



We Treat Kids Better



Influence of Healthy Work Environments on PICU Patient and Nurse Outcomes

Nancy Blake, PhD, RN, CCRN, NEA-BC
Children's Hospital Los Angeles

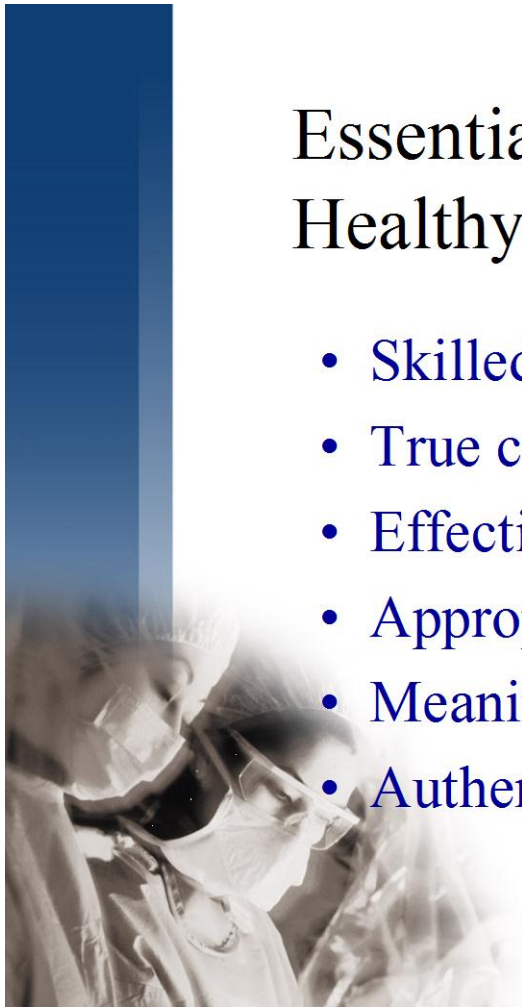
At the conclusion of this presentation the learning will be able to:

- Describe how effective communication, true collaboration and authentic leadership influence risk adjusted length of stay, risk adjusted outcomes, central line blood stream infections and ventilator associated pneumonia
- Describe the processes of effective communication, true collaboration and authentic leadership and their influence on RN turnover



Essential Elements of a Healthy Work Environment

- Skilled communication
- True collaboration
- Effective decision making
- Appropriate staffing
- Meaningful recognition
- Authentic leadership



AACN Standards for Establishing and Sustaining Healthy Work Environments

Standard 1

Skilled Communication

Nurses must be as proficient in communication skills as they are in clinical skills

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AACN Standards for Establishing and Sustaining Healthy Work Environments

Standard 2

True Collaboration

Nurses must be **relentless** in pursuing and fostering collaboration

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Standard 6

Authentic Leadership

Nurse leaders must fully embrace the imperative of a healthy work environment, authentically live it and engage others in its achievement

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What we know

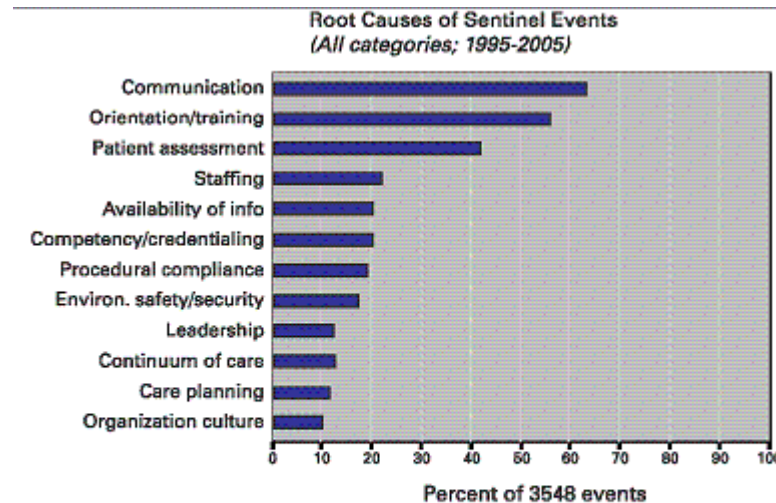
- Poor communication and intimidating behavior create a culture of silence or disrupt patient care
- Unhealthy work environments and poor communication contribute to medical errors, ineffective care delivery and conflict among healthcare professionals
- The Joint Commission stated that communication failures are the leading cause of harm to patients and have stated that in 70% of their sentinel events, the primary root cause was communication
- Nurse manager support affects nursing productivity, recruitment, retention and job satisfaction (Kramer & Schmalenberg, 2004)

- When the environment feels safe, staff can communicate freely and in those environments turnover is low
- The cost of replacing a nurse is approximately \$100,000
- Team communication and collaboration is critical in resuscitation
- The literature has numerous research studies that link poor outcomes in patients with poor team communication
- One of the recommendations of the first IOM report was to improve collaboration



Inadequate communication between care providers or between providers and patients and families is consistently the main root cause of sentinel events

JCAHO Annual Report on Quality and Safety, 2007



See Improving America's Hospitals - The Joint Commissions' Annual Report on Quality and Safety, Joint Commission, 2007

Research Study:

Influence of the work environment on PICU patient outcomes and nurses' intent to leave

Blake, 2012



- ✧ Determine the relationship between communication, collaboration and leadership and CLBSI and VAP in the PICU (Aim 1)
- ✧ Investigate the association between communication, collaboration and leadership and risk adjusted mortality in the PICU (Aim 2)
- ✧ Establish the relationship between communication, collaboration and leadership and risk adjusted length of stay in the PICU (Aim 3)
- ✧ Establish the relationship between communication, collaboration and leadership and nurses' intent to leave their jobs in the next six months (Aim 4)

Methods

- ✧ Design
 - ✧ Cross-sectional descriptive/correlational design
- ✧ Setting
 - ✧ Ten PICUs across the country
 - ✧ Greater than ten beds
 - ✧ Pediatric Critical Care Fellowship programs
- ✧ Sample size
 - ✧ 415 (*a priori* power analysis = 352)
 - ✧ two tailed, .05 alpha with 0.8 power

Methods

✧ Inclusion criteria

- ✧ RNs in the study units that had been in the unit greater than six months

✧ Exclusion criteria

- ✧ Non RNs
- ✧ RNs who have been there less than six months
- ✧ Administrative and management staff

Instruments

- **The Practice Environment Survey of the Nursing Work Index Revised (PES-NWIR) (Lake, 2002)**
 - 31 item instrument measuring the practice environment (5 domains - including leadership and collaboration - measured at the unit level)
 - Cronbach's alpha ranges from .80 - .96 (Same in this study)
 - Nursing Performance Measure by the National Quality Forum
 - The National Database of Nursing Quality Indicators (NDNQI) offer as annual satisfaction survey

Instruments

- **ICU Nurse-Physician Communication Tool (Shortell et al., 1991)**
 - 22 questions related to communication
 - Cronbach's alpha 0.7 except Timeliness 0.6 (Higher in this study 0.7 - 0.8)
 - 5 domains
 - Communication openness within groups (RN-RN)
 - Communication openness between groups (RN-MD)
 - Communication accuracy within groups
 - Communication accuracy between groups
 - Communication Timeliness

Summary of Findings (Hypothesis 1)

- **Correlations and/or regression models demonstrate a statistically significant inverse relationship with CLBSI and**
 - Collaboration
 - RN-RN and RN-MD communication accuracy
 - RN-RN and RN-MD communication openness
 - Communication timeliness
- **Communication, collaboration and leadership did not predict a lower incidence of VAP**

Summary of Findings (Hypothesis 2 & 3)

- Length of stay had an inverse relationship with collaboration, communication timeliness, communication openness RN-RN and RN-MD which supports that as these communication and collaboration variables increase, the length of stay decreases
- Risk Adjusted Outcome had an inverse relationship with collaboration, communication openness RN-RN and RN-MD
- Magnet designation was associated CLBSI, VAP, and LOS, but not in the direction expected

Summary of Finding (Hypothesis 4)

- There wasn't a statistically significant relationship between nurses' intent to leave and communication or collaboration
- There was a statistically significant inverse relationship between the nurses' rating of leadership in their unit and nurses' intent to leave their job in the next six months

Implication of findings

- Correlation between good communication and a decrease in patient risk adjusted length of stay, risk adjusted outcomes and a decrease in central line infections
- A correlation between good collaboration and positive patient outcomes (as above)
- Strong leadership reduces turnover and increases retention

Why is important to have a healthy work environment?

Healthy Work Environments

- There is a direct link between work environment and patient safety
- If you are not addressing your work environment, you are not addressing patient safety
- Communication is a major component of the work environment

Questions

