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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

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

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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”*

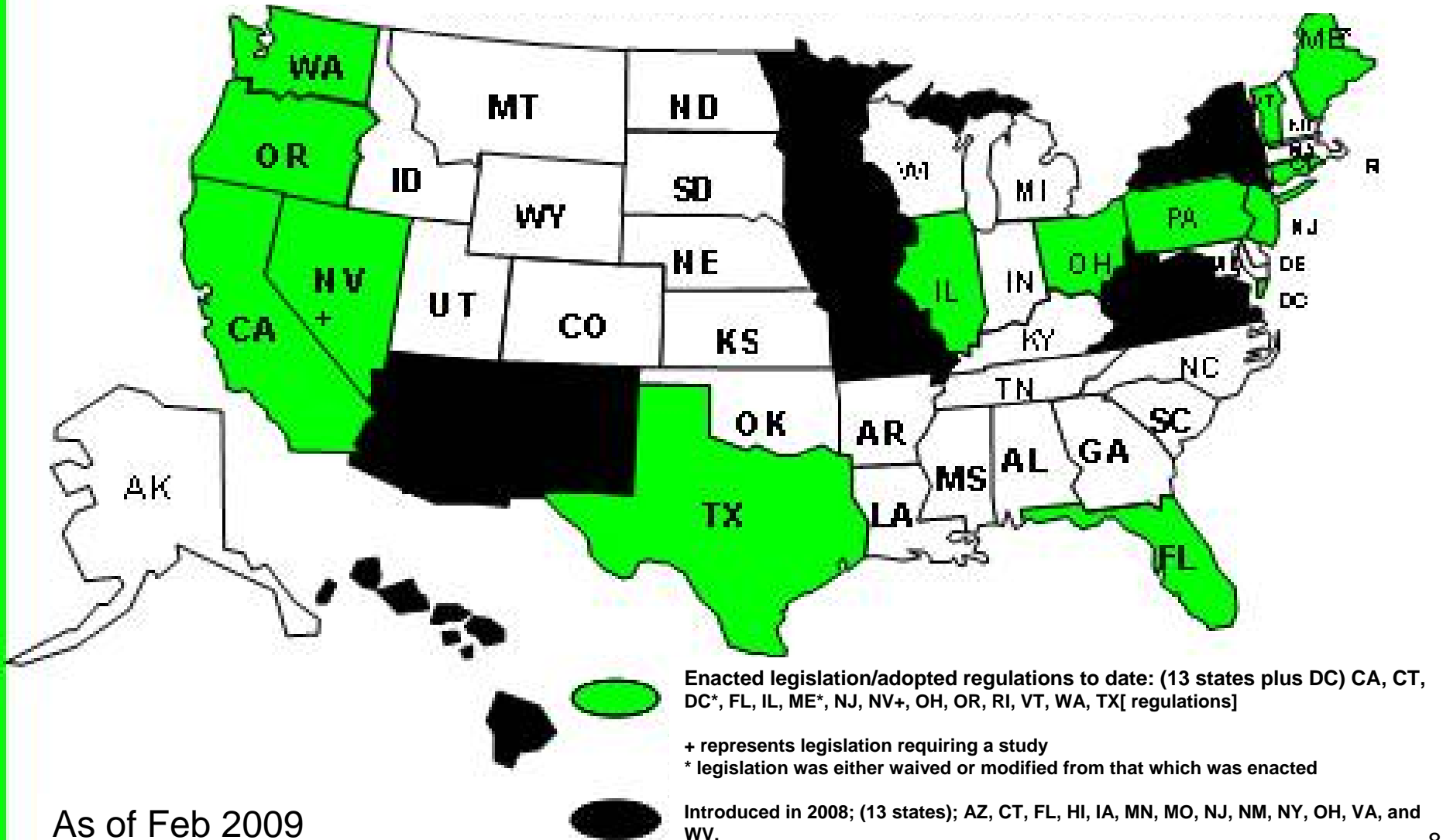
HIMSS position paper on Safe Staffing Ratios- June 2006

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



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 by dependency system
- Accounts for recent procedures
- Workload tied to evidence in 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 designation are the same

What Are the Options for Nurse Staffing?

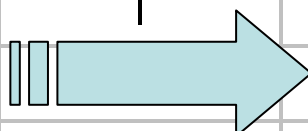
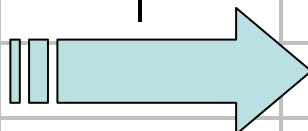

Data Driven Safe Staffing Systems

- 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?

Data Driven Safe Staffing Systems

- Accounts for technological support (EMR, electronic med cabinets, etc)
- Bed turnover issues

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 must be customized for all Nursing Specialties:
 - Women's Health
 - L&D
 - NICU/Nursery
 - PICU/Pediatrics
 - Oncology
 - Palliative Care
 - Emergency
Department

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

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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 www.thomsonreuters.com
- GHC Consulting [garrick@garrickhyde.com]
- Delta Healthcare Consulting Group
www.deltahcg.com

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

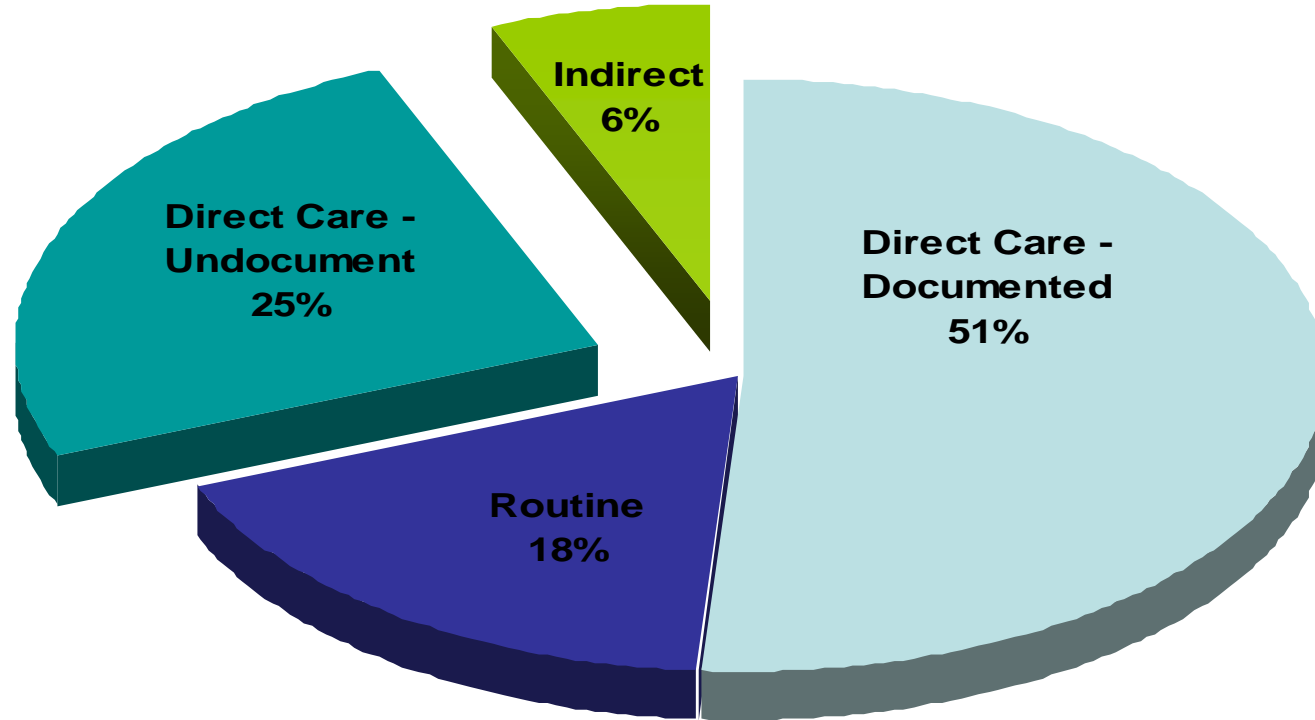
- During Work Sampling Process issues can be identified
 - Stage bed huddles in the Emergency Department so the LOS of ED patients can be observed first hand
 - Take action to prevent bolus of admissions occurring at change of shift (from the ED).
 - Staffing on inpatient units is already set (2 hours 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 – Where Nurses spend their time:



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
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 & 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
- *Call to action: Creation of staffing models qualified through the metrics of engineered staffing systems to provide the most effective match between available resources and desired patient outcomes.*