What’s so different about SCI?

• Guideline strength of evidence C except 1 B level recommendation
• Relatively small, heterogeneous population with high risk
• Guideline focus on seating considerations and education
• Prevention strategies for mattress support surfaces similar to other high risk populations
What’s so different about SCI?

• Unlike other populations, lifetime, continuous risk of developing pressure ulcers
• Balance living life fully engaged with avoiding injury
• Perfect storm of risk factors

Preventing Pressure Ulcers during Acute Care Phase

✦ Transfer off spinal hardboard/backboard as soon as feasible
✦ Extrication Cervical Collars – replaced with acute care rigid collar as soon as feasible
Changing Outcomes: Acute Injury

- Immediate post injury care in SCI-specific unit significantly decreases risk of developing pressure ulcer (12% vs 34% for usual care)
- Allows earlier, more efficient rehab-fewer days lost to bedrest for wound healing

Seating Surfaces

Selection of wheelchair/seating support surface and associated equipment for posture and pressure redistribution

Considerations:
- Body size and configuration
- Effects of posture and deformity
- Mobility and lifestyle needs

Refer individuals to a seating and mobility specialist for evaluation
Pressure redistribution cushion

Provide contour for immersion and envelopment or offloading

Optimize posture and stability (reduce sacral sitting and leaning to one side)

Permit air exchange to minimize temperature and moisture at the buttock interface

Stretchable cover that conforms to body contours and allows immersion and envelopment

Pressure ulcers: Unusual places

Head of the fibula

Lesser trochanter
Plantar flexion contracture

Why this wound in this place?

- Bed/mattress
  - ‘but I don’t get out of bed’ sitting for long periods in bed with distractions (computer, TV) limiting repositioning
- Shower/Bowel chair
- Travel-driving
- Physical fitness
- Other places patient sits?
- Transfers
- Implementation: assess for adequate protection other places where the patient sits
Wheelchair

• Inadequate lateral support?
  – Lateral chest ulcers

• Upholstery sagging
  – Persistent trochanteric ulcers from hammocking

Travel

• Passenger or driver
  – Pressure along R leg from center console
  – Lateral foot wounds

• Transfer to car seat
  • Use the wheelchair cushion
Seating for Individuals with Pressure Ulcers

- Seating support surface should prove contour, uniform pressure distribution and high immersion or offloading

- Alternating pressure seating devices: choose patient carefully (may increase shear, not be charged or turned on)

Repositioning and Mobility

- Adequate seat tilt to prevent sliding forward
- Adjust length and angle of footrests to optimize pressure redistribution

- Avoid use of elevating leg rests if the individual has inadequate hamstring length
Plantar flexion contracture

Use Variable Position Seating

- Tilt-in-space, recline and standing features in manual or power wheelchairs to periodically redistribute load

- Tilt the wheelchair before reclining
Repositioning

- Encouraging the individual to reposition regularly while in bed and seated
- Provide appropriate assistive devices to promote bed and seated mobility

Establish off-loading schedules

- Identify effective pressure relief methods
- Educate in performance of pressure relief activities
- Include frequency and duration of weight shift BE CONCRETE
Repositioning for those with existing pressure ulcers

- Weigh risks and benefits of sitting vs. bed rest against possible harm to physical and emotional health

- Consider periods of bed rest to promote ischial and sacral ulcer healing

Repositioning for those with existing ulcers

- Develop a schedule for progressive sitting according to the individual’s tolerance and pressure ulcer response in conjunction with a seating specialist

- Avoid seating an individual with an ischial ulcer in a fully erect posture in chair or bed
Education & Self Management

• Promote and facilitate self management for individuals with SCI
• Develop and deliver structured and ongoing education on pressure ulcer prevention and treatment of pressure ulcers
• Education during long hospitalizations improves knowledge (don’t miss opportunities)

Education & Self Management

• Health Care Professionals are primary source of information for patients.
• e-learning improves knowledge (but don’t leave your patients searching on the internet)
• Use Skin Management Needs Assessment Checklist (SMNAC) to identify knowledge gaps