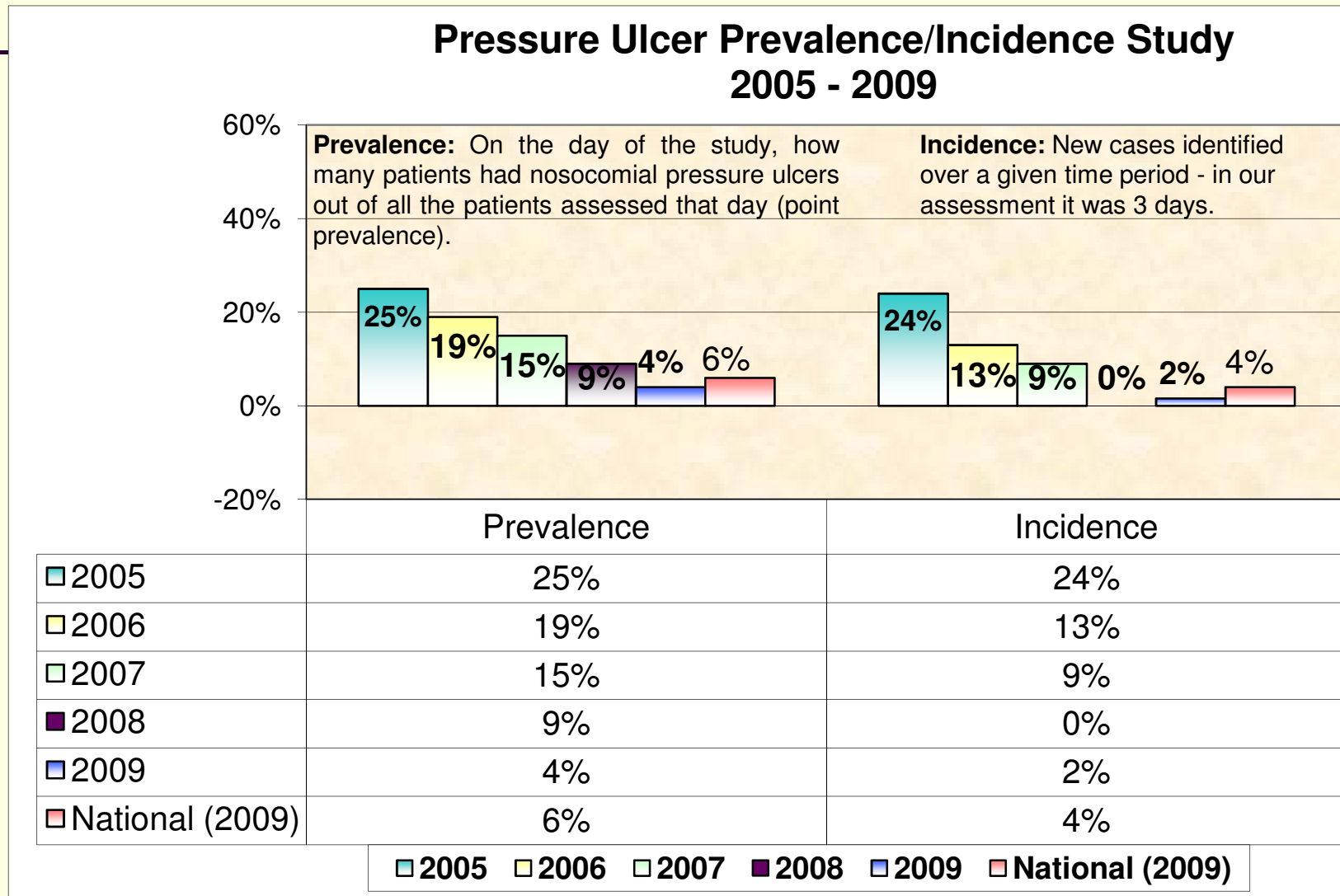

Exempla Lutheran Medical Center

Pressure Ulcer Prevention Activities:
Nursing – Driven, Multidisciplinary &
Patient – Centered
2005 - 2009

Show me the Data: Tracking Pressure Ulcer Prevalence & Incidence



National Benchmark Comparison Data per KCI

Early Developments in Pressure Ulcer Prevention

- Skin and Wound Resource Manual
- Development of Multidisciplinary SKIN Team
 - Nurses, dietician, administration, MD, and Quality
- Backbone of all pressure ulcer prevention activities
- Decision making body for Skin-related nursing activities.
- Monthly meetings in shared governance format
- Members perform NDNQI pressure ulcer assessments
 - Quarterly prevalence
 - Annual Incidence

2007 Changes: Assessment and Documentation

- Patient Risk Assessment Tool
 - Switched to the Braden Scale
- Electronic Medical Record, EMR, Changes:
 - Mandatory Completion of Present on Admission Pressure Ulcer Assessment
 - Plans of Care updated
 - Bed Decision guide updated
- Never Event with RCA* evaluation for all nosocomial pressure ulcers Stage III, IV or unstageable

*RCA – Root Cause Analysis

2008 Changes to Enhance a Pressure Ulcer Prevention Mindset

- IHI Baseline Pressure Ulcer Bundle Set Assessment:
 - Braden Completed within previous 24H
 - Daily Skin Inspection
 - Plan of Care Initiated
 - Cleaning and Moisturizing skin
 - Nutrition Optimized
 - Repositioned Q2H
 - Pressure Relieving Surfaces
 - Other
- 32.3% success rate for those noted at risk (Braden \leq 18)
- Nursing Policy and Procedure and Care Plans updated with Pressure Ulcer Bundle

2008 Changes: Policy and Procedures and the Nursing Care Plan

- Skin Assessment and Pressure Ulcer Prevention Policy and Procedures:
 - Inspect the Skin Daily
 - Conduct a Pressure Ulcer Risk Admission Assessment for all patients
 - Reassess Pressure ulcer risk daily
- Plan of Care:
 - Reduce Physical Forces of pressure, friction and shear to bony prominences
 - Turn every 2 hours
 - If bed- or chair-bound, order pressure redistribution mattress

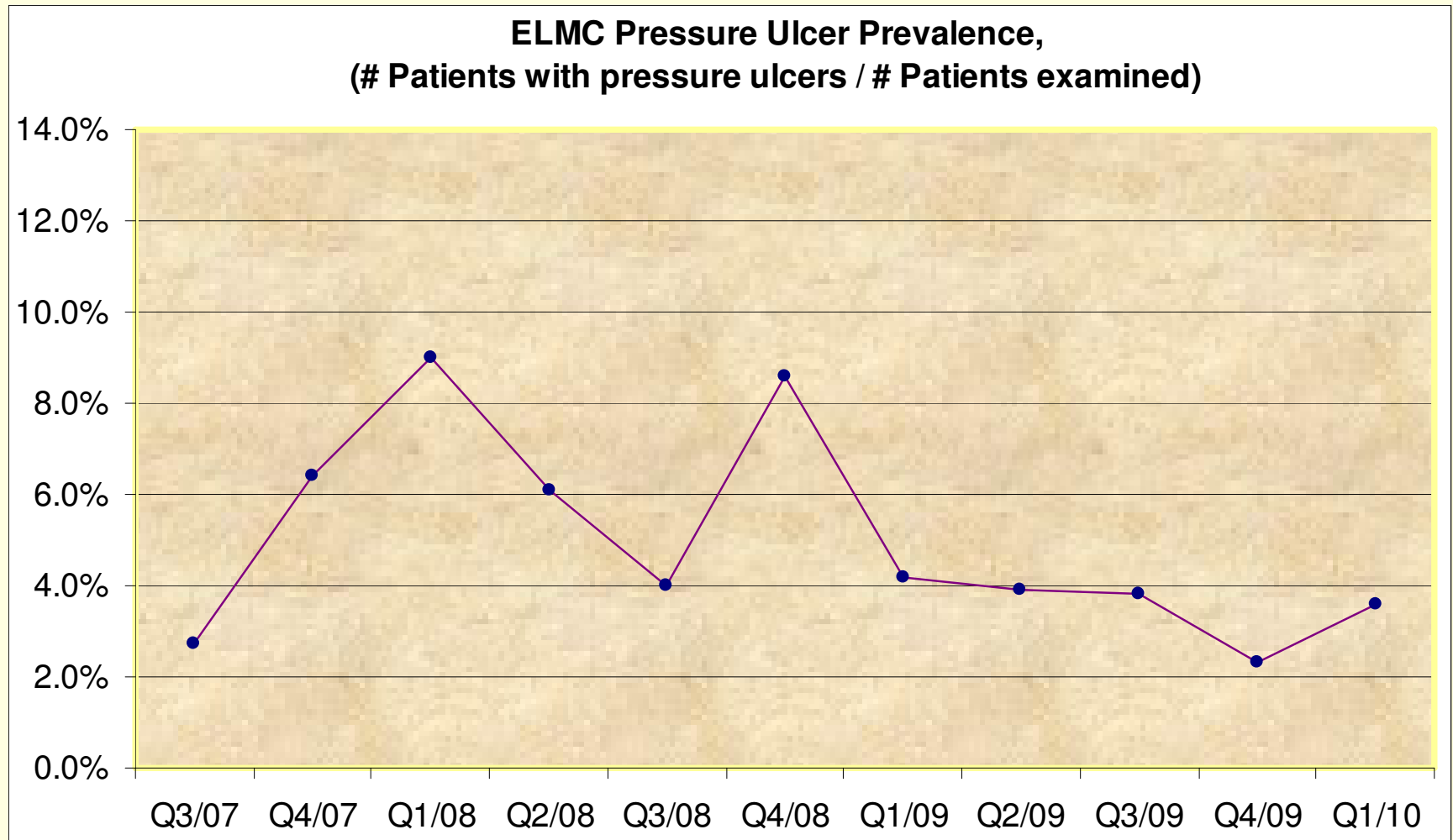
2008 Changes: Policy and Procedures and the Nursing Care Plan

- Plan of Care (continued):
 - Protect skin from moisture, urine and feces exposure
 - Keep skin clean - pat dry, do not rub
 - Apply skin moisturizer daily and as needed to hydrate the skin
 - Protect skin from urine and feces exposure with barrier ointment
 - Nutritional Status
 - Offer sips of fluid with each encounter
 - Consult dietician if Braden subscale ≤ 2 &/or supplements needed

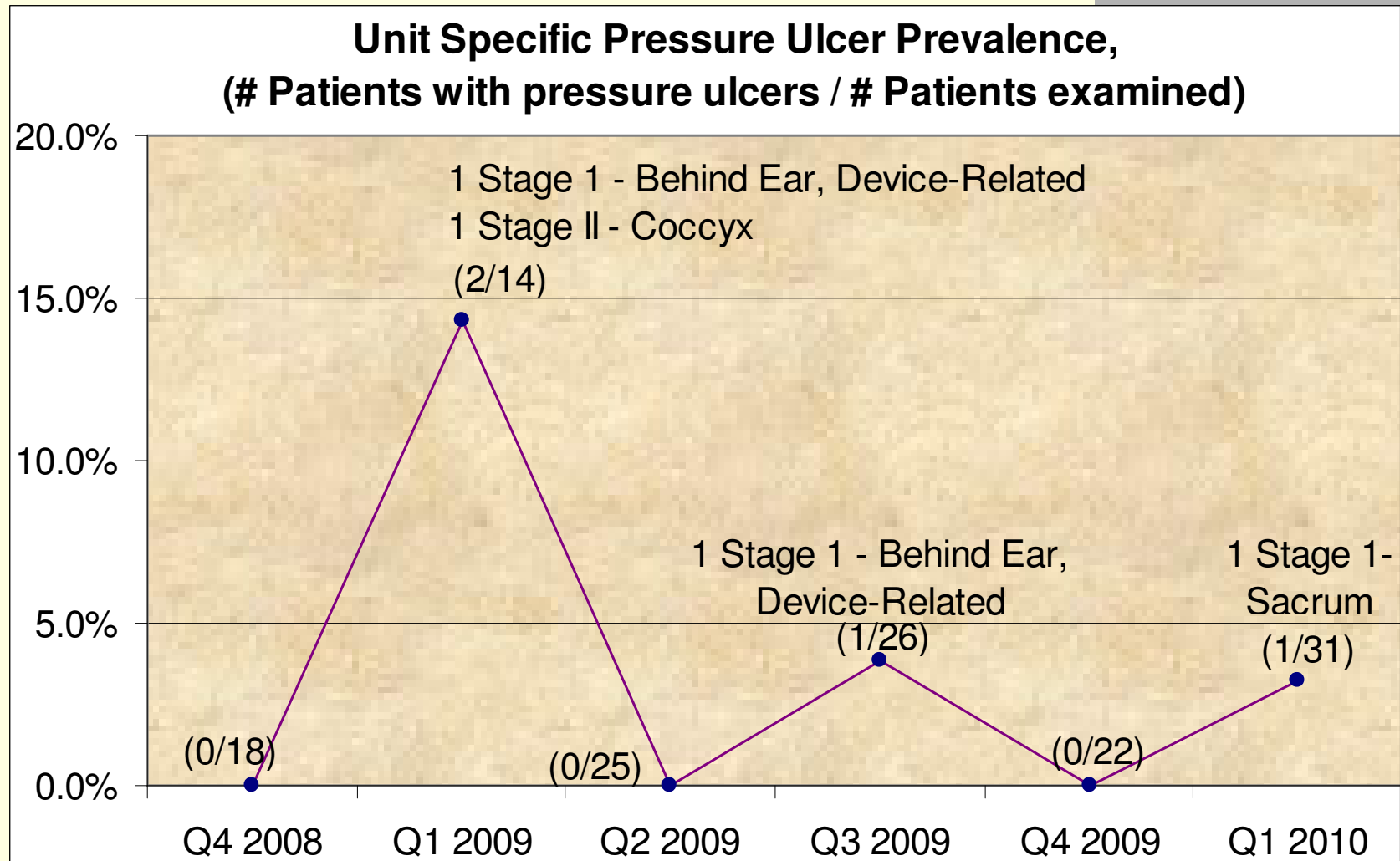
2008 Changes to Enhance a Pressure Ulcer Prevention Mindset

- Quarterly Prevalence Databoards posted on each Unit
 - Specific Unit Data & House-wide Trendlines
 - Table with break-out specifics and 4 quarter average

House-wide Trendline Graph



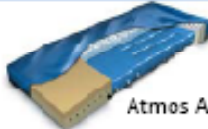




Unit-Based Data Board



2008 -2010 Changes to Enhance a Pressure Ulcer Prevention Mindset

- Surface/Mattress Replacement Algorithm
- ESJH template modified
 - Standard
 - Bariatric
 - ICU
- Incorporate Braden scores
 - <http://www.bradenscale.com/>





Decision Guide for Prevention and Treatment of Skin Breakdown at Exempla Lutheran Medical Center

Patient Assessment	Appropriate Surface	Comments	Products
<ul style="list-style-type: none"> • Braden Score 15-23 with no breakdown, or with Stage I pressure ulcer on trunk • Weight limit 500 lbs. 	<ol style="list-style-type: none"> 1. Atmos Air APod 25 2. Hill-Rom Advanta Mattress 	<ul style="list-style-type: none"> • Standard ELMC mattress • Must turn patient every 2 hours • Chart as <i>Self-adjusting air (non-power)</i> 	 <p style="text-align: right;">Atmos Air APod 25</p>
<ul style="list-style-type: none"> • Braden Score 6-18 • Skin intact, Stage I pressure ulcer • Weight limit 600 lbs. 	EHOB mattress overlay \$30.00 / unit	<ul style="list-style-type: none"> • Q shift hand checks for adequate inflation, use pump for reinflation • Chart as <i>Static air overlay</i> • EPIC order through CD use search term "Comfort Air Mattress" 	 <p style="text-align: right;">EHOB overlay</p>
<ul style="list-style-type: none"> • BMI < 18 • Braden Score 6-14 with no breakdown, or with Stage I pressure ulcer on trunk • Braden moisture subscale score 3-4 	RIK fluid mattress replacement system	<ul style="list-style-type: none"> • ELMC owns (4) • May also rent from KCI • Chart as <i>Gel mattress</i> 	 <p style="text-align: right;">RIK fluid mattress</p>
<ul style="list-style-type: none"> • Braden Score 6-18 with Stage II-IV, DTI or unstageable pressure ulcer on trunk • Braden Moisture subscale score 1-2 • Weight limit 250 lbs. (1st Step) 500 lbs. (DFS3) 	<ol style="list-style-type: none"> 1. First Step Select \$18.92 / day rental 2. Huntleigh DFS3 \$30.00 / day rental 	<ol style="list-style-type: none"> 1. First Step Select <ul style="list-style-type: none"> • Low air-loss, chart as <i>Low air-loss</i> • Aids in moisture control 2. Huntleigh DFS3 <ul style="list-style-type: none"> • ELMC owns (3) Huntleigh DFS3 • Chart as <i>Alternating Air (powered)</i> 	 <p style="text-align: right;">First Step Select</p>
<ul style="list-style-type: none"> • Braden Score 6-18 with Stage II-IV, DTI or unstageable pressure ulcer on trunk • Braden Moisture subscale score 1-2 • Pain management, Anasarca • Weight limit 300 lbs. 	KinAir MedSurg \$47.03 / day rental	<ul style="list-style-type: none"> • Integrated frame/mattress • Aids in moisture control • Low air-loss OR High air-loss • Built-in scale • Use breathable underpads on all powered air mattresses • Chart as <i>Low air-loss mattress</i> 	 <p style="text-align: right;">KinAir MedSurg</p>

- Please document on pressure ulcer bundle interventions, including turning every 2 hours, and type of specialty mattress
- To order a specialty bed, be sure to choose a product that is appropriate for the patient's weight, and call CD at extension 22052. Call for pickup also at extension 22052





Decision Guide for Prevention and Treatment of Skin Breakdown at Exempla Lutheran Medical Center ICU/CCU

- Please refer to **Bariatric** algorithm for all bariatric patients!

Patient Assessment	Appropriate Surface	Comments	Product
<ul style="list-style-type: none"> Critical Care Screening Tool for pressure ulcer risk factors Braden Score >15 Skin intact, Stage I pressure ulcer Weight limit 500 lbs. 	Hill-Rom ICU Sport	<ul style="list-style-type: none"> Standard ICU Bed Can move into egress position Reposition and assess all bony prominences Q2 hrs. Chart as <i>Self-Adjusting Air Powered</i> 	 ICU Sport
<ul style="list-style-type: none"> Critical Care Screening Tool for pressure ulcer risk factors Skin intact, Stage I pressure ulcer Weight limit 600 lbs. 	EHOB mattress overlay \$30.00 / unit	<ul style="list-style-type: none"> Locate in supply room Q shift hand checks for adequate inflation Reposition and assess all bony prominences Q2 hrs. Chart as <i>Static air overlay</i> 	 EHOB overlay
<ul style="list-style-type: none"> Braden Score 6-10 with Stage II-IV, DTI or unstageable pressure ulcer on trunk Braden Moisture subscale score 1-2 Weight limit 250 lbs. (1st Step) 500 lbs. (DFS3) 	1. First Step Select \$18.92 / day rental 2. Huntleigh DFS3 \$30.00 / day rental	1. First Step Select: <ul style="list-style-type: none"> Low air-loss, chart as <i>Low air-loss</i> Aids in moisture control 2. Huntleigh DFS3 <ul style="list-style-type: none"> ELMC owns (3) Huntleigh DFS3 Chart as <i>Alternating Air (powered)</i> Reposition and assess all bony prominences Q2 hrs. 	 First Step Select
<ul style="list-style-type: none"> For Pulmonary Use Only Mechanical ventilation with high risk of pneumonia or ARDS Increased pulmonary shunt Atelectasis Presence of pneumonia V/Q mismatch Weight limit 350 lbs. 	TriaDyne II \$129.69 / day rental or TriaDyne Proventa (for patient over 6'2") \$129.69 / day rental	<ul style="list-style-type: none"> Kinetic therapy to 45° bilateral rotation Low air-loss Pulsation Percussion 9" foot extension on TriaDyne Proventa (must request foot extension) Reposition and assess all bony prominences Q2 hrs. Chart as <i>Pulmonary bed</i> 	 TriaDyne Proventa

- Please document on pressure ulcer bundle interventions, including turning every 2 hours, and type of specialty mattress
- To order a specialty bed, be sure to choose a product that is appropriate for the patient's weight, and call CD at extension 22052. Call for pickup also at extension 22052

Decision Guide for Prevention and Treatment of Skin Breakdown at Exempla Lutheran Medical Center- *Bariatrics*

Patient Assessment	Appropriate Surface	Comments	Product
<ul style="list-style-type: none"> • Braden Score 15-23 with no breakdown, or with Stage I pressure ulcer on trunk • Patient weight or girth above standard hospital frame capacity • Weight limit 1000 lbs. 	<ol style="list-style-type: none"> 1. Huntleigh Contoura 1080 2. BariMaxx II \$87.00 / day rental 	<ol style="list-style-type: none"> 1. ELMC owns (2) Huntleigh Contoura 1080 • Chart as <i>Bariatric & Other (foam mattress)</i> 2. ELMC owns (1) BariMaxx II • Width expands from 36" to 42" to 48" • Side egress/ingress • Built-in scale • Chart as <i>Bariatric & low air loss</i> 	 <p>BariMaxx II</p>
<ul style="list-style-type: none"> • Braden Score 6-14 with no breakdown, or with Stage I pressure ulcer on trunk • Patient weight or girth above standard hospital frame capacity • Weight limit 1000 lbs. 	<ol style="list-style-type: none"> 1. Huntleigh Contoura 1080 with DF53 mattress overlay \$30.00 / day DF53 rental 2. BariMaxx II with ETS \$122.00 / day rental 	<ol style="list-style-type: none"> 1. ELMC owns (2) Huntleigh Contoura 1080 (see above) 2. ELMC owns (1) BariMaxx II with ETS • 30° rotation/turn assist • Width expands from 36" to 42" TO 48" • Side egress/ingress • Built-in scale • Low air-loss • Chart as <i>bariatric & low air loss</i> 	 <p>BariMaxx II with ETS</p>
<ul style="list-style-type: none"> • Braden Score 6-18 with Stage II-IV, DTI or Unstageable pressure ulcer on trunk • Patient weight or girth above standard hospital frame capacity • Weight limit 1000 lbs. for BariMaxx II with ETS and 850 lbs. for BariAir 	<ol style="list-style-type: none"> 1. BariMaxx II with ETS \$122.00 / day rental 2. BariAir (for details on BariAir, see Comments column below) \$100.00 / day rental 	<ol style="list-style-type: none"> 1. BariMaxx II with ETS • ELMC owns (1) BariMaxx II with ETS • 30° rotation/turn assist • Width expands from 36" to 42" TO 48" • Side egress/ingress • Built-in scale • Low air-loss • Chart as <i>Bariatric & low air loss</i> 	 <p>BariMaxx II with ETS</p>
<ul style="list-style-type: none"> • Braden Score 6-18 with Stage II-IV, DTI or Unstageable pressure ulcer on trunk • Braden Moisture subscale score 1-2 • Patient weight or girth above standard hospital frame capacity • Weight limit 850 lbs. • For ICU USE ONLY 	<ol style="list-style-type: none"> 1. BariMaxx II with ETS \$122.00 / day rental 2. BariAir \$100.00 / day rental 	<ol style="list-style-type: none"> 2. BariAir • Width expands from 36" to 48" • Length extends 9" (must request foot extension) • Front egress/ingress • Built in scale • Low air-loss • Capable of critical care pulmonary therapy (20° rotation, percussion, pulsation, cardiac chair) • Chart as <i>Bariatric & low air loss mattress</i> 	 <p>BariAir</p>

- Please document on pressure ulcer bundle interventions, including turning every 2 hours, and type of specialty mattress
- To order a specialty bed, be sure to choose a product that is appropriate for the patient's weight, and call CD at extension 22052. Call for pickup also at extension 22052

2008 Staff Education & Additional Efforts

■ Nursing

- Full day class on wounds and pressure ulcer prevention, management and treatment
- Pressure Ulcer Seminar with keynote speaker Barbara Braden, RN, Ph.D.
- Wound Care Reference Books on each unit

■ Physician 2008 CMS changes and pressure ulcer staging

■ Products

- Skin Barrier Products Changed

■ Exempla System-Wide Efforts

- Skin Assessment and Treatment Policy and Procedures updated
- Best Practice Quality Council for Pressure Ulcer Prevention

2009: Education, Documentation & Hardwiring

- Mandatory Staff Annual Competencies
 - “Using the Braden Scale in Clinical Practice”
 - © 2004, Detroit Medical Center
 - NDNQI “Pressure Ulcer Staging” and “Other Wounds”
 - <https://www.nursingquality.org/NDNQIPressureUlcerTraining/Default.aspx>
- Wound Care Champion Group Initiated
 - Unit-based, bedside RNs with wound management skill sets: assess, document, prevent and treat
- Updated Electronic Medical Record to automatically trigger the Pressure Ulcer Bundle for those with a Braden Value ≤ 18 (see below)

Pressure Ulcer Prevention Bundle, for those with a Braden ≤ 18

Reposition every 2 hours off bony prominences:

Assess for pressure redistribution mattress. Order if needed.

Date Ordered: 09/25/09

Float heels if needed:

Keep skin clean and moisturized:

Clean after each incontinent episode:

Protect perineal are with barrier ointment if needed:

If nutrition subscale = 1 or 2 obtain Nutrition Consult:

Date Ordered: 09/25/09

Offer sips of fluid w/each visit (Speech Therapy orders)

Educate patient and family on pressure ulcer prevention:

2009 - 2010 Continued Efforts

- Discontinued daily cleansing with disposable skin wipes
- Restarted bed bathing to enhance skin assessment
- Standardize beds and mattresses house-wide
- Screening Tool implemented for patient conditions and co-morbidities not captured in the Braden Risk Assessment
 - Critical Care environments only
 - Obtained in NDNQI teleconference from Baptist Medical Center Downtown, Jacksonville Florida
- ED to start Braden Risk Assessment and disposable mattress overlay for frail elderly, lengthy wait times and high risk co-morbidities

... And the work continues

- Expanded NDNQI quarterly pressure ulcer prevalence assessments to Pediatrics and NICU settings
- Wound Care Champion skill set expansion to include vascular insufficiency, skin tears and diabetic foot ulcers
- 2010 House-wide Nursing Education
 - Review Policy and Procedures in relation to skin & skin risk
 - Discuss Braden scale
 - Review the importance of the pressure ulcer prevention bundle
 - Reinforce the need for hand-off & transfer communication that is skin and wound specific
 - Unit-specific Braden case scenarios

Manage Moisture

- Offer bedpan or urinal, if needed
- Assess incontinence (fecal and/or urinary)
- Clean perineal area with foam cleanser and pink wipes
- Change linens and pad to keep skin dry
- Use barrier cream (Calazime) ointment on perineal area
- For incontinence associated dermatitis, consider low air loss mattress
- Document when patient refuses and note why

Nutrition/Hydration

- If the nutrition subscale ≤ 2 , obtain nutrition consult
- Offer sips of fluid with each encounter
- Assist with ordering meals and feeding
- Encourage high-protein choices, based on diet
- Consult with physician to maintain hydration
- Document if patient is NPO
- Document if patient refuses and note why

- Assess nutritional labs (albumin, prealbumin) & f/u as needed

Minimize Pressure

- Reposition and monitor bony prominences every 2 hours
- Use draw sheet or mechanical lift to reposition
- Keep head of bed $\leq 30^\circ$, unless contraindicated
- Use trapeze for positional changes, if needed
- Use Bed Decision Guide to choose mattress replacement
 - Critical Care tool, Standard, Bariatric and Critical Care Beds
 - Waffle Overlay hand checks
- Use air cushion to redistribute pressure, if needed

Minimize Pressure

- Float heels
 - Pillows under calves or waffle boots
 - Rotate “foot drop” boot schedule – 2 hours on, 2 hours off
 - Always assess need for splinting or other device while in bed
- Limit continuous sitting to one hour
 - Small positional changes
- Protect heels and elbows
- Encourage ambulation
- Document if patient refused and why
- Document contraindications
- Educate Patient and Family on Pressure Ulcer Prevention

Turning Schedule

- Note if patient is:
 - Independent in their mobility
 - Being turned every 2 hours
 - Being turned less than every 2 hours
 - Document if patient refused and why
 - Document contraindications
-
- For patient and staff safety, always turn a patient with another staff member.

Handoff and Transfer Communication

- Communicate wounds and/or risk
 - Location, type of wound and stage, if pressure ulcer
 - Whether Present on admission or nosocomial
- Wound Dressing type – all dressings should be dated
- Braden Score, if at risk
 - Interventions:
 - surface replacement, if needed
 - Dietary or Nutrition involvement
 - CWOCN involvement



Questions?