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

Cimiotti, Haas, Saiman, Larson, 2006

- Higher RN HPPD resulted in 79% reduction in risk of blood stream 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

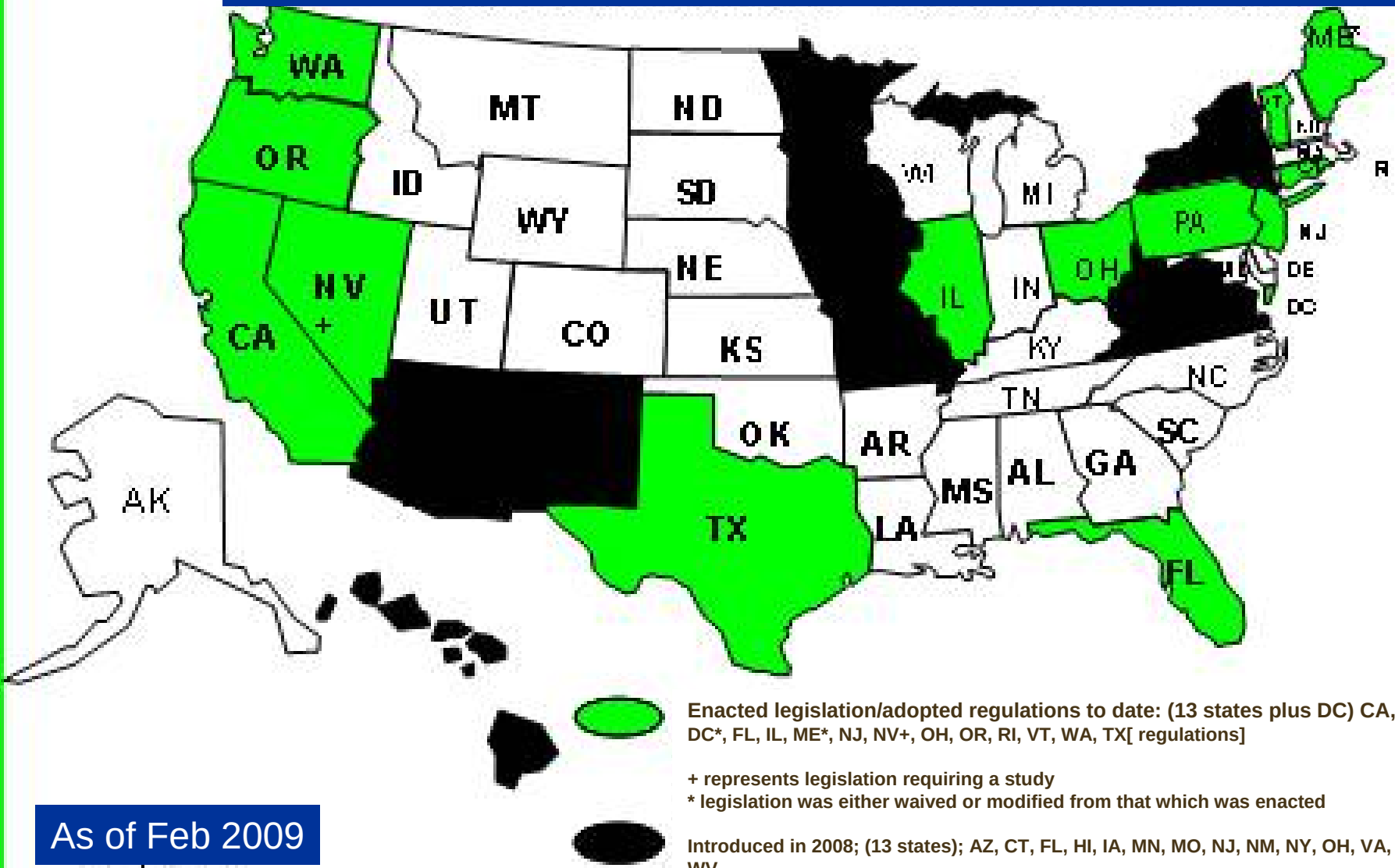
- *"Patient Safety and Quality Patient Care can be enhanced through the collaborative efforts of all HIMSS/SHS communities to provide useful and effective information technology, enhanced processes, and appropriately designed staffing ratios for Nursing Staff"*
  From the HIMSS position paper on Safe 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

The American Nurses Association Nationwide State Legislative Agenda

NURSE STAFFING PLANS AND RATIOS



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

Nurse	Skill Level	Bed Assigned	Class Level	Hours Assigned
A2N	RN	0973	2	2.8
	Ratio	**1:1**	**Total**	**2.8**
BJS	RN	0963	1	2.5
BJS	RN	0970	2	2.8
BJS	RN	0982	1	2.5
	Ratio	**1:3**		**7.8**
BOM	RN	0968	4	3.4
BOM	RN	0969	5	4.2
BOM	RN	0972	1	2.5
	Ratio	**1:3**		**10.1**
CAN	RN	0977	1	2.5
CAN	RN	0981	4	3.4
CAN	RN	0983	4	3.4
	Ratio	**1:3**		**9.3**

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
- Solucient (Thomson Reuters Healthcare - www.thomsonreuters.com
- GHC Consulting [garrick@garrickhyde.com]
- Delta Healthcare Consulting Group – 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)

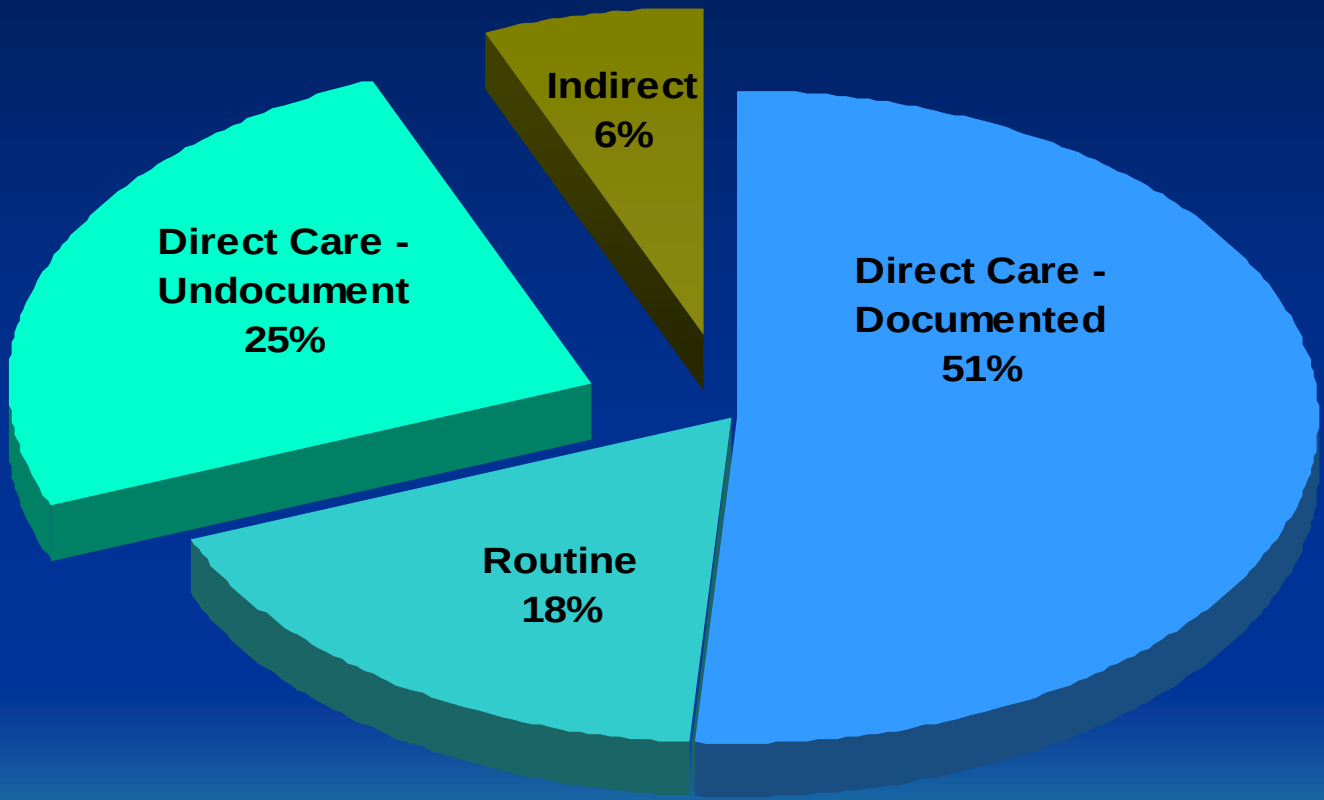
-Transportation of patients to unit at last minute may cause overtime and delays

-Nurses on inpatient units are not available for receiving reports on inbound patients.

Workload Measurement
Detailed Standards Development

- 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



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