

Pressure Ulcer Prevention: Learning from the  
New F-314

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Prevention

Critical Steps

- Identifying resident at risk for PU
- Identifying & evaluating risk factors
- Changes needed to remove or modify risk
- Changes in residents condition
- Implementing individualized interventions
- Monitoring the impact of interventions
- Modifying interventions as needed

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Comprehensive Care Plan

Care Plan:

- Identify resident at risk, the level & nature of risk (s)
- Identify the presence of pressure ulcers
- Monitoring: If PU risk is stabilized, reduced, removed
- Impact of interventions
- Assessments are timely & appropriate

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## Comprehensive Care Plan

- Interventions are implemented, monitored & revised
- Changes in condition are recognized, evaluated, reported and addressed
- Use clinical resources
- Need a quality assessment & assurance committee
- Monitor P & I of PU's;
- P & P meet current standards

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## Comprehensive Assessment

- Admission evaluation defines initial care approaches
- Identify pre-existing signs (ie: purple or dark areas)
- Deep tissue injury-----Unavoidable PU

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## Was it Really a Stage I??



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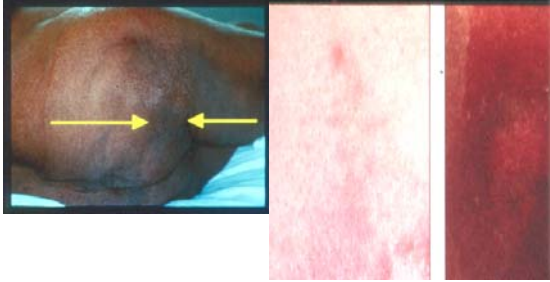
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## Darkly pigmented skin



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## General Guidelines

- Components of prevention
  - risk assessment
  - skin care
  - pressure reduction
  - friction & shear
  - incontinence/moisture care
  - nutritional assessment & interventions
  - patient/staff education

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## Comprehensive Assessment

- Multiple co-morbid factors
  - >immobility, hospitalization, prolonged procedures
- Decreased sub-q tissue & lean muscle mass, skin elasticity, & impaired circulation
- Includes the RAI
- Identify multi-system organ failure, end of life condition, refusal of care & Tx.

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## Comprehensive Assessment

Addresses factors that can impact development, treatment or healing

- > pressure points
- > Under-nutrition
- > hydration deficits
- > moisture on the skin
- > cognitive
- > drugs, steroid

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## Comprehensive Assessment

ASSESSMENT TOOL  
Requirements DO NOT mandate any specific tool other than the RAI

Validated Tools  
Braden Scale  
Norton Scale  
Waterlow Scale

Recommended: PU risk assessment tool on admission, weekly for four weeks, then quarterly.

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## Pressure Points & Tissue Tolerance

- Assessment of skin condition defines prevention strategies
- Pressure, Shear & Friction addressed
- Conduct regular skin assessment on at risk resident's
- Impaired circulation from positioning (sloughing) or medical devices (tubes, casts, orthoses), keep heel off bed

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### Nutrition Needs

Nutrition provides vital energy & building blocks for all body structures

- Skin condition reflects overall body function
- Skin breakdown may be evidence of general catabolic state

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### Nutrition Needs

Weight reflects a balance between intake and utilization of energy

- Unintended weight loss-poor nutrition or worsening health status
- Increase hydration & caloric needs
- Nutritional goals: ↑ protein intake  
1.2-1.5 gm/kg body weight daily—unless contraindicated

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### Moisture

- Urine & feces irritate the epidermis and may make skin more susceptible to breakdown.
- Dermatitis related to incontinence should not be staged and documented as a PU.

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## Dermatitis



Intense erythema  
Scaling  
Itching  
Papules  
Weeping  
Skin eruptions

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## Basic or Routine care

- Redistribute pressure (reposition, protect heels)
- Minimize exposure to moisture & keep skin clean
- Provide appropriate pressure redistributing support surfaces
- Provide non-irritating surfaces
- Maintain or improve nutrition & hydration
- Monitor adverse drug reactions

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## Repositioning

- Repositioning plan
- Lifting devices
- Avoid lying on the PU
- Educate resident on why position changes are important
- Change position regularly & monitor
- Assist with position changes if resident cannot move self

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## Repositioning

- Reposition at least q 2 hours or more frequently—based on resident's condition & tolerance
- Keep off of trochanter unless no other options
- Keep reclining chair and bed below 30 degree angle to decrease pressure load
- Sitting: may need hourly position changes

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## Repositioning

- Teachable resident---teach how to shift weight q 15 minutes
- Wheelchairs with sling seat are not optimal for prolonged sitting
- No evidence to support shifting weight for 10-15 second is of any benefit
- Ongoing monitoring of resident's skin integrity

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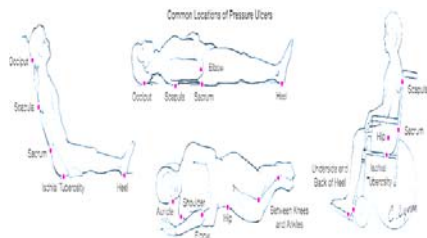
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## Positioning



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QUESTION ????

How do you turn the resident?

How do you get him up in a chair?

**ANSWER**  
Use an appropriate  
Pressure relieving  
Support surfaces



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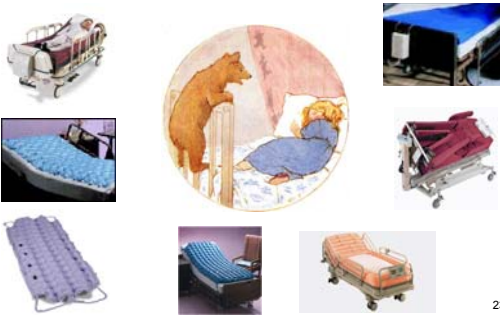
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Which Bed is "Just Right"?



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EA Avella 2005

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## Support Surfaces

- Appropriate SS or devices selected to match the therapeutic benefits for each resident
- Provide pressure redistribution
- Check for over-inflated cushions and mattress; Assess if bottoming-out.
- Elbows & Heels high risk areas
- Keep heels off the bed

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## Support Surfaces

- Flexion contractures need special attention to reduce pressure
- Use of Pillows, & devices to keep skin off of skin; No donut devices
- Sheepskin, elbow & heel protectors are not effective at reducing pressure
- Use of Static and dynamic bed products

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## Group I: Static devices/mattresses or mattress overlays

- Air
- Foam
- Gel
- Water Overlay
- Completely immobile\*



\*From CMS Support Surface Criteria from: <http://www.palmettogba.com>

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## Group II: Dynamic devices/mattresses, nonpowered mattress replacements or mattress overlays

- Low air loss
- Alternating air
- Multiple Stage II on trunk or pelvis, tried Group I without improvement\*
- OR
- Large or multiple Stage III or IV on trunk or pelvis\*
- OR
- Myocutaneous flap or skin graft in past 60 days\*



\*From CMS Support Surface Criteria from: <http://www.palmettogba.com>

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## Group III: Air-Fluidized Bed

### The "Original Model"



### New & Improved



- Stage III or IV ulcers\*
- Bedridden or Chairbound\*
- Would require institutionalization without AFT\*
- Conservative treatment (including Group II surface) failed\*
- Must have a trained caregiver\* as well as MD directing the treatment regimen
- In addition:
  - No co-existing pulmonary disease\* or
  - Require treatment with wet soaks or moist wound dressings

\*From CMS Support Surface Criteria from: <http://www.palmettogba.com>

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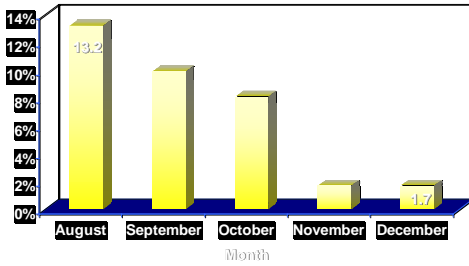
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## Incidence of Pressure Ulcers in High Risk Patients

### Braden Tool/Care Plan



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## Comprehensive Prevention

- AHCPR
- AMDA
- CMS
  - Xakellis, Frantz, et al 1999
  - Osterbrink, et al 2000
  - Lyder, et al, 2001
  - Baier, et al, 2002
  - Lyder, et al, 2003
  - Abel, et al, 2005

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## Interventions

Based on establishing relevant goals and approaches to stabilize or improve co-morbidities

- Routine & Individualized interventions
- Minimize clinically significant risk factors
- Document valid reason why interventions were not appropriate or feasible

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## Resident Choice

Resident's Rights 42 CFR 483.10(b)(3)(4).

- Must discuss resident's condition, treatment options, outcomes and consequences of refusing treatment
- Expected to address resident's concerns and offer relevant alternatives

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## Advanced Directives

- Care must reflect resident's wishes
- Supportive care given that is not prohibited by the advanced directive
- End-of-life care—follow resident wishes
- If facility has implemented individualized approaches to stabilize condition and to prevent or Tx the PU (cleaning, turning, repositioning) then the development, or progression may be consistent with regulatory requirements.

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**Seat  
AND  
Back Pressure Mapping**



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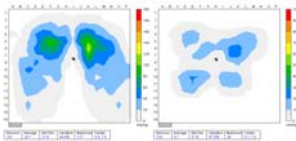
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**SEAT PRESSURE MAPPING**  
Advanced Office Chair Design



Seat and Back

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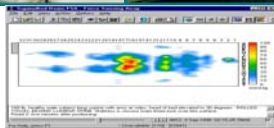
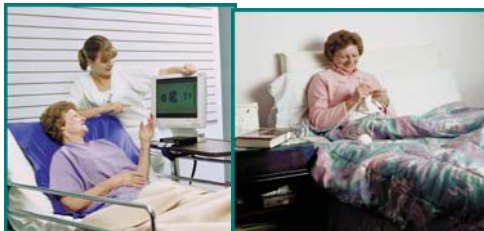
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**UltraThin Bed Pressure Mapping System**



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## New model



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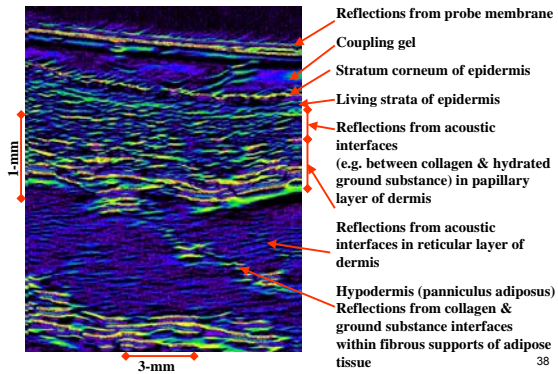
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## Intact Skin




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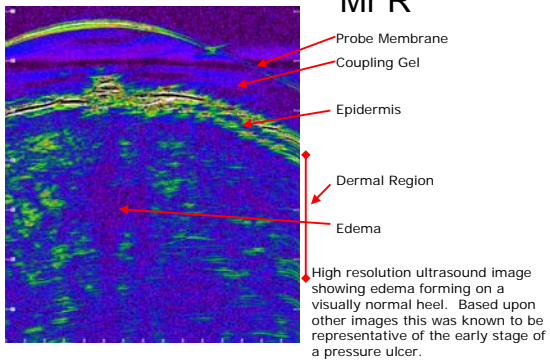
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## Mr R




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## Prevention Summary

- Identification of risk
- Implementation of individualized interventions
- Monitoring the effectiveness of interventions

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## No Butts About It!

# Prevention !



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## Resources

- [www.cms.internetstreaming.com](http://www.cms.internetstreaming.com)
- [www.amda.com](http://www.amda.com)
- [www.wocn.com](http://www.wocn.com)
- [www.ahrq.gov](http://www.ahrq.gov)
- [www.npuap.org](http://www.npuap.org)

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