injure the skin, particularly in areas that are compromised. Shearing occurs when the skin is moved one way and the bone and tissue under the skin move another. When this happens, the tiny blood vessels are pinched and the blood supply to the skin is decreased.

For people who use a wheelchair, pressure sores often occur on skin over the following sites:

- Tailbone or buttocks
- Shoulder blades and spine
- Backs of arms and legs where they rest against the chair

For people who are confined to a bed, common sites include the following:

- Back or sides of the head
- Shoulder blades
- Hip, lower back or tailbone
- Heels, ankles and skin behind the knees

Signs of a developing or actual pressure ulcer require acute observation skills. Some signs to watch for include:

- Reddened areas that do not return to normal color after pressure is relieved. In those with darker skin, the area may appear ashen
- The client may sense slight itching or tenderness
- The area may be warm to the touch
- The area may be red and swollen or shiny
- Blistering
- An open skin area is noted

As with most things in health care, it is easier to prevent skin care issues than to treat them once they occur. Wound healing in older adults often is difficult due to poor circulation and other disease processes that may occur in a client. To help your client prevent skin breakdown, help or remind them to reposition often or at least every two hours. Regular repositioning helps prevent any one part of the body from being without proper circulation for too long. Check the client's skin for changes at every opportunity, particularly when toileting or providing personal care. Providing good skin care and protecting client's skin from moisture can also go a long way to helping protect client skin. Other things that can help protect skin include: providing good incontinence care, making sure linens are wrinkle free, providing back massage, using lift devices or other positioning devises to help with friction or sheering, and encourage adequate nutrition and hydration. Always report changes in skin to your supervisor.

Finally, in talking about skin observations and prevention, another thing that you can do as a direct are provider is to

provide toileting interventions and encourage or provide adequate peri-care. According to Nationalincontinence.com, exposure to urine and feces is one of the most common causes of skin breakdown and makes the skin more susceptible to the following types of injuries:

Maceration: Over-exposure to moisture can cause the skin to become macerated (waterlogged), which makes the skin very fragile. This added fragility puts the skin at greater risk for damage caused by friction, shear, and pressure. Once skin is macerated, even gentle rubbing by bed linens, adult diapers, or wash cloths could cause injury.

Incontinence Dermatitis: A common condition related to incontinence is incontinence dermatitis. Otherwise known as perineal dermatitis or diaper rash, this condition affects all age groups from infancy to old age. Perineal dermatitis involves the irritation and breakdown of the skin as a result of over-exposure to moisture and chemicals in urine and feces.

Bacterial Infection: Another risk associated with incontinence is bacterial growth and infection. Incontinence allows the skin's surface to come in contact with bacteria from waste products. This is particularly dangerous for the elderly whose skin may be characteristically dry. Dry skin provides an opportune breeding ground for bacterial growth since micro-organisms can be absorbed through skin cracks and fissures. When left unchecked, in a conducive environment, bacteria can literally double in number every 20 minutes!

Exposure To Caustic Agents: One of the caustic agents contained in urine is ammonia. Ammonia increases the pH of the skin causing irritation. Ammonia is also used by bacteria as a source of nutrition, contributing to the reproduction of more micro-organisms. Without proper treatment, the cycle goes on and on. Individuals with fecal incontinence are at an even higher level of risk for bacterial colonization of the skin.

Fungal Infection: The damp, warm skin environment generally associated with incontinence is ideal for the proliferation of pathogenic fungi. A skin rash that is fiery red, itches, and burns is usually of fungal origin, and requires treatment with an anti-fungal agent in order to heal.

To prevent or minimize incontinence-associated dermatitis or skin breakdown:

- Change incontinence products as soon as soiling occurs to avoid excessive skin wetness.
- Maintain the skin at its natural pH range (between 4 and 7) by using formulated skin products designed for incontinence care.
- Use a barrier ointment, or diaper rash cream, to minimize direct contact with urine and feces (if on service or care plan).
- Cleanse gently to avoid friction.
- Stay hydrated and eat well to maintain skin integrity.
- Report any change of skin condition to your supervisor

Observe the condition of the skin each time you visit. Be sure to note the temperature, cleanliness, and dryness. Any difference between two extremities is important and should be reported immediately. Also, observe for bruises and scratches. Notify your supervisor of your observations and document according to your agency policy.