Pressure Ulcer Prevention: Resource Nurse Model to Foster Staff Leadership and Improve Patient & Fiscal Outcomes

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Objectives

- Describe impact of the staff nurse resource model on pressure ulcer prevention and outcomes.
- Discuss resource nurse role as a strategy for staff empowerment and development of leadership at the bedside.
- Discuss the cost-benefit analysis of the staff nurse resource role in pressure ulcer prevention.

Shands Healthcare Nursing Vision

- Our VISION is “To set a new standard of excellence in autonomous, accountable nursing practice committed to patient advocacy and innovative patient care in a climate of trust and collaboration.”
- Our PHILOSOPHY -Shands at UF Nursing leadership recognizes the benefit of utilizing specially trained resource nurses to provide unit based leadership, mentoring and development of staff, and implementation of evidence based practice.

What is a Resource Nurse?

Resource Nurses are clinical experts who function as both a resource and change agent by:

- disseminating evidence based information; and
- interfacing with nurses, physicians, other health care providers, patients and families to facilitate patient/staff satisfaction and positive clinical outcomes.

Resource Nurse Role

- Assess education needs of unit
- Educate staff – “real-time” and at the bedside
- Educate patients and families
- Facilitate best practice at the unit level
- Act as a role model for evidence based practice
- Model collaboration with physicians and other health care professionals
- Lead or participate in quality initiatives
- Act as a change champion or opinion leader

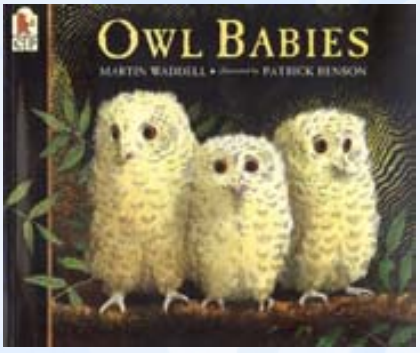
What are the criteria to be a resource nurse?

- **Resource Nurses are selected by the unit leadership team**.
  - **Staff nurses express interest in role to Nurse Manager.**
- **The following criteria are considered:**
  - Minimum of one year of nursing experience at Shands at UF
  - Demonstrates interest in sharing knowledge with staff through role modeling and teaching.
  - Demonstrates effective interpersonal skills, especially the ability to collaborate with others.
  - Demonstrates commitment to own professional development by attendance at continuing education programs and/or involvement in professional practice organizations and groups.
  - Demonstrates knowledge and expertise in providing nursing care, problem solving, and implementing standards/evidence based care.
  - Demonstrates effective communication skills in written and verbal forms, as evidenced by: shift report, documentation and patient teaching.
  - Expresses an interest in teaching and mentoring.

Where did we start ….

- **2004**
  - Pressure Ulcer Rate too high
  - We had 1.5 CWOCNs; no resources to expand number
  - Nursing Leadership recognized that a creative strategy was needed for staff to own this Nurse Sensitive indicator
- **2005**
  - OWL Resource Nurse program was hatched
    - Initiated in the ICUs
    - Expanded to all units over four years

So what do you do with all these OWL babies?



Role Development – the Vision

- **First step is to help staff see the need and the vision.**
  "People need a compelling vision of a new reality to get involved and excited."
- **Using data and evidence, nursing leadership cast a vision of decreasing pressure ulcers to at or below the NDNQI mean for ICU and Med/surg units.**
- **Nursing Leadership emphasized our Vision Statement of autonomous, accountable nursing practice, *i.e. staff owning this nurse sensitive indicator.***

Role Development - Education

- **Next step is to educate**
  - Staff need the **knowledge** for the specific role to feel comfortable being the resource and clinical expert
  - Staff need the **skills -** this includes physical, intellectual and interpersonal skills
  - Staff need to **practice** with the experts

Role Development - Education

- **OWL Training**
  - Basic OWL training
    - One day education session with CWOCNs & experienced OWLs
    - Includes NDNQI online training module with test
  - Rounding with experienced OWL or CWOCN
  - Participation in unit weekly rounds and monthly prevalence data collection
  - Ongoing mentoring to assist the resource nurses in synthesizing information and operationalizing the role at the bedside.
  - Ongoing quarterly education meetings
  - Yearly OWL Education Days
  - New opportunity – clinical practicum with CWOCN (experienced OWLs)
- **All resource roles**
  - New one day course focusing on interpersonal skills (maximizing work relationships) and change strategies

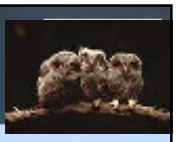
Basic OWL Training -Experienced OWL discusses role of the OWL resource nurse

How to Soar Like an Eagle, When You're an OWL

– *Georgette Hastings, RN, OWL, MICU*

- *Be Recognizable*
- *Round on staff*
- *Round on patients*
- *Educate yourself*
- *Know the protocols and products*
- *Share your wealth*
- *Mentor others*

Role Development – Team Building



- PUP (Pressure Ulcer Prevention) team
  - Meet monthly (education once/qtr)
  - Each unit sends an OWL representative
  - Initially co-chaired by nursing leadership
    - 2008 - Co-chairs staff nurse OWLs
  - Team interdisciplinary (RNs, MD, PT/OT, Dietician)
  - Protocols developed by team based on evidence (prevention strategies, bed algorithm, wound care products, etc.)
  - Review prevalence data monthly and compare to NDNQI & Shands UF goals
  - Share unit based activities
  - Problem-solve for complex patient populations (review root cause analysis for hospital acquired PUs)
- OWL team - support inter- and intra- unit
  - Training of new OWLs
  - Support with prevalence during staffing crisis
  - Support and development of new OWLs from our community hospital

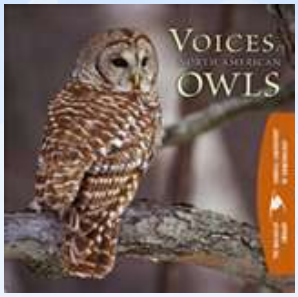
Role Development – Team Building & Accountability at Unit Level

- OWLs develop unit based teams
  - All shifts on high risk units
  - Include other disciplines
  - Communication tools
  - Plans of care
  - Recruit staff to become OWL

- OWLs feel accountable for PU prevention on their unit
  - Weekly rounds
  - Monthly prevalence
  - Assist CWOCNs with daily consults when time permits

Role Development - Empowerment

- OWLs have a voice in product selection, bed selection, protocol development, etc.
- OWLs question current evidence
  - Research study conducted by staff nurse and Clinical Leader on Neuro ICU unit
- OWLs bring evidence to the bedside
  - Elimination of bar soap
- OWLs know they have made a difference in PU reduction
- OWLs are “known” throughout the institution
- Staff want to be an OWL



Evaluation and Outcomes

- Staff satisfaction, engagement and retention
- Clinical outcomes
- Financial outcomes

Recognition

- Staff is recognized in the evaluation process for these roles.
- Recognition in hospital & nursing publications
- Pictures of resource nurses on units.
- Recognition pin

Most important – staff is proud of their outcomes!

Staff Engagement

Staff Engagement

- Research: "Pressure Ulcer Risk Assessment in Critical Care Patients"
  - Jeannette Hester, MSN, RN, CCRN & Courtney Puentes, ASN, RN
  - Podium presentation at National Magnet Conference, Louisville KY, Oct 1, 2009
- Evidence Based Practice: "Proper pH for Skin Care Products"
  - Aimee Sheddan, RN, Co-Chairman, Pressure Ulcer Prevention Committee
  - Elimination of deodorant bar soap from patient care units
  - Implementation of proper pH skin care products
  - Paper to be submitted for publication

Clinical Outcomes

- Staff need to be involved in the measurement
  - "If you don't measure, you won't know if you've made a difference."
- Staff need to understand benchmarking
  - NDNQI (National Database for Nursing Quality Indicators)
    - Assure that standardized methodology for data collection is used
    - Verify data for accuracy!
    - Quarterly prevalence reported nationally
  - Hill-Rom: participate annually in international study

Prevalence Studies and Benchmarking

- Staff need to know unit specific data
  - Monthly prevalence (timely feedback!)
  - Root cause analysis for all unit PUs
  - Management Teams and Staff must believe the benchmark used and set goals
  - Data must be posted for staff (tracking/trending graphs)

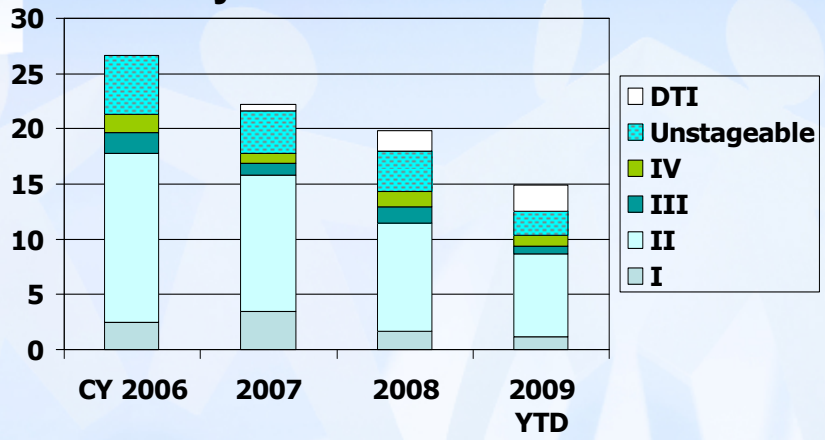
Prevalence Studies and Benchmarking

- **Comparing 2006 to 2009 data**
- ICU FAPU rates decreased from 11.96% in 2006 to 7.65% in 2009 (p = 0.0004)
- MS FAPU rates decreased from 3.24% in 2006 to 1% in 2009 (p = < 0.0001)

	ICU FAPU	Med/Surg FAPU
SUF 2006	**11.96%**	**3.24%**
NDNQI Means	14.87	4.49
SUF 2009	**7.65%**	**1.0 %**
NDNQI Means	11.08	2.83

Trend in Staging of FAPU

(average per month in prevalence studies)



Note: N = number of ***PU*** NOT number of patients

Financial Outcomes – Cost of OWL Education

- **Basic Education -Estimate 2006 – 2009**
  - Includes Basic OWL Training, rounds with WOCN or experienced OWL, yearly update
  - Salary dollars
    - Approximately $10,000 per year
    - 2009 higher due to opening of new tower, integration of community hospital staff
    - Total estimate to build program 2006 – 2009 - $45,000
  - Yearly cost projected to decrease in 2010
    - Staff will continue to be paid for basic OWL education and training
    - Only need to train “replacement OWLs”
    - Annual conference registration will be free to OWLs but will not receive pay to attend

Financial Outcomes – Cost of Skin Rounds & Prevalence – 2008 & 2009

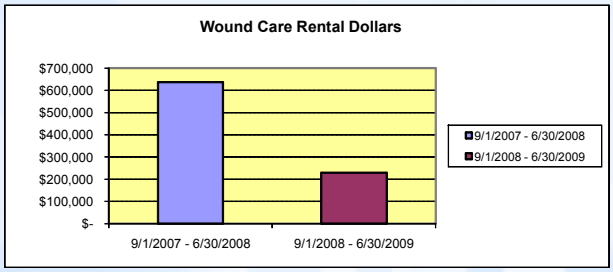
- OWLs conduct weekly skin rounds on all high risk units
- OWLs conduct monthly prevalence on all units
  - Exceptions: Pediatrics is quarterly, NICU is yearly
- Cost of "non-productive" hours/month for rounds, prevalence, & meetings averages $4000/month
- Estimated yearly cost - $48,000

Financial Outcomes

- Rental Bed Utilization
  - Initially utilization increased especially in ICUs with development of OWLs & staff education
  - CNSs, WOCN and OWLs presented data to administration on benefit of purchasing new low air loss mattresses for Total Care ICU beds (Total Care SpO2RT)– cost of approximately $1 million
  - Mattresses replaced in August 2008

Cost Savings: Rental Specialty Beds

SHANDS UNIVERSITY FLORIDA			
WOUND CARE	9/1/2007 - 6/30/2008	9/1/2008 - 6/30/2009	% Change
Rental Dollars	$ 637,190	$ 229,653	-64.0%
Rental Days	17,322	5,896	-66.0%
Avg. Rental Price	$ 36.79	$ 38.95	5.9%
Patients Treated	$ 851	$ 472	-44.5%
ALOS (Days)	20.35	12.49	-38.6%
Cost Per Outcome	$ 748.75	$ 486.55	-35.0%

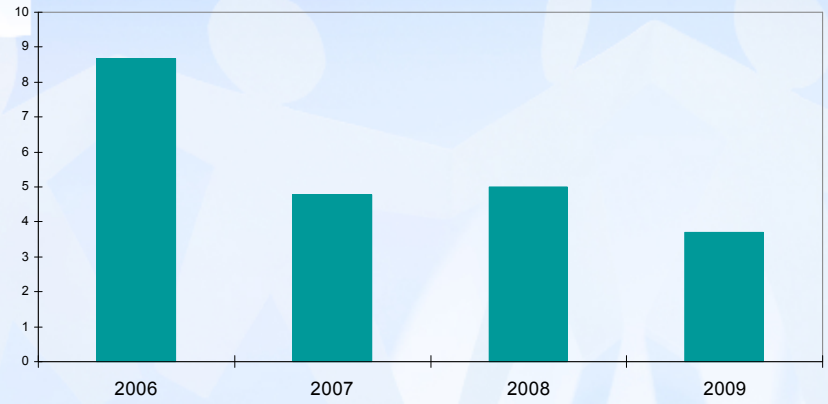


Cost Savings of $407,090/year and improved clinical outcomes!

Financial Outcomes
Cost for Treating FAPU

- CMS estimates the average pressure ulcer costs $43,180 per hospital stay
- WOCN (white paper 2009) estimates the cost for treating pressure ulcer at $50,000
- Estimate using prevalence data
  - Use stage III or higher only
  - Normalize over the months (use the average for the year for the number of FAPU patients)

Average Number of FAPU Patients per month
(stages III, IV, UTS only)

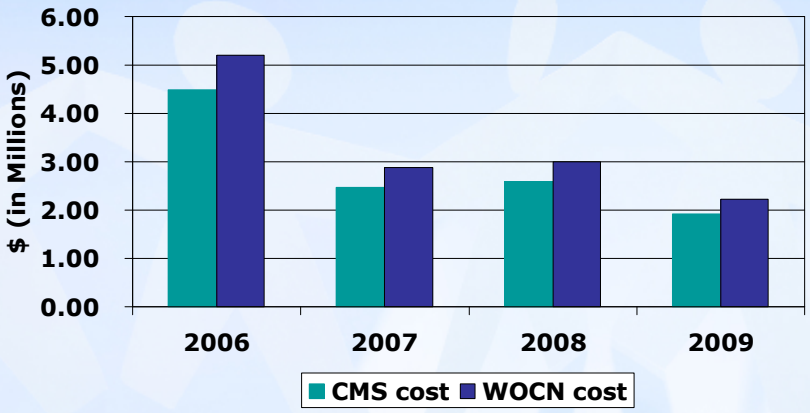


Prevalence data include some repeat patients

Assumptions

- Patients with Stage III or higher incur costs to treat
- Patients identified during prevalence are only patients with FAPU
- All patients with FAPU incur same cost (stage III = stage IV = UTS cost)
- CMS estimate of $43,180/patient and WOCN estimate of $50,000/patient establish a valid range for true costs to treat
- Average monthly # of patients times 12 is annual number of FAPU patients

Estimated Costs for Treating FAPU (Stage III+)



Estimated cost $43,180/patient (CMS) and $50,000/patient (WOCN)

Cost Aversion - Treatment of Pressure Ulcers 2006 through 2009

- From 2006 to 2009, **cost aversion** of **$2.57 to $2.98** Million by the decreased number of patients with Stage III, IV and UTS pressure ulcers.

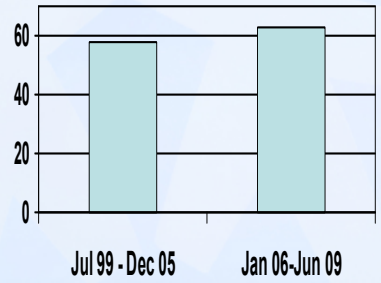
Cost Aversion – Risk Management

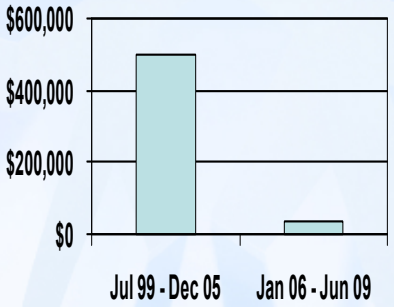
- Data available from Self Insurance Program (SIP) related to PU cases for the past ten years
- For comparison, time frames utilized:
  - 7/1999 - 12/2005 (6.5 years)
  - 1/2006 - 6/2009 (3.5 years)
- Rationale for time frames
  - In January 2006 substantial changes were made to the pressure ulcer prevention activities at SUF
- SIP costs reported were
  - **Indemnity** paid (sum paid by A to B by way of compensation for a particular loss suffered by B)
  - **Allocated Loss Expense** (ALE: adjusting (handling) costs of the claims, i.e., attorney fees, medical record copies, costs for depositions, expert reviewers, travel expenses of attorneys, experts and claim coordinators, etc.)
  - **Write-off** of medical/hospital charges

Cost Aversion
Impact on Risk Management

- July 1999 – Dec 2005:
  - 58 cases reported to SIP (average 8.9/year)
  - 15/58 resulted in payment (26%)
  - Average payment
    - Per case reported: $499,006
    - Per case paid: $1.9M
- Jan 2006 – June 2009:
  - 63 cases reported to SIP (average 18/year)
  - 11/63 resulted in payment (17%)
  - Average payment
    - Per case reported: $36,026
    - Per case paid: $206,331

Cost Aversion
Impact on Risk Management





Cost Summary

- **Costs (Estimates)**
  - **Education** – approx $10,000 per year *(estimate cost to decrease in 2010 to $5000)*
  - **Prevalence/skin rounds/meetings** – approx $48,000 per year *(estimate cost to increase in 2010 due to increase in number of beds)*

- **Benefits**
  - Lower cost to treat FAPU (stage III +) $2.98 Million from 2006 – 2009
  - Lower costs for risk management
  - Fewer Specialty Bed Rental Days (new surfaces will be cost neutral after two years)
  - Staff Development/Pride

Review - Success strategies for Resource Role

- Support from Nursing Administration
  - Recognition of the role, creation of the “vision”
  - Funding for training
  - Support for clinical rounds & prevalence
- Support from Nurse Managers
  - Time to attend meetings and conduct unit rounds
  - Support to operationalize role at the bedside
  - Recognition
- Support from clinical experts
  - Initially drive the program; then turn over the leadership
- Peer resource system
- Meeting as a team
- Focus on outcomes
- Celebrating success

Challenges

- Staff time to attend education and meetings
- Workload management (caring for own patients and being a resource to others)
- Staff skills with leading change
- “Migration” of staff

OWL Resource Role paved the way …

- **Current resource roles include:**
  - Charge Nurse
  - Preceptor
  - Mentor
  - OWL – Ostomy Wound Liaison Nurse
  - DRN – Diabetes Resource Nurse
  - PCN – Pain Care Nurse
  - PCRN - Palliative Care Resource Nurse
- **New roles proposed for 2010:**
  - Geriatric Resource Nurse
  - Bariatric Resource Nurse
  - Computer Resource Nurse

Questions/Discussion