

Promoting Skin Care for Older Adults

Chronic conditions and age-related changes place older adults at increased risk for skin breakdown and damage to skin integrity, leading to poor outcomes that may impact quality of life. Although we cannot stop skin from aging, home care clinicians are in the best position to mitigate further skin problems and influence healthier outcomes for patients with skin issues. Home healthcare clinicians can improve skin health and well-being for older adults by incorporating simple but thorough systematic skin assessments at every visit. This includes identifying the patient's personal skin care practices and preferences. Home healthcare clinicians can intervene and address excessive moisture or extreme dryness of skin, use available resources for best practices in wound care, and educate about sun protection.

Most home care visits by clinicians in the United States are to care for older adults, and the majority of these visits are related to chronic conditions such as hypertension, heart disease, osteoarthritis, chronic obstructive pulmonary disease, and diabetes (Harris-Kojetin et al., 2016; Jones et al., 2012). Although the home care clinician's role is often multifaceted, the primary reason for visiting the patient may not be related to their skin, yet many of these chronic conditions indirectly affect the skin's surface. Thus, in order to provide the best evidence-based home healthcare to older patients, clinicians must adequately assess all skin surfaces, not just what is readily visible. Skin conditions among older adults are common, so identifying and protecting high-risk skin areas and maintaining skin integrity is important (Hahnel et al., 2017; Kottner & Surber, 2016).

Structure and Function of Skin

The skin is the body's first line of defense against the external environment, and it protects the body from chemicals, ultraviolet rays, and physical harm. It provides numerous homeostatic functions including fluid regulation, electrolyte balance, thermoregulation, acid base balance, and sensation (Benbow, 2017; Bianchi & Cameron, 2008). These protective factors will be compromised if the patient has decreased fluid intake, cognitive changes, poor nutrition, or reduced mobility. Chronic conditions may further exacerbate skin concerns for the older adult. Diabetes, obesity, malnutrition,

dementia, vascular disease, renal failure, a history of smoking, chronic exposure to air pollution, hormonal changes, and extensive sun exposure all compromise skin health (Cheung, 2010; LeBlanc & Baranoski, 2014; Wingfield, 2011).

Normal age-related changes also have an impact on the skin. As the skin ages, it is vulnerable to breakdown and injury for multiple reasons. The skin becomes less elastic, drier, and more fragile as the epidermis thins (Cowdell & Garrett, 2014). There is also less moisture in the stratum corneum, and blood vessels break more easily than when the individual was younger (Voegeli, 2013). Table 1 explains how normal aging can directly and indirectly alter skin integrity. All older adults are at risk for skin integrity concerns and increased susceptibility for skin breakdown related to aging. Home care clinicians can use this evidence to plan preventative skin care initiatives

and teach the patient and family methods that decrease risks for skin breakdown.

Skin Assessment

Although we cannot stop aging, home care clinicians are in the best position to mitigate age-related skin problems and influence better outcomes for patients with skin issues. The skin is the body's largest organ; thus, it is in the best interest of home care clinicians to carefully assess the skin at each encounter and provide clear patient and family education to enhance quality outcomes. Skin care practices are very personal. Patients might not want to discuss incontinence issues because of embarrassment or shame. Also, patients are usually fully dressed creating a barrier for a thorough evaluation. Despite the obstacles of embarrassment, layers of clothing, poor lighting in the home, and competing illnesses that need attention, home care clinicians should be mindful of the skin's role as a physical barrier against the environment and the difficulty that older adults experience in maintaining that protective barrier (Cowdell & Radley, 2012).

Skin Care Practices

Question patient about their overall skin care practices. This includes cleansing and bathing practices. Personal hygiene practices may be considered private and personal. Careful, respectful questions with an explanation of why one is asking about bathing practices should be explained so as not to seem intrusive. Establishing baseline skin care practices can be helpful in identifying risks and patient's preferences. As long as the integrity of the skin is not affected, there is no evidence to change an individual's personal hygiene practices (Lichterfeld et al., 2015). Otherwise, home care clinicians can add best practices to the patient's routine care to lessen skin breakdown. There is

**Jill Brennan-Cook, DNP, RN, CNE,
and Rachel L. Turner, BSN, RN**

little evidence to support how often one should bath, thus best recommendations for older adults are to wash using a skin cleanser once or twice weekly followed by moisturizing. Moisturizers can be repeated up to three times daily when the skin remains dry, as moisturizers may

not remain on the skin surface after 8 hours (Purnamawati et al., 2017). Table 2 identifies common ingredients found in many skin care products. Home care clinicians can review this with the patient to help select products for individual skin care needs.

Table 1. Age-Related Changes That May Impact Skin Integrity

Body System	Age-Related Changes	Effects on Skin
Cardiac	Decreased blood flow Fragile capillaries	Delayed wound healing Increased bruising
Neurological	Decreased sensation Decreased memory Increased confusion Decreased vision	Increased risk of physical injury (burns) May not sense skin breakdown May forget to care for skin Risk for falls and skin damage May not visualize skin breakdown
Musculoskeletal	Decreased mobility	Increased risk for skin breakdown and pressure ulcers May have difficulty reaching areas for good skin care
Genitourinary	Increased incontinence Increased moisture Dehydration	Risk for skin breakdown and increased irritation Risk for infection Dry scaly skin
Gastrointestinal	Increased incontinence and diarrhea episodes Decreased appetite Decreased intake/malnutrition Decreased chewing ability with less dentition	Risk for skin irritation and breakdown Delayed wound healing
Immune	Decreased immunity Decreased ability to regulate temperature	Risk for skin infection Increased risk for skin cancer

Note. Adapted from Bianchi & Cameron (2008); Chang et al. (2013); Cowdell & Garrett (2014); Humbert et al. (2016).

Table 2. Common Ingredients of Skin Cleansers and Moisturizers

Category	Ingredient	Action
Humectant	Glycerin Glycerol Propylene glycol Honey Hyaluronic acid	Binds to water and retains moisture Hydrates skin
Emollient	Petrolatum Dimethicone Cetyl alcohol Castor oil Jojoba oil	Provides an occlusive barrier Hydrates skin from within Attracts water and moisturizes skin
Surfactant	Sodium lauryl sulfate Ammonium lauryl sulfate	Emulsifies dirt, oil, and sweat from skin
Synthetic preservative	Methylparaben Parabens	Preservative and limits microorganisms
Antibacterial	Triclosan Triclocarban	Inhibits bacteria

Note. Adapted from Duncan et al. (2013); Hoggarth et al. (2005); Iizaka (2017); Purnamawati et al. (2017).



After a wound is identified and staged, the wound length, width, and depth should be consistently monitored and documented.

Excessive Moisture and Dryness

Inspection of skin surfaces should include an examination of bony crevices, potential dry areas, probable moist areas such as the groin and under breasts and skin folds, in between toes and under arms. If the moisture area is associated with incontinence, the home care clinician needs to shift the focus of teaching to good continence care. This includes a routine skin care cleaning regime following each episode of incontinence and a method of protecting the skin from excessive moisture (Voegeli, 2017). Soap and water should be avoided, and a skin cleanser (e.g., Cetaphil or Cerave) is recommended. Skin cleansers contain mild surfactant, increased emulsifiers and moisturizer, thus the ideal cleanser does not damage the skin and maintains moisture (Mukhopadhyay, 2011). The surfactant decreases the surface tension on skin and helps to remove dirt and oil. After the skin is clean, a skin barrier protectant (e.g., Calazime and ConvaTec) that repels moisture and protects the skin from moisture can be applied (Hoggarth et al., 2005; Voegeli, 2013).

When the skin is subjected to moisture for other reasons such as excessive sweating, wound drainage, or repeated hand washing, home care clinicians can best intervene by encouraging prevention of excessive moisture and sweating (keeping the home cool in hot weather and changing clothes with high temperatures), providing wound bandaging education, and recommending that the patient avoid frequent contact with water. Moisture-associated skin damage can be further controlled by incorporating routine and consistent skin care followed by use of a skin protectant and moisture barrier products (Voegeli, 2013).

Home care clinicians should also inquire about dryness, rashes, itching, redness, or swelling. Excessively dry skin (xerosis) may be related to overwashing, alkaline soaps, venous disease,

medications, or simply aging (Bianchi & Cameron, 2008). Soap cleanses the skin by removing the lipid film skin layers and dirt, but it increases skin pH during and after washing that ultimately damages the skin barrier protective function. Repeated alkaline soap with a higher pH use increases surface pH and irritates the skin (Lakshmi et al., 2008). Best recommendations in avoiding alkalinity are to choose soaps without perfumes and preservatives and to avoid antibacterial or deodorant soaps, decreasing risks for irritation and inflammation. Examples of alkaline soaps are Dial and Zest, whereas Dove is considered gentle with a pH that closely aligns with normal skin pH.

Polypharmacy is common in older adults, and medications such as diuretics, antilipemics, and antiandrogens can exacerbate dry skin (White-Chu & Reddy, 2011). Health conditions common in older adults, such as diabetes and malnutrition, can also aggravate dry skin (O'Shea, 2011). Xerosis may lead to irritation, itching, scratching, and inflammation that further compromises skin integrity with subsequent infections (Bianchi & Cameron, 2008; O'Shea). Older adults may assume dry, flaky skin is normal. Thus, educating the patient on what is considered normal and when to be concerned is prudent for initiating appropriate treatment. Recommended treatment for xerosis discourages daily full washes or baths because water will promote increased dryness (Kottner & Surber, 2016). Excessive bathing habits such as bathing more than once or twice a week, using a lot of soap and wiping roughly with a towel decrease barrier function and increase skin roughness (Iizaka, 2017).

Patients need help in choosing and applying appropriate skin care products. There is a plethora of products that hydrate, moisturize, and protect the skin. Choosing the correct product for the patient's individual needs can be confusing



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for both patients and caregivers. Home care clinicians can partner with patients by reviewing patient's preferences and encouraging lipophilic products including humectants that reestablish moisture (Lichterfeld et al., 2015). These emollient products are restorative and should be the initial treatment for xerosis (Wingfield, 2011). Petroleum jelly emollients tend to be messy and greasy, so patients may prefer cream emollients for very dry skin. Creams have less water and more lipids, providing moisture for xerosis. It is important to include the patient's preference to improve compliance when implementing treatments for dry skin (Wingfield).

Sun-Protective Practices

Long-term sun exposure and whether the patient incorporates sun-protective actions when outside should be included in the assessment (Wheeler, 2009). All skin areas should be inspected for reddened, tanned, or discolored skin of excessive sun exposure, especially on the scalp, face, ears, and arms. Many older adults might not see the relevance in wearing sun block because of their ages, so the home care clinician should inquire about sun-protective practices and provide education when needed. The use of daily sun block with a sun protection factor of 30 to all sun-exposed

areas should be stressed. Older adults should apply sun block 30 minutes before exposure and repeat the application every 2 hours. Clinicians should encourage patients to avoid the sun between the hours of 10 and 4, when ultraviolet rays are the strongest. Wearing a hat with a 2- to 3-in. brim that effectively covers the ears and face is recommended. Protective sunglasses that block ultraviolet rays are important not only for the eyes but for the skin around the eyes (United et al., 2014; U.S. Department of Health and Human Services, 2017; Watson et al., 2016).

Activity and Functional Status

It is helpful to take into consideration a patient's activity level and functional status when looking for pressure areas and irritation in skin folds. A patient with an unsteady gait or weak muscles has an increased risk for falls and skin tears while walking, dressing, bathing, and transferring. Teaching the patient and caregiver best practices for positioning, turning, and shifting body weight may prevent unnecessary pressure and injury (LeBlanc & Baranoski, 2014). Clinicians can demonstrate gentle handling, moving, and pulling to avoid skin tears. Padding hard furniture surfaces with pool noodles and using soft material around the edges can prevent injury to vulnerable skin areas. The use of long sleeves, elbow pads, and covering the legs also serve as additional barriers to protect thin, frail skin (LeBlanc & Baranoski). If the patient has limited mobility, home care clinicians can increase independence by encouraging the patient to apply moisture creams wherever he or she can reach and to ask family members or caretakers to apply moisture creams to other areas.

Wound Care

Age-related changes to skin, obesity, poor nutrition, limited mobility, and common chronic conditions alter wound healing in older adults. High-calorie, high-protein nutritional supplements are encouraged for older adults at risk for skin breakdown. The National Pressure Ulcer Advisory Panel (NPUAP) recommends an individualized wound treatment plan that is reflective of the older adult's goals of care (Edsberg et al., 2016; European Pressure Ulcer Advisory et al., 2014). Home care clinicians should use the NPUAP classification system to document the level of tissue loss and incorporate the treatment guidelines

when pressure injuries are identified. Pressure injuries are staged based on the extent of tissue loss and physical appearance (European Pressure Ulcer Advisory et al.). The clinician must recognize differences between incontinence-associated dermatitis and skin tears from pressure injuries. After a wound is identified and staged, the wound length, width, and depth should be consistently monitored and documented. A 2-week period is an adequate amount of time to evaluate wound healing. Barrier products are recommended to prevent further skin damage, and atraumatic wound dressings should be selected so as not to cause further skin injury (Edsberg et al.; European Pressure Ulcer Advisory et al.). Atraumatic wound dressings do not adhere to the wound or damage the surrounding skin upon removal. Additional pressure on an existing wound should be avoided; thus, the patient and family should be shown how best to redistribute pressure on the wound.

There are multiple options for home care clinicians when choosing a pressure injury dressing. The wound bed needs to be kept moist, yet decreasing heavy wound exudate may also add to the complexity of selecting appropriate dressings. Wound dressings that allow for infrequent dressing changes are encouraged to reduce painful dressing changes. The NPUAP provides evidence-based dressing recommendations (available online) for all types of wounds, and home care clinicians are strongly advised to follow their recommendations (European Pressure Ulcer Advisory et al., 2014).

Conclusion

It is well known that age-related changes to the skin and comorbidities may lead to poor health outcomes for older adults. Age-related skin conditions are a common occurrence, yet tend to be overlooked in home healthcare, even though they can significantly affect quality of life (Hahnel et al., 2017). Home care clinicians can improve skin health and well-being for older adults by incorporating simple and thorough systematic skin assessments at every visit. These assessments should include: identifying the patient's personal skin care practices, habits, routines, and preferences. Skin care does not have to be complex, but it does need to be incorporated into each home healthcare visit. Working together with the patient and caretakers, the home care clinician can advocate for best practices and take each

opportunity to educate the patient in preventative techniques that minimize risk for further skin damage. ■

Jill Brennan-Cook, DNP, RN, CNE, is an Assistant Clinical Professor, School of Nursing, Duke University, Durham, North Carolina.

Rachel L. Turner, BSN, RN, is a Registered Nurse, Medical/Surgical Services, Duke University Health System, Durham, North Carolina.

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Address for correspondence: Jill Brennan-Cook, DNP, RN, CNE, Duke University School of Nursing, 307 Trent Drive, Durham, NC 27710 (jill.brennan-cook@duke.edu).

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REFERENCES

- Benbow, M. (2017). Assessment, prevention and management of skin tears. *Nursing Older People*, 29(4), 31-39. doi:10.7748/nop.2017.e904
- Bianchi, J., & Cameron, J. (2008). Assessment of skin integrity in the elderly 1. *British Journal of Community Nursing*, 13(3), S26, S28, S30-S22. doi:10.12968/bjcn.2008.13.Sup1.28684
- Chang, A. L., Wong, J. W., Endo, J. O., & Norman, R. A. (2013). Geriatric dermatology review: Major changes in skin function in older patients and their contribution to common clinical challenges. *Journal of the American Medical Directors Association*, 14(10), 724-730. doi:10.1016/j.jamda.2013.02.014
- Cheung, C. (2010). Older adults and ulcers: Chronic wounds in the geriatric population. *Advances in Skin & Wound Care*, 23(1), 39-44; quiz 45-46. doi:10.1097/01.ASW.0000363487.01977.a9
- Cowdell, F., & Garrett, D. (2014). Older people and skin: Challenging perceptions. *British Journal of Nursing*, 23(12), S4-S8. doi:10.12968/bjon.2014.23.sup12.S4
- Cowdell, F., & Radley, K. (2012). Maintaining skin health in older people. *Nursing Times*, 108(49), 16, 18, 20.
- Duncan, C. N., Riley, T. V., Carson, K. C., Budgeon, C. A., & Siffleet, J. (2013). The effect of an acidic cleanser versus soap on the skin pH and micro-flora of adult patients: A non-randomised two group crossover study in an intensive care unit. *Intensive and Critical Care Nursing*, 29(5), 291-296. doi:10.1016/j.iccn.2013.03.005
- Edsberg, L. E., Black, J. M., Goldberg, M., McNichol, L., Moore, L., & Sieggreen, M. (2016). Revised National Pressure Ulcer Advisory Panel Pressure Injury Staging System: Revised Pressure Injury Staging System. *Journal of Wound, Ostomy and Continence Nursing*, 43(6), 585-597. doi:10.1097/won.0000000000000281
- European Pressure Ulcer Advisory, P., National Pressure Ulcer Advisory, P., & Pan Pacific Pressure Injury, A. (2014). *Prevention and treatment of pressure ulcers: Quick reference guide*. Retrieved from <http://www.npuap.org/wp-content/uploads/2014/08/Quick-Reference-Guide-DIGITAL-NPUAP-EPUAP-PPPIA-Jan2016.pdf>
- Hahnel, E., Lichterfeld, A., Blume-Peytavi, U., & Kottner, J. (2017). The epidemiology of skin conditions in the aged: A systematic review. *Journal of Tissue Viability*, 26(1), 20-28. doi:10.1016/j.jtv.2016.04.001
- Harris-Kojetin, L., Sengupta, M., Park-Lee, E., Valverde, R., Caffrey, C., Rome, V., & Lendon, J. (2016). Long-Term Care Providers and services users in the United States: Data from the National Study of Long-Term Care Providers, 2013-2014. *Vital and Health Statistics. Series 3: Analytical and Epidemiological Studies*, (38), x-xii; 1-105.
- Hoggarth, A., Waring, M., Alexander, J., Greenwood, A., & Callaghan, T. (2005). A controlled, three-part trial to investigate the barrier function and skin hydration properties of six skin protectants. *Ostomy/Wound Management*, 51(12), 30-42.
- Humbert, P., Dreno, B., Krutmann, J., Luger, T. A., Triller, R., Meaume, S., & Seite, S. (2016). Recommendations for managing cutaneous disorders associated with advancing age. *Clinical Interventions in Aging*, 11, 141-148. doi:10.2147/cia.s96232

- lizaka, S. (2017). Skin hydration and lifestyle-related factors in community-dwelling older people. *Archives of Gerontology and Geriatrics*, 72, 121-126. doi:10.1016/j.archger.2017.05.016
- Jones, A. L., Harris-Kojetin, L., & Valverde, R. (2012). *Characteristics and Use of Home Health Care by Men and Women Aged 65 and Over*. *National Health Statistics Reports; No. 52*. Hyattsville, MD: National Center for Health Statistics.
- Kottner, J., & Surber, C. (2016). Skin care in nursing: A critical discussion of nursing practice and research. *International Journal of Nursing Studies*, 61, 20-28. doi:10.1016/j.ijnurstu.2016.05.002
- Lakshmi, C., Srinivas, C. R., Anand, C. V., & Mathew, A. C. (2008). Irritancy ranking of 31 cleansers in the Indian market in a 24-h patch test. *International Journal of Cosmetic Science*, 30(4), 277-283. doi:10.1111/j.1468-2494.2008.00448.x
- LeBlanc, K., & Baranoski, S. (2014). Skin tears: The forgotten wound. *Nursing Management*, 45(12), 36-46; quiz 46-47. doi:10.1097/01.NUMA.0000456648.49038.df
- Lichterfeld, A., Hauss, A., Surber, C., Peters, T., Blume-Peytavi, U., & Kottner, J. (2015). Evidence-based skin care: A systematic literature review and the development of a basic skin care algorithm. *Journal of Wound, Ostomy, and Continence Nursing*, 42(5), 501-524. doi:10.1097/WON.0000000000000162
- Mukhopadhyay, P. (2011). Cleansers and their role in various dermatological disorders. *Indian Journal of Dermatology*, 56(1), 2-6. doi:10.4103/0019-5154.77542
- O'Shea, S. J. (2011). Successful management of xerosis. *The Nurse Practitioner*, 36(10), 12-13. doi:10.1097/01.NPR.0000405150.06468.eb
- Purnamawati, S., Indrastuti, N., Danarti, R., & Saefudin, T. (2017). The role of moisturizers in addressing various kinds of dermatitis: A review. *Clinical Medicine & Research*, 15(3-4), 75-87. doi:10.3121/cm.2017.1363
- United, S., Public Health, S., & Office of the Surgeon, G. (2014). The Surgeon General's call to action to prevent skin cancer.
- U.S. Department of Health and Human Services. (2017). *Skin cancer prevention progress report 2017*. Atlanta, GA: Centers for Disease Control and Prevention.
- Voegeli, D. (2013). Moisture-associated skin damage: An overview for community nurses. *British Journal of Community Nursing*, 18(1), 6, 8, 10-12. doi:10.12968/bjcn.2013.18.Sup9.S6
- Voegeli, D. (2017). Prevention and management of incontinence-associated dermatitis. *British Journal of Nursing*, 26(20), 1128-1132. doi:10.12968/bjon.2017.26.20.1128
- Watson, M., Thomas, C. C., Massetti, G. M., McKenna, S., Gershenwald, J. E., Laird, S., ..., Lushniak, B. (2016). CDC Grand Rounds: Prevention and Control of Skin Cancer. *American Journal of Transplantation*, 16(2), 717-720.
- Wheeler, T. (2009). The role of skin assessment in older people. *British Journal of Community Nursing*, 14(9), 380-384. doi:10.12968/bjcn.2009.14.9.43804
- White-Chu, E. F., & Reddy, M. (2011). Dry skin in the elderly: Complexities of a common problem. *Clinics in Dermatology*, 29(1), 37-42. doi:10.1016/j.clindermatol.2010.07.005
- Wingfield, C. (2011). Skin care in the older person: A focus on the use of emollients. *British Journal of Community Nursing*, 16(10), 470-476, 478. doi:10.12968/bjcn.2011.16.10.470

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