Outcomes Congress
Indiana Pressure Ulcer Initiative
The (Preferred) Future of Wound Care

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• Why is the future of wound care an issue?
  – 5 billion spent on wound care yearly
• Federal Deficit Reduction Act of 2005
  – Mandate to control cost of health care
  – Obama’s health care plans

![Graph showing the percentage of Social Security, Medicare, and Medicaid as a percentage of GDP from 2005 to 2029.](chart)

*Source: Congressional Budget Office.*
Indiana Pressure Ulcer Initiative

- Institutes of Medical, National Quality Forum
  - Errors in Health Care Settings Going Unchecked
  - Costing millions of dollars, and 100,000 lives each year

- How do pressure ulcers stack up?
  - From 1992 to 2003, there was 63 percent increase in pressure ulcers in hospitalized patients.
  - Patients 65 years and older accounted for 72.3 percent of all hospitalizations during which pressure ulcers were noted.
  - Hospitalizations primarily for the treatment of pressure ulcers lasted nearly 13 days.
2007 Spending (Data April 2008)

Stage III and IV pressure ulcers
257,412 cases x $43,180 = 11 Billion

• Falls and Trauma
  – 193,566 x $33,894 = 6.5 B

• VAD infection
  – 29,536 x $103,027 = 304 M

• UTI from Catheters
  – 12,185 x $44,043 = 53 M

• Mediastinitis
  – 69 x $299,237 = 20 M

• Retained objects
  – 750 x $63,631 = 4.7 M

• Air embolism
  – 57 x $71,636 = 4 M

• Blood incompatibility
  – 24 x $50,455 = 1.2 M
Have we progressed?
The Future of Wound Care Depends on…

• Answering some tough questions
  – How much should we pay for prevention?
  – Are all forms of pressure ulcers avoidable?
  – Should all pressure ulcers be able to be litigated?
  – Is the cheapest form of a therapy the best?
    • Is there generic forms of wound care? Do they work as well?
  – Should we keep doing what we were doing in acute care once the patient transfers?
  – What is an acceptable outcome of healing?
  – How much should we pay for healing?
The Future of Wound Care Depends on...

- How much money should be paid for prevention?
  - Have we become over reliant on technology?
    - Could we keep skin intact with simple turning?
    - Can a bed really “turn the patient” so the nurses don’t have to?
    - Do we need boots, socks, etc, when leg exercise and pillows might do the same thing?
  - Could families do simple bedside care?
    - Foreign versus American health care perceptions
  - Is skin failure in ICU just another organ that failed?
The Future of Wound Care Depends on…

• Are all forms of pressure ulcers avoidable?
  – When we use lots of organ and life sustaining equipment, should we just use a high-end speciality bed too?
  – Is there a point in which the skin cannot tolerate pressure especially when BP is low? Meds are used to maintain BP?
  – How can we prove our care was provided with “charting by exception”?
• Should all forms of pressure ulcers be able to be litigated?
  – Are attorneys able to “prove” care was not provided just by negative outcomes?
  – Is “charting by exception” helping or hurting?
  – How is the electronic medical record going to change the role of the bedside nurse?
  – Are large verdicts tainting the patient and family?
Is the cheapest form of therapy the best? If so, can we prove it?
  – Generic drug production to standards
  – Are wound therapies subjected to same rigor?
  – Role of manufacturer research

Comparative effectiveness research in wound care very badly needed
  – Last technology in wound care report was incomplete
The Future of Wound Care Depends on...

• Should we keep doing what we were doing in acute care once the patient transfers?
  – Once wound is on a healing trajectory, why can’t we keep it going?
  – How can we procure equipment in skilled care, rehab, home care that sustains healing?
    • Medications don’t change at dismissal...why do beds?

– Medicare to do 30 day readmission reviews
  • Pressure ulcers to be reviewed

– FDA examining safety with NPWT in home care
What is a good outcome of healing?

- Is a good outcome when the wound is beginning to heal? Staying on a healing trajectory?
- Is it a closed wound? How long does it have to stay closed?
- What if the patient is happy because he can return to work, but the wound is still open and draining?
- What if the patient is not compliant?
• What should we pay for healing?
  – Does it have to take a year to heal?
  – What do we do with noncompliant patients?
  – Should we always start with the most conservative forms of treatment? Or can a wound heal best early?
  – Do we know the difference in healing rates between dressings? NPWT? Beds?
  – Is amputation cheaper than advanced therapy?
    • Who decides?
  – When do we stop?
The Future of Wound Care Depends on…

Moving from the old ways to the new ways….
WHAT ROLE DO GUIDELINES PLAY IN OUR PREFERRED FUTURE?
1994 Treatment Guidelines

- 82 statements
  - Assessment
  - Tissue Loads
  - Ulcer Care
  - Infection
  - Surgery
  - Education
Progress in 15 years

• 6 categories in 1994
  – 82 recommendations
    • 3.5 % Level A
    • 14.5 % Level B
    • 81% Level C

• 12 categories in 2009
  – 300+ recommendations
    • .06% Level A
    • 18.5% Level B
    • 81% Level C
300+ Recommendations on

- Staging
- Assessment
- Nutrition
- Pain
- Support Surfaces
- Cleansing
- Debridement
- Dressings
- Infection
- Biophysical Agents
- Surgery
- Palliative Care
2009 Treatment Guidelines

• Greater majority are Level C evidence
• Important to guide care even when no research is available or could even be conducted
Level of Evidence

- **Level A** = RCT’s with little room for error
  - $N = 2$
- **Level B** = less rigorous studies
  - $N = 55$
- **Level C** = little formal research and expert opinion
  - $N = 239$
• 9 statements
• Evidence to teach proper ulcer identification by photos
• Need to teach how to identify pressure ulcers in persons with dark skin
Assessment Guidelines

• 16 statements
• Need for complete assessment of person and ulcer
• How to monitor healing
• Need to adjust expectations of healing/closure
• Consider photographs
Nutrition Guidelines

• 20 statements
• Assess adequacy of diet
• Revise and liberalize diet
• Offer vitamin and mineral supplements only when diet is poor
New section
Assess all patients for pain
Allow “time out” during painful procedures
Prevent and manage persistent pain and pain with debridement or dressing changes
Many new recommendations
  – Bariatric
  – OR
  – ER
  – ICU

Wheelchair seating
Cleansing Guideline

- Same recommendations for the most part

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Debridement Guideline

• New information on “water knife”
Dressings Guideline

- Specific guidelines on dressings and in which wounds they would work
- 48 statements
- Antiseptics
  - Honey
  - Silver
  - Iodine
Infection Guideline

- Use of antibiotics and antimicrobials
- Signs of chronic infection
Biophysical Agents Guideline

• Electrical stimulation, ultrasound
  – Level A on E stim
• NPWT with specifics on care of device and patient
Surgery Guidelines

- What to do before considering surgery
- Postoperative care to prevent flap loss
Palliative Care Guidelines

• New section
• Guidance on support surface and dressing choices for patients in whom healing is not the goal
• 1 level A statement
Gaps that Remain

• Guidelines based on research in pressure ulcers only
  – Could further evidence be found in other wounds?
• RCTs few and far between
  – What wound outcome measure is preferred?
  – Many studies sponsored by industry
• Pediatrics not addressed
• Homeopathic and natural remedies not addressed
• Psychosocial issues not addressed
The Preferred Future of Wound Care is Up To Us!

We must prove to payers that our wound care practices are sound, that our science is valid and that we can get wounds to heal!
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