ESTABLISHING SAFE STAFFING PATTERNS FOR NURSING
HIMSS Safe Staffing Work Group

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Presentation Overview

- Discuss background on Safe Staffing
- Options for Nurse Staffing
- Data-driven Nurse Staffing Methodology
- Conclusions
A Data Driven Approach to Nurse Staffing

“Hospitals are held together, glued together, enabled to function...by the nurses”
Thomas, L. 1983

“Nurses are the *early warning system* for early detection of complications and early detection of problems in care...”
Aiken L. et al, 2003
• Higher RN HPPD resulted in 79% reduction in risk of bloodstream infection between 2 NICUs

• Recommended that staffing decisions based on census be transformed into acuity driven staffing decisions

• Findings suggest that RN staffing associated with risk of bloodstream infection in NICU
Establishing Safe Staffing Patterns for Nursing

- “Patient Safety and Quality Patient Care can be enhanced through the collaborative efforts of all HIMSS/SHS communities to provide useful and effective information technology, enhanced processes, and appropriately designed staffing ratios for Nursing Staff”

From the HIMSS position paper on Safe Staffing Ratios - June 2006
Establishing Safe Staffing Patterns for Nursing

• Background
  – Mandatory Staffing Ratios
    • States and Federal Government
    • Driven primarily by CNA and other nurses’ unions
    • Being touted as “safe staffing ratios”, but based upon no documentable evidence.
    • Same ratios Days and Nights
Enacted legislation/adopted regulations to date: (13 states plus DC) CA, CT, DC*, FL, IL, ME*, NJ, NV+, OH, OR, RI, VT, WA, TX[ regulations]

+ represents legislation requiring a study
* legislation was either waived or modified from that which was enacted

Introduced in 2008; (13 states); AZ, CT, FL, HI, IA, MN, MO, NJ, NM, NY, OH, VA, and WV.

As of Feb 2009
Establishing Safe Staffing Patterns for Nursing

• Only California and Massachusetts have actually passed legislation mandating minimal ratios.

• There has been NO evidence that these ratios have resolved any patient safety issues nor improved patient outcomes.
Alternatives to Mandatory Staffing

- HIMSS proposes alternatives to mandatory staffing
  - Benchmarking
  - Benchmarking supplemented by work sampling
  - Work sampling only
  - Detailed data collection
What Are the Options for Nurse Staffing?

• Data Driven Safe Staffing Systems
  – Every patient is different determined by a dependency system
  – Accounts for recent procedures
  – Workload is tied to evidence in the patient’s chart
  – Accounts for various aspects of ADL

• Fixed Ratios
  – Every patient is the same
  – Arbitrarily set, even legislated
  – All units with the same designations are the same
What Are the Options for Nurse Staffing?

• Data Driven Staffing Systems
  – Layout & design issues considered
  – Ancillary Department support built in
  – Family interaction with the patient is factored in
  – Accounts for LOS

• Fixed Ratios
  – All hospitals are the same
  – Requires some nurses to work harder and longer than some others
  – Nurse has an imbalanced workload even if she has the same number of patients
# Ratios Don’t Equal Hours

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</table>
What Are the Options for Nurse Staffing?

- Engineered Safe Staffing Ratios
  - Accounts for Technological Support (EMR, Electronic Meds, etc)
  - Bed turnover issues (ADT)

- Fixed Ratios
  - All shifts are staffed the same
  - Technology is ignored
  - Unique Patient turnover is ignored
Patient Classification Tool Sets
(One size does not fit all)

• Evidence-based Staffing Systems for All Nursing Specialties:
  • Women’s Health
  • L&D
  • NICU/Nursery
  • PICU/Pediatrics
  • Oncology
  • Palliative Care
  • Emergency Department
  • Med/Surg
  • Critical Care
  • Cardiology
  • PACU
  • Rehab
  • Mental Health
Engineered Safe Staffing for Nursing

• Evidence-based or engineered Safe Staffing Systems for Nursing include two major components:
  
  — *Patient Classification* (Acuity/Dependency) Systems, which groups patients into similar groups
  
  — Development of Engineered Staffing Ratios, also called *workload measurement to establish a foundational database*
  
  — The two must be linked
Essential Elements of a Valid Dependency Staffing/Classification System

- **Objective** – Not subject to individual interpretation (high inter-rater reliability)
- **Auditable** – Traced back to patient chart/orders
- **Discriminating** – Criteria sets must differentiate between various patients
- **Statistically valid** - Using generally acceptable statistical validation methodologies
Workload Measurement

What is it?

• Workload measurement is the process of determining the hours of care required by each patient in each “bucket” or dependency level

• Multiple options for developing engineered staffing ratios:
  
  — Use of hospital’s budgeted HPPD
  — Work sampling
  — Use of database of treatment profiles
  — Detailed engineered staffing ratios/treatment profile development
AONE Requirements for Setting Engineered Staffing Ratios

• It accounts for the:
  ─ Specific layout and design features of a facility
  ─ Technological support (EMR or not; CPOE or not, etc.)
  ─ Unique dependency/acuity requirements of the patient
AONE Requirements for Setting Engineered Staffing Ratios

- It accounts for the (cont’d):
  - Ancillary department support (pharmacy, imaging, transport, EVS, etc.)
  - Specific mission of the hospital (teaching or not; specialty of the hospital (pediatric, cardiac, cancer, etc.))
  - Skill mix and education level of the nursing staff
Benchmarking Services

- NACHRI (for Pediatrics)
- NDNQI
- CALNOC
  [https://www.calnoc.org/globalPages/mainpage.aspx](https://www.calnoc.org/globalPages/mainpage.aspx)
- Solucient (Thomson Reuters Healthcare - [www.thomsonreuters.com](http://www.thomsonreuters.com))
- GHC Consulting [garrick@garrickhyde.com]
- Delta Healthcare Consulting Group – [www.deltahcg.com](http://www.deltahcg.com)
- Premier
Workload Measurement

Work Sampling

• 3rd Party Observer
• Observations every 10-15 minutes
• Focus on Staff, not patient
• Provides work distribution by skill, by shift
• 24 hour sampling time/unit
Workload Measurement

Work Sampling

• During Work Sampling process issues will be identified:
  • Stage bed huddles in the Emergency Department so the LOS of ED patients can be observed first hand
  • Take action to prevent bolus of admissions occurring at change of shift (from the ED).
    - Staffing on inpatient units is already set (2 hours in advance of shift)
    - Transportation of patients to unit at last minute may cause overtime and delays
    - Nurses on inpatient units are not available for receiving reports on inbound patients.
• The hours of care by acuity level are found by measuring four types of activities:
  ─ Direct care activities (documented)
  ─ Direct care activities (undocumented)
  ─ Indirect care activities
  ─ Routine activities
Sample Results of Detailed Engineered Staffing Ratios

- Direct Care - Undocumented: 25%
- Indirect: 6%
- Routine: 18%
- Direct Care - Documented: 51%
Goals & Objectives of Safe Engineered Staffing

• Optimize staffing at the unit level
• Allocation of appropriate activities to appropriate skill levels
• Balance Patient Assignments among Caregivers
• Maximize efficiency (minimize non-value added activities)
Patient Classification Services

- McKesson
  (http://www.mckesson.com/en_us/McKesson.com/For%2BHealthcare%2BProviders/Hospitals/Nursing%2BSolutions/ANSOS%2BOne-Staff.html)
- Delta Healthcare Consulting Group (www.deltahcg.com)
- Optilink
  (www.advisoryboardcompany.com/content/optilink/optilink.html)
- ResQ (www.res-q.com)
- Clairvia
- API Healthcare
  http://www.apihealthcare.com/products/patient_classification/
Patient Classification + Workload Measurement

The Result

• Aligns with accrediting and regulatory guidelines for staffing:
  – ANCC Magnet Accreditation
  – AONE
  – JCAHO
  – State Boards of Nurse Examiners recommendations for staffing
Summary

• The patient must remain the focus!
• Improved patient care outcomes is a shared goal
• Optimal nurse staffing can improve patient outcomes
• Staffing plans qualified through the metrics of engineered staffing systems will provide the most effective match between available resources and desired patient outcomes