

Disclosure of Commercial Interests

I have commercial interests in the following organization:

American Medical Technologies

-Title: Director of Public Policy and Education

-

What the company does? Medicare Part B biller for dressing products

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ACHCA
Winter Market Place
presents

The Endangered Heel

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DIRECTOR OF PUBLIC POLICY & EDUCATION
AMERICAN MEDICAL TECHNOLOGIES

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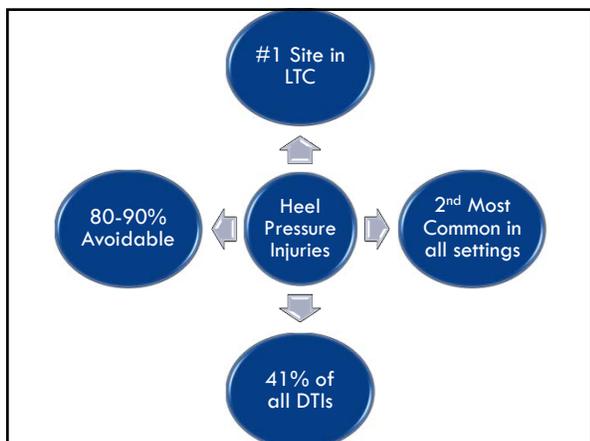
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Objectives

- **Objectives: At the end of this program participants will be able to:**
- Identify heel anatomy & physiology related to pressure injury development
- List the primary risk and causative factors for the development of heel pressure injuries
- Discuss current recommendations from national & international guidelines for prevention and treatment of heel pressure injuries

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Pressure Injuries

- >2.5 million people in US develop pressure related wounds
- Estimated cost of care in US: 9.1-\$11.6 billion
- Range of cost for treating \$2000-\$21,000 per wound
- Most severe pressure injuries (Stage 4) at sacrum (~40%) & heels (~39%)



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Pressure Injuries

- Can lead to life-threatening complications;
 - infections
 - gangrene
 - sepsis
 - death
- ~60,000 die - direct result of pressure injury wounds
- Contributes to increased debilitation for patients/residents on top of causes of pressure injuries (i.e. immobility)
- Increases health care utilization and costs
- Largely affect most vulnerable population, those over 75

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Other Issues Related to Pressure Injuries

- Litigation
 - > 17,000 PI related suits filed annually...**settlements favor patient/family 87% of cases**
 - Second only to wrongful death lawsuits
 - Average settlement \$250,000
 - As high as \$312 million
- Government oversight and penalties
 - Office of Inspector General-related to resident safety & "harm"
 - Survey process (think F314)-CMS instructs surveyors to review QAA committee activities
- Impact of facility performance metrics-Quality Measures
- CMS gathers data on percentage of residents who develop pressure ulcer in facilities

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Table 4: Temporary Harm Events Identified Among SNF Residents by Category

Types of Temporary Harm Events	Percentage*
Events Related to Medication	43%
• Hypoglycemic episodes (e.g., low or significant drop in blood glucose)	16%
• Fall or other trauma with injury associated with medication	9%
• Medication-induced delirium or other change in mental status	7%
• Thrush and other nonsurgical infections related to medication	4%
• Allergic reactions to medications (e.g., rash, itching)	3%
• Other medication events	3%
Events Related to Resident Care	40%
• Pressure ulcers	19%
• Fall or other trauma with injury associated with resident care	8%
• Skin tear, abrasion, or breakdown	7%
• Other resident care events	6%
Events Related to Infections	17%
• CAUTI	5%
• SSI associated with wound care	5%
• Other infection events	7%
Total	100%

Heel Pressure Injuries

- Of all pressure injuries, ~24-30% develop on the heel and 6.1% on the malleolus (ankle bone)
- Second and fifth most common sites on the body.



Risk Factor for Heel Pressure Injuries

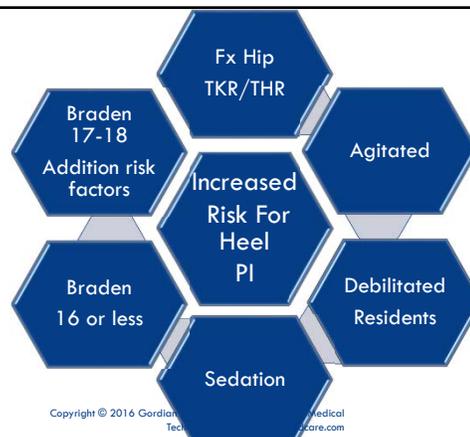
Extrinsic Factors

- Pressure
- Friction
- Shear

Intrinsic Factors

- Advanced age
- Immobility
- Neuropathy
- Nutrition/hydration issues
- PAD
- Lower extremity edema
- Comorbidities (i.e. DM)
- Contractures

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Number 1 Reason for Acquiring Heel Pressure Ulcers

Immobility

Everything else is a contributing factor

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Anatomy and Physiology of the Heel

What does anatomy have to do with it?

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Anatomy of Heel



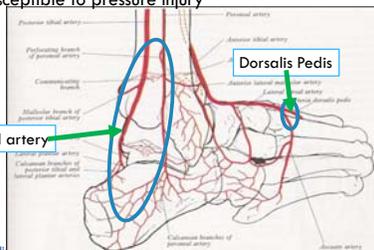
Pressure point
Small area

- Lower leg (with bone, muscle, tissues, fluids)
- Calf may or may not take part of the weight...depending on the muscle bulk in the calf muscles
- Severely atrophied muscles of calf will put more weight resting on posterior heel when person supine
- All this weight is focused on a very small area...the posterior aspect of the calcaneus bone

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Blood Supply to Heel

- Blood supply often compromised in older population due to PAD
- ↑ PAD in people with DM
- Decreased blood flow, thinning skin & subcutaneous tissue make heels more susceptible to pressure injury



Posterior tibial artery

Dorsalis Pedis

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Important?

1. What Stage?

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Unstageable
- DTI

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The Perfect Storm

Without external interventions this person will most likely acquire a heel pressure injury.



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The Importance of the Team!!!

- Highest reduction of facility acquired PI happened in facilities where there was:
 1. Resident participation
 2. Multidisciplinary team
 3. Integration of ALL clinical report



Horn et al

The Importance of the Team!!!

- **Requires organizational culture and operational practices that promote teamwork and communication, as well as individual expertise**
- Where are your clinicians getting their education for wound prevention and care???

The Importance of the Team!!!

Improvement in pressure Injury prevention calls for a system focus to make needed changes.

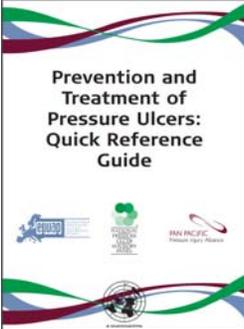
The Importance of the Team!!!

No one can do this alone!

Many organizations take at least a year to develop and incorporate new pressure Injury prevention practices along with the monitoring and reporting needed to validate the outcomes of the program.

NPJAP Prevention and Treatment of Pressure Injuries: Clinical Practice Guideline

- National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel, Pan Pacific Pressure Ulcer Alliance, Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. Emily Haesler (Ed.). Cambridge Medical: Perth, Australia; 2014.¹
- NPUAP.org for complimentary Quick Reference Guide



NP/UP

Conducting Skin and Tissue Assessment

- Increase the frequency of skin assessments in response to any deterioration in overall condition.
 - SoE=C; SoR=Ⓢ
- Conduct a head-to-toe assessment with particular focus on skin overlying bony prominences including the sacrum, ischial tuberosities, greater trochanters and **heels**.
- Each time the patient is repositioned is an opportunity to conduct a brief skin assessment.

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Ongoing Skin Assessment Skin Considerations

- Remove devices on feet on regular basis
- At least daily
- More than once a day if high risk for skin breakdown
- Specifically
 - TED hose
 - Support stockings
 - Heel protectors or suspension devices

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Inspect Skin for Erythema

- Inspect skin for erythema in individuals identified as being at risk of pressure ulcer.
 - SoE=C; SoR=Ⓢ
- **Caution: Avoid positioning the individual on an area of erythema wherever possible.**



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2. What Stage?

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Unstageable
- DTI

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MDS 3.0

M0300B: Stage 2 Pressure Ulcers

3. Examine the area adjacent to or surrounding an intact blister for evidence of tissue damage. If other conditions are ruled out and the tissue adjacent to, or surrounding the blister demonstrates signs of tissue damage, (e.g., color change, tenderness, boggy or firmness, warmth or coolness) these characteristics suggest a suspected deep tissue injury (sDTI) rather than a Stage 2 Pressure Injury.

4. Stage 2 pressure ulcers will generally lack the surrounding characteristics found with a deep tissue injury.

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Easy Staging Mistake to Make



3. What Stage?

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Unstageable
- DTI

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Cause and Extent of Erythema

- Differentiate the cause and extent of erythema.
 - SoE=C; SoR=Ⓢ
- Differentiate whether the skin redness is **blanchable** or **nonblanchable**.

Structural damage to capillary bed or microcirculation



4. What Stage?

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Unstageable
- DTI

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NPQAP

Methods for Blanching

- **Use finger or disc method to assess whether skin is blanchable or non-blanchable.**
 - finger pressure method — finger pressed on erythema for three seconds; blanching assessed following removal of finger;
 - transparent disk method — transparent disk used to apply pressure equally over an area of erythema; blanching can be observed underneath disk during application.



Blanch Every Heel

- Blanch every heel during skin assessment
- Non-blanchable-pressure Injury present



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CMS SOM

F314-State Operations Manual

- Erythema or color changes on areas such as the sacrum, buttocks, trochanters, posterior thigh, popliteal area, or heels when moved off an area:
- If erythema or color change are noted, return approximately 1/2 - 3/4 hours later to determine if the changes or other Stage I characteristics persist
- **GREAT CLINICAL PRACTICE SUGGESTION!!!**

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NPQAP

Inspect the Skin of the Heels Regularly (SoE=C; SoR=☹☹)



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AHRQ-Recommend Use of Mirrors

Preventing Pressure Ulcers in Hospitals



January 2015. Agency for Healthcare Research and Quality, Rockville, MD.
<http://www.ahrq.gov/professionals/systems/long-term-care/resources/pressure-ulcer/index.html>

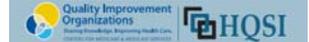


Two Practical Tips for Preventing Heel Pressure Injuries

Number 1	Number 2
□ Float heels	□ Use mirrors to check heels and other hard to see areas



Pressure Ulcer Prevention Tip of the Month



Original materials developed by Mountain-Pacific Quality Health. This material was prepared by Healthcare Quality Strategies, Inc., the Medicare quality improvement organization for New Jersey, under contract with the CMS, an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy.

Why Mirrors?

- Provide reflective surface
- Helps staff visualize hard-to-see areas
- Provides method for examining skin in hard to see areas without having to maneuver immobile patients/residents



Preventing Pressure Ulcers in Hospitals: A Toolkit for Improving Quality of Care.
Agency for Health Research and Quality

NPUAP

Repositioning for Preventing Heel Pressure Ulcers

- Ensure that the heels are free of the surface of the bed. (SoE=C; SoR=☺☺)
- Ideally, heels should be free of all pressure — referred to as “floating heels”



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NPUAP

Heel Suspension Devices

- Use heel suspension devices that **elevate and offload the heel completely** in such a way as to **distribute the weight of the leg along the calf without placing pressure on the Achilles tendon.**
- SoE=B; SoR=☺☺




Pressure Injury on Achilles tendon

NPUAP

Recommendations for Heel Suspension Devices

- Heel suspension devices are preferable for long term use, or for those individuals unlikely to keep their lower extremity on pillows
- Select devices based upon the individual's clinical condition, POC, patient/resident's tolerance of device, and **manufacturer's guidelines**



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NPUAP

Recommendations for Heel Suspension Devices

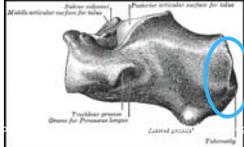
- Some devices are not appropriate to be worn in bed due to risks of pressure ulcers on other parts of the leg (i.e. devices with metal support bars)
- Special care and observation for patient's/resident's with **contractures** or **decreased sensation (think diabetic neuropathy)** or **inability to communicate pain/discomfort** from pressure

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NPUAP

Note: Pressure Redistribution Device NOT Adequate

- Posterior prominence of heel (calcaneus with calcaneal tuberosity) sustain intense pressure, **even with a pressure redistribution mattress in use** (NPUAP, EPUAP, Pan Pacific Pressure Ulcer Alliance)
- **Recommendation: use a heel suspension device even when using a pressure redistribution mattress**



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Note: Pressure Redistribution Device NOT Adequate¹

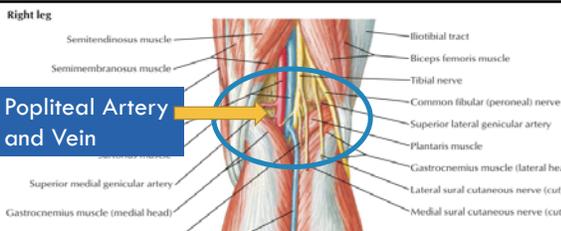
- Float heels even when resident on pressure redistribution device!!!
- i.e. bed/mattress

NPUPAP 2014 NPUAP Guidelines for Heels

- Knee should be in slight (5° to 10°) flexion



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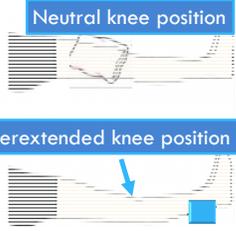


Popliteal Artery and Vein

Popliteal vein lies superficial to the popliteal artery; May be put on "stretch" if foot/heel is elevated and the knee is hyperextended

NPUPAP Why Flex Knee?

- Indirect evidence that hyperextension of knee may cause obstruction of popliteal vein, which could predispose an individual to DVT.



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Heel Protectors



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NPUPAP Protect the Achilles Tendon

- Avoid areas of high pressure, especially under the Achilles tendon (SoE=C; SoR=↔)
- Use a foam cushion under the full length of the calves to elevate heels (SoE=B; SoR=↔)
- Pillows or foam cushions used for heel elevation should extend the length of the calf to avoid areas of high pressure, particularly under the Achilles tendon.



What to Look for in a Heel Protector Device

- Separate and protect ankles
- Maintain heel suspension “floating heels”
- Prevent foot drop or planter flexion contractions
- Exterior slides over bed sheets for freedom of movement
- Pressure distribution for calf within device
- Works for left or right leg/foot
- Holds foot in neutral position without external rotation (foot turning out putting pressure on lateral ankle)



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Following Devices Should **NOT** be Used to Elevate Heels

- Do not use ring or donut-shaped devices for position. (SoE= C; SoR= ⚡)
- The following should not be used to elevate heels:
 - Synthetic sheepskin pads;
 - **Cutout, ring, or donut-type devices**
 - **Intravenous fluid bags**
 - **Water-filled gloves**
- All these products have been shown to have limitations. (SoE=C; SoR=⚡)
- **Natural** sheepskin pads might assist in preventing pressure ulcers.

Pillows as a Heel Protection Device

- Appropriate for short-term use
- Patient/resident must be able to keep foot on pillow with heel floated
- Place under full length of calves in alert/cooperative individuals
- Still need to flex knees 5-10° when using pillows



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F 314 from State Operations Manual

- Because the heels and elbows have relatively little surface area, it is difficult to redistribute pressure on these two surfaces.
- Therefore, it is important to pay particular attention to reducing the pressure on these areas for the resident at risk in accord with resident's overall goals and condition.
- Pillows used to support the entire lower leg may effectively raise the heel from contact with the bed, but use of the pillows needs to take into account the resident's other conditions.
- The use of donut-type cushions is not recommended by the clinicians.

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F314-State Operations Manual

- Erythema or color changes on areas such as the sacrum, buttocks, trochanters, posterior thigh, popliteal area, or heels when moved off an area:
- If erythema or color change are noted, return approximately ½ - ¾ hours later to determine if the changes or other Stage I characteristics persist

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Repositioning Existing Heel Pressure Ulcers-Stage I or II

- Relieve pressure under the heel(s) with Stage I or II pressure ulcers by placing legs on a pillow to **‘float the heels off the bed or by using heel suspension devices.** (SoE = B; SoR = ⚡)



5. What Stage?

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Unstageable
- DTI

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Repositioning Existing Heel Pressure Ulcers – Stage III or IV

- For Category/Stage III, IV and unstageable pressure ulcers, place the leg in a device that elevates the **heel from the surface of the bed, completely offloading the pressure ulcer.** Consider a device that also prevents footdrop.
 - (SoE = C; SoR = ☹️)

★ NOTE: Elevation of the heel on a pillow is usually inadequate for Stage III & IV pressure ulcers

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Treatment of Existing Heel Pressure Injuries

- Follow general guidelines for wound care; include by not limited to:
 - Offloading wound; frequent repositioning
 - Moist wound healing practices
 - Debridement of necrotic tissue
 - Preventing infections/treating chronic inflammation
 - Keeping the wound bed moist (dressing selections, or compression (venous insufficiency, lymphedema)
 - Ensure wound edges able to migrate
 - Address nutrition/hydration
 - Mitigate comorbidities if possible (i.e. Diabetes-blood glucose control)

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Eschar-Tread Carefully

- Do not debride stable, adherent eschar in **ischemic** limbs
- (SoE=C; SoR=☹️)
- Think stable heel eschar is **not** a wound
- Stable dry eschar is **not** a wound

Assess daily
Per shift
Document, document, document

6. What Stage?

- Stage 1
- Stage 2
- Stage 3
- Stage 4
- Unstageable DTI

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MDS 3.0

Coding Tips from MDS 3.0, M-Section

- Stable eschar (i.e., dry, adherent, intact without erythema or fluctuance) on the heels serves as “the body’s natural (biological) cover” **and should only be removed after careful clinical consideration, including ruling out ischemia,** and consultation with the resident’s physician, or nurse practitioner, physician assistant, or clinical nurse specialist if allowable under state licensure laws.

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Best Practices for Pressure Injury Prevention

- It needs to be **customized**: Each patient is different, so care must address their unique needs.
- It is also highly **routinized**: The same tasks need to be performed over and over, often many times in a single day without failure.

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Summary for Prevention of Heel Pressure Injuries

- Keys to improving pressure injury prevention:
 - Simplification & standardization of pressure-injury-specific interventions with clear/consistent documentation
 - Involvement of multidisciplinary teams and leadership
 - Designated skin champions**
 - Ongoing in-depth education specific to heel & other site PrU prevention
 - Use **recognized clinical practice guidelines** to structure prevention program such as NPUAP, EPUAP, Pan Pacific Alliance, Wound Ostomy Continence Nurses Society (WOCN)
 - Sustained audit and feedback for promoting both accountability and recognizing successes

CWS
SOM

F314-State Operations Manual

- Erythema or color changes on areas such as the sacrum, buttocks, trochanters, posterior thigh, popliteal area, or heels when moved off an area:
- If erythema or color change are noted, return approximately ½ - ¾ hours later to determine if the changes or other Stage I characteristics persist

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Name 3 Things that Stood Out to you in this Presentation

- Help you change clinical practice & improve care
- Something you might teach others

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THANK
YOU!!!

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References and Resources

- Amlung SR, Miller WL, Bosley LM, Adv Skin Wound Care. Nov/Dec 2001;14(6):297-301.
- National Pressure Ulcer Advisory Panel, European Pressure Ulcer Alliance Panel, Pan Pacific Pressure Injury Alliance, Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. Emily Haesler (Ed.). Cambridge Medial: Perth, Australia; 2014.
- Preventing Pressure Ulcers in Hospitals: A Toolkit for Improving Quality of Care. Agency for Health Research and Quality. Published online Feb 16, 2015
- The Financial Impact of Pressure Ulcer: A review of the direct and indirect costs associates with pressure ulcers. Leaf Healthcare. White Paper. 2014.
- Are We Ready for This Change? Preventing Pressure Ulcers in Hospitals: A Toolkit for Improving Quality of Care. April 2011. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/systems/long-term-care/resources/pressure-ulcers/pressureulcertoolkit/putool1.html>
- Levinson, DR. Inspector General. Department of Health and Human Services OFFICE OF INSPECTOR GENERAL ADVERSE EVENTS IN SKILLED NURSING FACILITIES: NATIONAL INCIDENCE AMONG MEDICARE BENEFICIARIES
- Walsh J, DeOcampo M, Waggoner D, Keeping heels intact: evaluation of a protocol for prevention of facility-acquired heel pressure ulcers. Poster presented at the Symposium on Advanced Wound Care, San Antonio, TX, Apr 2006.

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References

- Bosanquet DC, Wright AM, White RD, Williams IM. A review of the surgical management of heel pressure ulcers in the 21st century. International Wound Journal. <http://onlinelibrary.wiley.com/doi/10.1111/iwi.12416/abstract>
- Pressure Ulcers. January 2015. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/systems/long-term-care/resources/pressure-ulcers/index.html>
- Horn SD, Sharkey SS, Hudak S, Cassaway J, James R, Spector W. Pressure ulcer prevention in long-term-care facilities: a pilot study implementing standardized nurse aide documentation and feedback reports. Adv Skin Wound Care. 2010 Mar;23(3):120-31.
- Hanna-Bull D, Four Years of Heel Pressure Ulcer Prevention. Poster presented at the 19th Annual CAWC Conference; November 7-10, 2013, Vancouver, Canada
- 2015 Patient Safety Core Topics and Tips
- <http://www.ashrm.org/resources/patient-safety-portal/2015-ps-portal-HEN.dhtml#six>
- Sullivan, N. Prevention In-Facility Pressure Ulcers. In Making Health Care Safer II: An Updated Critical Analysis of the Evidence for Patient Safety Practices. Chapter 21.
- National Patient Safety Goals Effective January 1, 2015.

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