



How to choose the right mattress

Find the right persona
to your patient



Holistic care - the cornerstone of pressure injury prevention


Using an appropriate support surface is essential, and an important aspect of preventing pressure injuries (PI). However, pressure injury prevention requires addressing and assessing multiple factors, including skin integrity, tissue perfusion, mobility, nutrition, and overall health.⁽¹⁾ In addition, patients have unique needs based on their medical conditions and personal circumstances.

When selecting a support surface, it is important to adopt a holistic approach to ensure that all these aspects are considered all together, providing a more comprehensive care plan and allowing caregivers to tailor the support surface and other interventions to the specific needs of each patient.⁽¹⁾⁽²⁾


Surface selection and use

As stated by the international guidelines⁽²⁾, selecting a support surface that minimizes pressure, shear, and friction is one of the key elements in pressure injury prevention⁽³⁾. To ensure that the support surface is adapted to the patients' individual needs, three types of assessments should be considered.

- Risk assessment
- Skin assessment
- Assessment of mobility level

When selecting the right mattress, start by doing a risk assessment and look at the chart for guidance 

| Risk level | Products |
|---------------|---|
| Severe Risk | CuroCell® IQ CuroCell® A4 CuroCell iA® |
| High Risk | CuroCell® IQ CuroCell® A4 CuroCell iA® CuroCell® IQ Cirrus CuroCell® S.A.M. PRO |
| Moderate Risk | CuroCell® S.A.M. PRO CuroCell AREA Zone Optimal 5zon® Optimal Care Optimal Cura |
| Mild Risk | CuroCell® AREA Zone Optimal 5zon® Optimal Care Optimal Cura |
| No Risk | No need for preventative support surface |

To assure a holistic approach, the level of mobility and skin status must be considered. 

aSSKINg skin care bundle framework

Research has identified seven key steps to consider in preventing pressure injuries, defined as the aSSKINg skin care bundle framework.^{(4) (5) (6)} This method has been established for many years and is widely used in clinical practice.

Developed by NHS and based on a thorough review of the best evidence and practices for pressure injury prevention and management, the aSSKINg care bundle outlines seven key steps. By integrating these steps into a holistic care plan, caregivers can significantly reduce the risk of pressure injuries and enhance patient outcomes.



aSSESS RISK



SKIN ASSESSMENT AND SKIN CARE



SURFACE SELECTION AND USE



KEEP PATIENTS MOVING



INCONTINENCE ASSESSMENT AND CARE



NUTRITION AND HYDRATION - ASSESSMENT/SUPPORT



gIVING INFORMATION (SELF CARE)



Find your

The mobile individual

Patient Profile

Typically an individual who is active and mostly independent. The individual can get in and out of bed on their own or with minimal assistance and is capable of repositioning themselves in bed without help. A walker may be used for support when walking short distances.

Risk Level

Mild to moderate risk of PI's, preventive measures recommended during periods of rest or reduced activity.

Skin Status

PI's up to and including stage II.

Recommended Mattress

A pressure-redistributing foam mattress. Recommended options are: Optimal 5zon®, Optimal Care or Optimal Cura.



The limited-mobility individual

Patient Profile

The individual has limited mobility and requires assistance for bed entry/exit, and occasionally for repositioning. The individual may use a wheelchair, such as a cross-frame model, and has some mobility but with significant limitations.

Risk Level

Mild to high risk of developing PI's.

Skin Status

PI's up to and including stage III.

Recommended Mattress

For individuals with mild to moderate risk, redness/colour difference of skin and/or PI's up to stage II, a foam mattress like Optimal 5zon® may suffice.

For those with moderate risk or existing PI's up to stage III, a hybrid pressure redistribution mattress like AREA Zone may be suitable.

For individuals with moderate to high risk, and/or existing PI's, a constant low-pressure mattress like S.A.M. PRO may be appropriate.

patient persona

The restricted mobile individual



Patient Profile

Individual with severely limited mobility that spends most of the time in bed, requiring assistance with repositioning, transferring in and out of bed, and walking. May include critically ill or palliative care patients.

Risk Level

High to severe risk of PI's, often affecting multiple areas.

Skin Status

Presence of PI's up to stage IV or deep tissue injuries.

Recommended Mattress

When high risk, PI's up to stage III, still able to do minor repositioning, a constant low-pressure mattress like AREA Zone or S.A.M PRO may be appropriate. For sensitive individuals requiring highest degree of comfort, CuroCell® IQ Cirrus may be preferred.

For high to severe risk with severely limited mobility or PI's up to stage IV, pressure relief is essential. Options include CuroCell iA®, CuroCell® A4, CuroCell® IQ.



The immobile individual

Patient Profile

Fully immobile, such as post-surgical or ICU patients, requiring complete assistance for repositioning.

Risk Level

High to severe risk of developing PI's due to immobility.

Skin Status

Presence of PI's up to stage IV or deep tissue injuries and/or deep tissue injuries.

Recommended Mattress

Continuous pressure relief and tissue perfusion is essential, as these patients are unable to reposition themselves. Recommended options include CuroCell iA®, CuroCell® A4, CuroCell® IQ.

Remember to assess as the individual's condition improves and choose a mattress that supports mobility.

**Scan here for an extended
version of the mattress guide**



Mobility promotes independence

Remember to assess the individual as their condition improves. Foam supports mobility by providing stability during bed entry and exit, as well as aiding independent repositioning.

! *This mattress guide is intended as a general tool for educational purposes only. While based on recognized models like aSSKIN and other sources, it does not replace clinical judgment or personalized medical advice. Always consult a healthcare professional for individual recommendations and decisions.*

⁽¹⁾ Coleman S., Nixon J., Keen J., Wilson L., McGinnis E., Dealey C., Stubbs N., Farrin A., Dowding D., Scols J.M.G.A., Cuddigan J., Berlowitz D., Jude E., Vowden P., Schoonhoven L., Bader D.L., Gefen A., Oomens C.W.J. & Nelson E.A. (2014) A new pressure ulcer conceptual framework. Journal of Advanced Nursing, 2014

⁽²⁾ European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The international Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA: 2019

⁽³⁾ Portoghesi C et al. 2024. The Role of Shear Stress and Shear Strain in Pressure Injury Development.

⁽⁴⁾ Lorraine Wright, Heather Macgowan, Pressure ulcer risk assessment & prevention guideline, NHS Forth Valley, Tissue Viability Team, 01.05.2020

⁽⁵⁾ Whitlock J. SSKIN bundle: preventing pressure damage across the health-care community. British Journal of Community Nursing. 2014; 18:suppl 9: s32-39.

⁽⁶⁾ McCoulough S. Adapting a SSKIN bundle for carers to aid identification of pressure damage and ulcer risks in the community. British Journal of Community Nursing. 2016 June; Suppl: S19 – S25.