

Carol Stamas, RN, BS, CLLM
Janice Carter Larson, BA, CLLM

Published: March 2010

Lit. No. AC10103

ANGEL SLIDER BREATHABLE PATIENT POSITIONER

Abstract

The selection of an effective patient positioner is key to ensuring high quality patient care and staff safety. Understanding the potential impact of positioning methods and products on patient skin is also essential due to the roles they play in helping to prevent pressure ulcers. This paper will explore the specific clinical advantages of a breathable patient positioner, designed to remain under the patient, that will promote patient and staff safety without interfering with skin integrity.

Introduction

Patient and healthcare provider safety are critical elements in the delivery of quality patient care. Inherent to ensuring this safety is the careful consideration of the various techniques utilized by healthcare workers to move and reposition patients. Manual repositioning exposes the caregiver to an increased risk of neck, shoulder and back injuries. It is essential for the patient that safe patient handling techniques are in place to minimize discomfort and injury to their skin.

In 2003, the American Nurses Association (ANA) implemented a Handle with Care Campaign[®], the goal of which was to mount a profession-wide effort to prevent back and other musculoskeletal injuries through increased education, training and use of patient-handling devices. The official position of the ANA is as follows: "In order to establish a safe environment of care for nurses and patients, the ANA supports actions and policies that result in the elimination of manual patient handling".¹ Safe patient handling measures to improve the safety of nurses and patients supported by ANA were introduced in Congress in 2009. To date, eight states have adopted the legislation and nine additional states have the legislation pending.²

Recognizing the Risk to Patients and Staff

Controlling the conditions that can compromise skin integrity is an essential component of care for both patients who have already developed pressure ulcers and for those who are at risk of doing so. The Skin Safety Protocol published by the National Guideline Clearinghouse (NGC) makes several clinical recommendations, including a skin safety plan, which specifies interventions that will minimize or eliminate friction and shear, minimize pressure, manage moisture, while maintaining adequate nutrition and hydration. The use of a transfer or assistive device is

recommended to reduce friction and/or shear. Additionally, a lift sheet is recommended to reposition, turn or transfer patients, since immobility is recognized as the most significant risk factor in the development of pressure ulcers.³

Heat and moisture levels at the skin surface known as skin microclimate play a significant role in preventing and controlling pressure ulcers. When a person lies on a mattress, the outflow of heat and moisture is blocked resulting in a build up of both heat and moisture. "Prolonged high levels of moisture weaken skin making it susceptible to pressure and shear forces. Warm skin needs a greater supply of blood-borne nutrients and also is put at risk when blood flow is reduced by external pressure and shear forces. This condition is called maceration. It causes the skin to soften, turn white, and if the epidermis tears, become infected with bacteria or fungi."⁴

Angel Slider Breathable Patient Positioner

The Angel Slider Patient Positioner was specifically designed to support the microclimate of patient skin. It is constructed of two layers; a 50/50 cotton polyester twill surface and a thin, breathable taffeta backing. The breathable backing and thin profile ensure that the device will not affect the pressure redistribution properties of therapeutic support surfaces as confirmed by pressure mapping study data conducted in early 2010. Consequently, the Angel Slider can remain under the patient throughout their stay as long as needed without comprising skin integrity.

The Angel Slider Positioner is manufactured in two sizes, the 40" x 72" standard size and the 47" x 72" bariatric size. Since the large surface area of the product accommodates the heaviest portion of a patient's body, it reduces the potential for shearing and friction, particularly in the at-risk shoulder area, frequently left exposed by other positioning devices.

Consistent repositioning of the patient is known to be a major factor in helping prevent the development of pressure ulcers. A review of hospital policies, on pressure ulcer prevention and wound care, reinforces the need for a consistent turning and repositioning schedule for patients of at least every two hours.^{5,6} Since the Angel Slider positioner is designed to be retained on a patient bed until no longer required, it will encourage staff compliance with recommended protocols. Load force test data⁷ support that the reduction in force required for turning and repositioning with the Angel Slider will also ensure a gentler and smoother process for the patient.⁸

Using the Angel Slider

It is very easy to train staff on how to use the Angel Slider, as the steps are intuitive for healthcare workers who have been taught safe patient handling methods. To ensure maximum safety and comfort for the patient and healthcare practitioner, the following guidelines should be followed when using the Angel Slider Positioner.

Step 1: Place Angel Slider on bottom sheet with blue, low-friction backing face down. NOTE: Ensure brakes of bed are on.

Step 2a: Tuck in flaps once the Angel Slider has been positioned.

Step 2b: If required, place patient care incontinence pad on top of Angel Slider.

Step 3: Patient should lie centrally on white Angel Slider surface. The central panel should support the patient from the neck to just below the buttocks. NOTE: Place pillow at head of bed to avoid accidental injury.

Step 4: Ensure there is a caregiver on each side of the bed. NOTE: When possible, bed height should be at caregivers' upper thigh level.

Step 5: Un-tuck flaps.

Step 6: Bend patient's knees to protect heels from being dragged across linen (when possible).

Step 7: Hold Angel Slider with two hands, one at patient's shoulder height, one at hip height. Gather Angel Slider as close as possible to the patient's body.

Step 8a: Reposition patient by laterally shifting body weight to move patient up the bed.

Step 8b: Alternate repositioning method - Rabbit ears technique: stand at the head of the bed, facing the foot of the bed. Gather Angel Slider ensuring you are holding a portion of the blue low-friction panel. Place one leg forward, sit back on yourself.

Step 8c: The Angel Slider can also be used for turning, and/or repositioning up, down, side to side.

Step 9: Once patient is repositioned, smooth out positioner and retuck flaps securely under mattress.

Clinical Indications

The Angel Slider Positioner is indicated for use in both the acute care and chronic or long term care environment with patient need determining the extent of movement assistance required. Acute care patients generally require movement assistance for an acute episode of illness, recovery from a surgical procedure or trauma such as incurred in an accident.⁹ The patient with chronic disease requires care

on a continuing basis and is often more at risk for skin breakdown due to their immobility. In both patient groups, it is essential to minimize any risk and discomfort associated with physical movement. Therefore, the specific design of the Angel Slider Positioner, relative to its ability to remain under the patient for extended periods of time and thus minimize unnecessary movement of the patient, effectively meets the repositioning needs of both the acute and chronic care patient.

Conclusion

As has been stated, the Angel Slider positioner is uniquely designed to focus on ensuring safety for both patient and caregiver. The large surface area and the softness of the cotton twill surface of the Angel Slider support the weight of the patient while the breathable taffeta backing and thin profile support the skin microclimate. Additionally, the potential for skin shear and friction is reduced and the effectiveness of the pressure redistribution surface in use is not comprised. Use of the Angel Slider supports the recommendations noted in the NGC skin safety plan and the turning protocols outlined in the referenced hospital protocols. The ease of use in training staff on use of the Angel Slider not only facilitates the correct use of the Angel Slider by staff, but further supports the mandate of the ANA Handle with Care Campaign[®] to prevent back and other musculoskeletal injuries through increased education, training and use of patient-handling devices.

Implementing the use of the Angel Slider Breathable Patient Positioner will help ensure the comfort and safety of patients, promote skin integrity and will create a safer healthcare environment for caregivers.

¹ American Nurses Association (ANA) Ergonomics/Handle With Care <http://www.nursingworld.org/MainMenuCategories/OccupationalandEnvironmental/occupationalhealth/handlewithcare.aspx>

² PATIENT LIFTING\Safe Patient Lifting Legislation Makes Progress.mht

³ http://www.guideline.gov/summary/summary.aspx?doc_id=13699National Guideline Clearinghouse Skin safety protocol: risk assessment and prevention of pressure ulcers. Health care protocol

⁴ Hill-Rom, Microclimate Management Frequently Asked Questions (FAQ), 6/2/08

⁵ LSUHSC - Shreveport, LA, Pressure Ulcer Prevention and Wound Care, 2/08

⁶ Hegarty, Deirdre M. RGN, BSN, O'Connor Hospital, San Jose, CA, Prevention of Hospital Acquired Pressure Ulcers, January 31, 2008

⁷ Load Force Data Test 2009, MIP

⁸ Pressure Mapping Data Test 2010, MIP

⁹ Mosby's Medical Dictionary, 8th edition. ©2009, Elsevier