

Time to select a support surface

By Donna Sardina, RN, MHA, WCC, CWCMS, DWC, OMS

Having the proper support surface for beds and wheelchairs is imperative in preventing pressure ulcers. “Pressure” ulcers are named that for a reason—pressure is the primary cause of interruption of blood flow to the tissue. Unfortunately, guidelines for support surface selection tend to make recommendations for the type of surface to use *after* a pressure ulcer has developed. Another factor that complicates matters is the development of deep-tissue injuries. These injuries start at the bone level, which means that often, tissue damage is extensive before we see visible signs and realize that the support surface we chose might not have been effective enough.



Being proactive in preventing pressure ulcers requires that a pressure redistribution surface is provided for the bed and wheelchair when the patient is admitted. Even when you decide to apply a support surface early, choosing the specific surface can be difficult.

Choosing a support surface

What makes support surface selection so challenging is that we are all different in body weight, size, distribution of weight, and sensitivity to pressure, humidity, and temperature. What might be cool and comfortable (and prevent a pressure ulcer) for one patient might be too firm and hot for another. Of course, it's not possible to have every type of support surface in stock. Clinicians and administrators should consider the following characteristics when working with manufacturers to determine the options to provide. The products that best fit the following areas should be considered:

- **Microclimate:** Does the product diffuse heat and prevent humidity?
- **Immersion:** What is the immersion capability? Immersion is the ability to “sink” into a support surface. The more a patient can sink into the surface without bottoming out (there should be at least 1" of space between the buttock and the bed frame), the less likely there will be pressure points.
- **Envelopment:** What is the envelopment degree of the surface? Envelopment is the ability of the support surface to conform to body contours. The more the surface can conform to body contours, the more effective it will be in preventing pressure.
- **Shear and friction:** Does the cover of the support surface help reduce shear and friction?

Another important question is, “For up to what stage ulcer is the mattress recommended?”

Following up

Your responsibility doesn't end with the initial application of the support surface on

admission. You need to re-evaluate the choice of support surface every time you conduct a risk assessment of skin integrity and when any of the following occurs:

- decline in mobility status
- decline in activity level. This factor is often overlooked in patients who are independent in their mobility. Even though they are independent, they may choose to sit for prolonged periods or prefer to stay in the same position.
- acute illness or injury that may render patients bedbound or decrease their activity level
- change in weight; weight loss may accentuate a bony prominence or weight gain can affect the ability to move.
- development of a pressure ulcer.

Taking prompt action

Support surfaces can be expensive, but selecting the right support surface early and changing it as needed is more cost effective in the long run if pressure ulcers are prevented or a current pressure ulcer heals more quickly. You also need to consider that to prove a pressure ulcer was unavoidable, the care setting needs to show that interventions were in place before its development. Choosing—and documenting—appropriate support surfaces will help provide that proof.

For more information on support surface selection, refer to the National Pressure Ulcer Advisory Panel's "Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline." You can [order the guidelines online^A](#) and [download a copy^B](#) of the Quick Reference Guide. Another resource is the [evidence-based support surface algorithm^C](#) available from the Wound, Ostomy and Continence Nurses Society. ■

Donna Sardina is editor-in-chief for *Wound Care Advisor*.



Staying out of sticky situations: How to choose the right tape for your patient

By Ann-Marie Taroc, MSN, RN, CPN

Are you using the wrong kind of medical tape on your patients? Although we strive to provide the safest care possible, some nurses may not realize that medical tape used to secure tubes and dressings can cause harm. The harm may stem from using the wrong product or using a product incorrectly, which can cause adhesive failure or skin injury.

Many different medical tapes are available. To prevent injury, you need to choose the right tape for each patient. But knowing which tape is right can be challenging even for experienced nurses. To choose and use tape successfully, you need to understand the components of medical tape and base tape selection on your patient assessment findings.

Medical tape has three jobs—to provide an initial stick, increase adhesion, and remain intact. The initial stick isn't sufficient for the tape to stay in place. To improve