Leveraging Clinical Documentation to Meet Illinois Acuity Legislation and Increasing the Visibility of Nursing Influence on Patient Outcomes

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Quincy, Illinois

Learning Objectives

1. Review and discuss regulations adopted in the IL Acuity SB and its impact on staffing
2. Review and discuss the nursing divisions adoption of driving acuity from the online clinical documentation system
3. Explore the outcome achieved by staffing from an evidenced-based acuity system

We are a Magnet Hospital!

MAGNET RECOGNITION

AMERICAN NURSES CREDENTIALING CENTER

Where we are located

About Blessing Hospital

- 367 beds not-for-profit Sole Community Hospital
- Regional Medical Center
  - Open Heart Surgery
  - Cancer Center
  - Level II Trauma Center
  - Acute Service includes: Med/Surg, OB, Peds, Surgery, Ambulatory Surgery, Critical Care, Psychiatry
  - Sub-Acute: SNU, Rehab, Home Care, Hospice, Renal Dialysis
  - Ambulatory Care Clinics
  - Level 2 NICU
- 2000 Employees / 630 RNs
- 240+ physicians

Satisfy the Illinois Nurse Staffing by Patient Acuity Act

- Patient Acuity Act Requires:
  - Written Staffing Plan
  - Nursing Care Committee
  - Acuity Model

Satisfy the Illinois Nurse Staffing by Patient Acuity Act

- Written Staffing Plan
  - Hospital Wide Plan
  - Balances both patient and nurse considerations to yield appropriate resources for quality care
  - Ongoing assessments of unit's patient acuity levels
  - Defined strategy to meet unexpected surge in patient needs

Satisfy the Illinois Nurse Staffing by Patient Acuity Act

- Nursing Care Committee
  - At least 50% of the members are registered nurses providing direct patient care
  - Broad representation of clinical services
  - Recommendations must be given significant regard and weight into:
    - Staffing plans
    - Selection of an acuity model
    - Review of nurse to patient staffing guidelines

Implementation Overview

Supply of Nurses

- Staff Manager: Live May 2006, interfaced to HR and Time and Attendance

Demand of Patients

- Demand Manager measures need for nursing care hourly uses patient data from Registration and Sunrise Clinical Manager

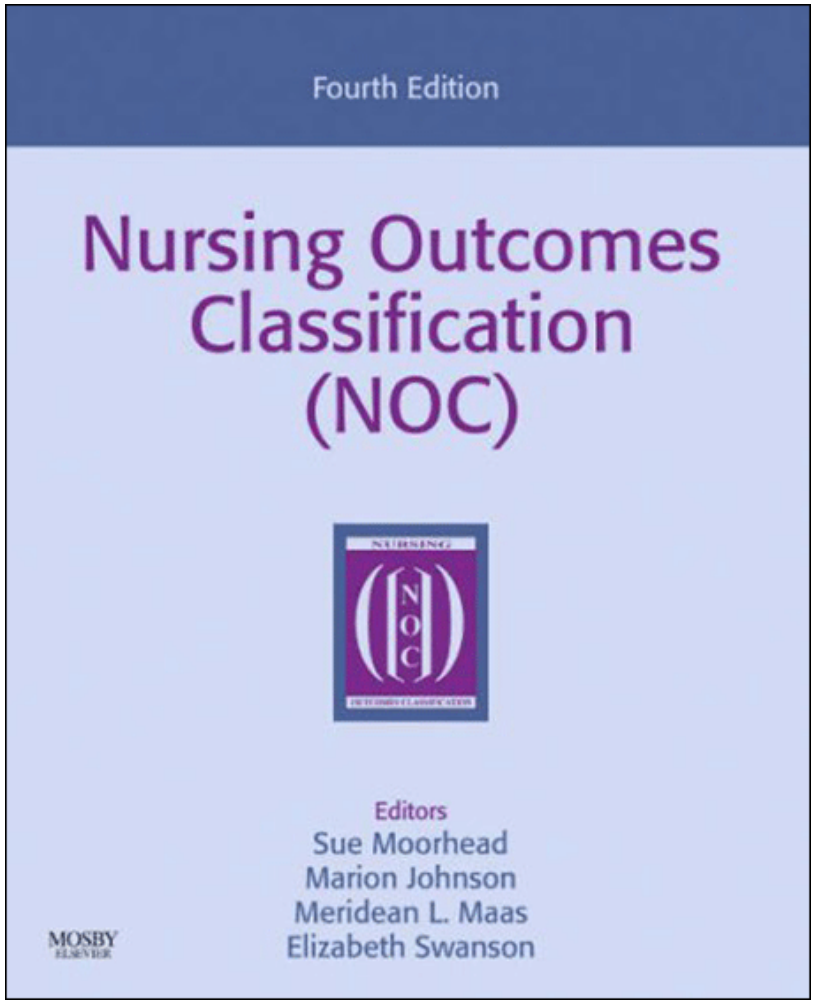
- Outcomes driven Acuity
  - 7 Adult Med/Surg units live since July 2009
  - Psychiatry, Pediatrics, and Behavioral Health in audit phase

Standardized Outcomes

Outcomes: patient outcomes sensitive to nursing interventions.

Nursing Outcome: an individual, family, or community state, behavior, or perception that is measured along a continuum in response to a nursing intervention(s).

> 20 years of clinical and scientific testing at The University of Iowa



Outcome Set Selection

6 Domains- represent the holistic view of the patient and the family

1. Physiologic Health
2. Psychosocial Health
3. Perceived Health
4. Functional Health
5. Family Health
6. Health Knowledge and behavior

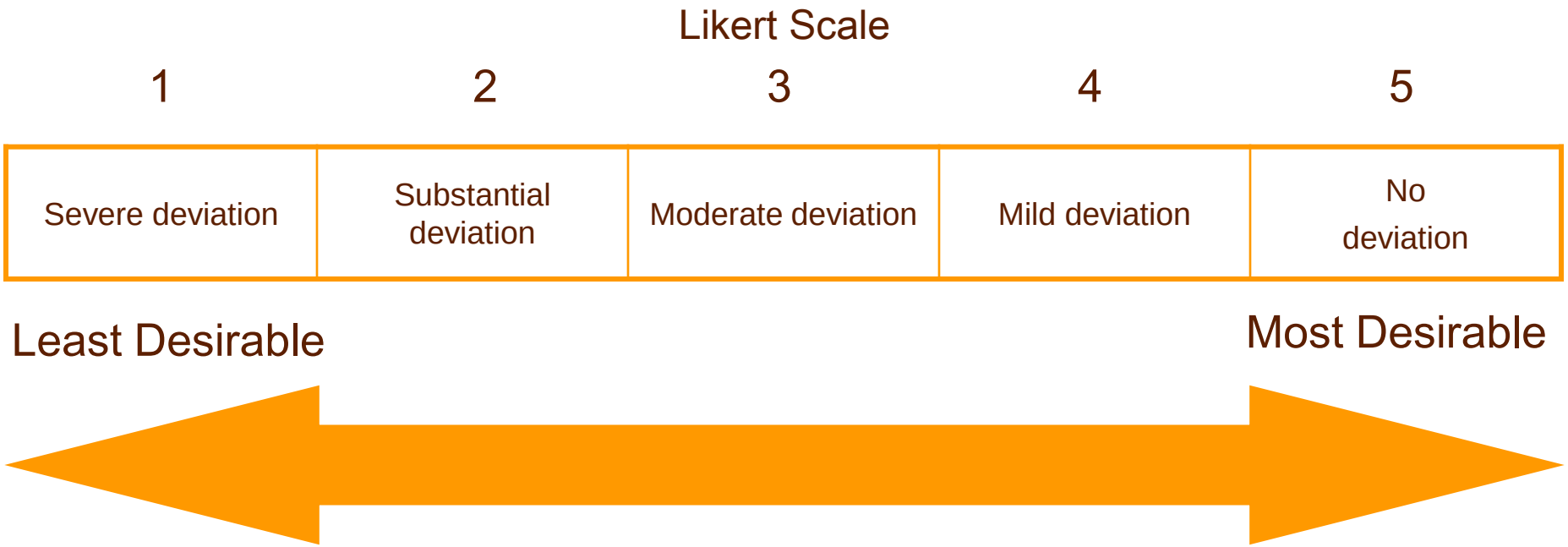
The Outcomes Team

Role of Patient Outcomes Experts

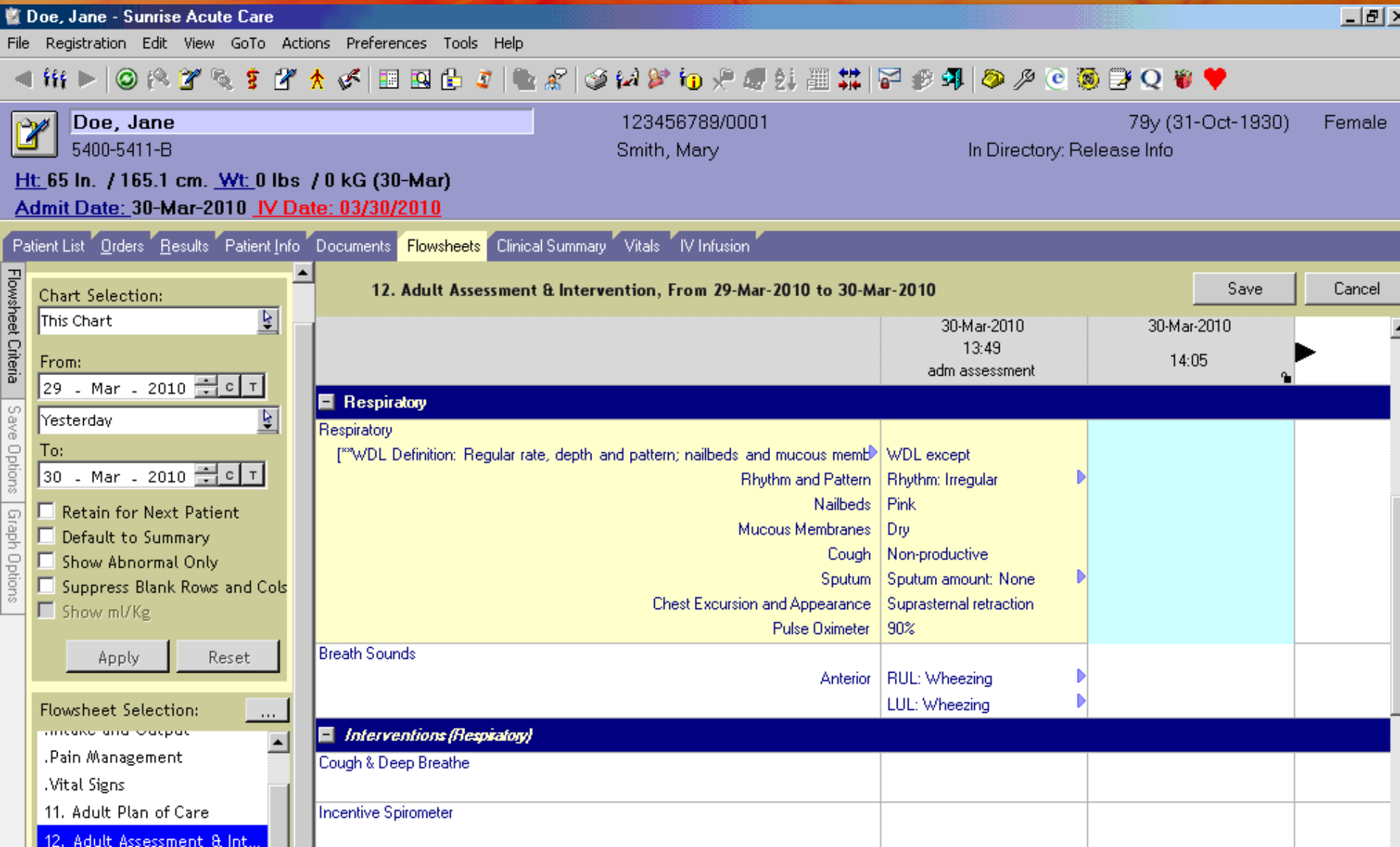
- Learn and understand the NOC classification and how it applies to their clinical area
- Create a cross walk between two structured languages: CPM (clinical content) and NOC
  - How does the use of Oxygen via nasal cannula by an adult male translate to a Likert rating?
- Identify deficiencies in charting content and how it is used
  - No drop down selection for use of Wound Vac
  - No way to document pain reassessment
  - Are patient condition changes charted in a timely manner?

Nursing Outcomes Classification

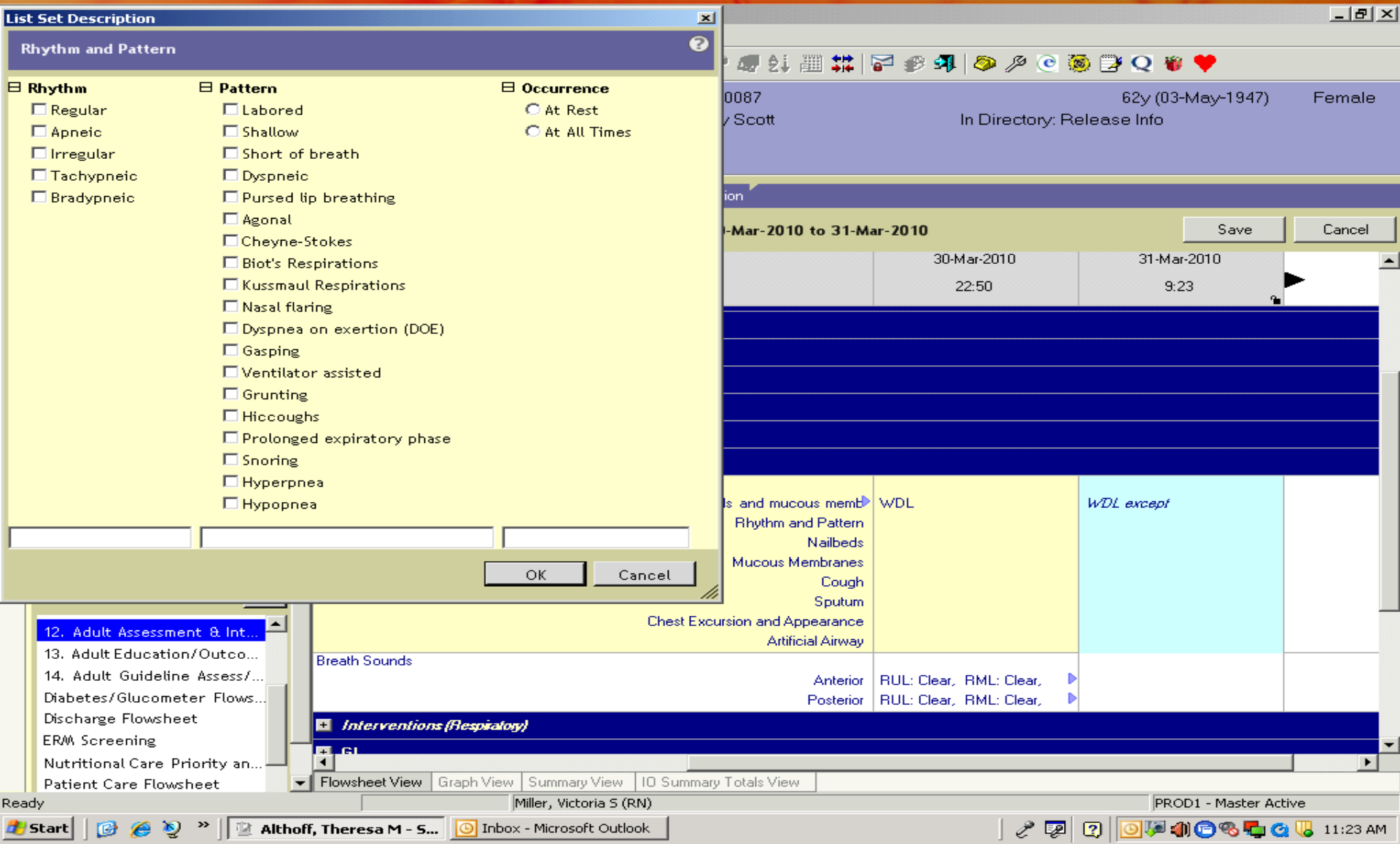
- NOC Outcome Label: Respiratory Status (0415)
- Definition: Movement of air in and out of the lungs and exchange of carbon dioxide and oxygen at alveolar level



Clinical Charting



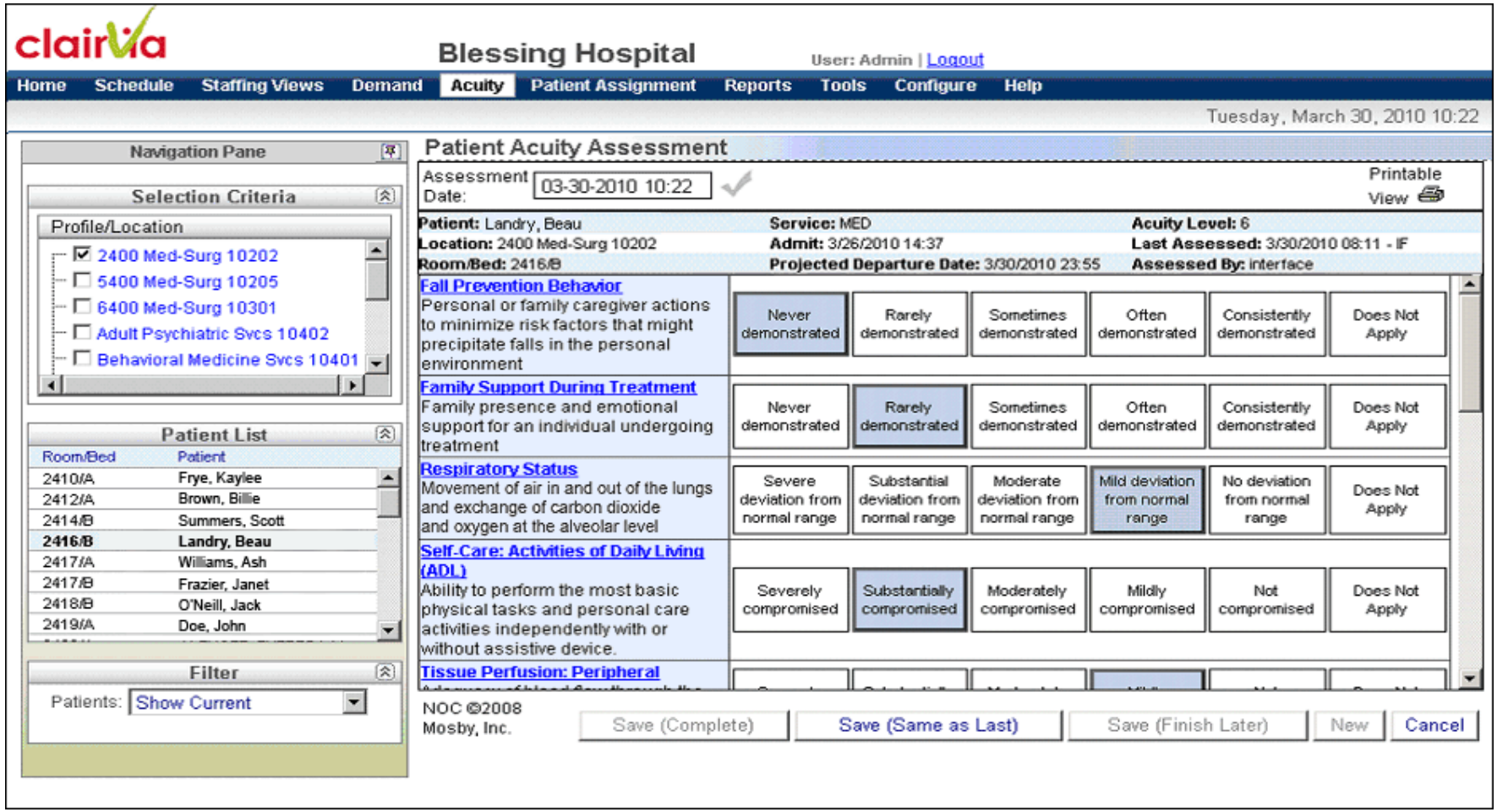
Clinical Charting



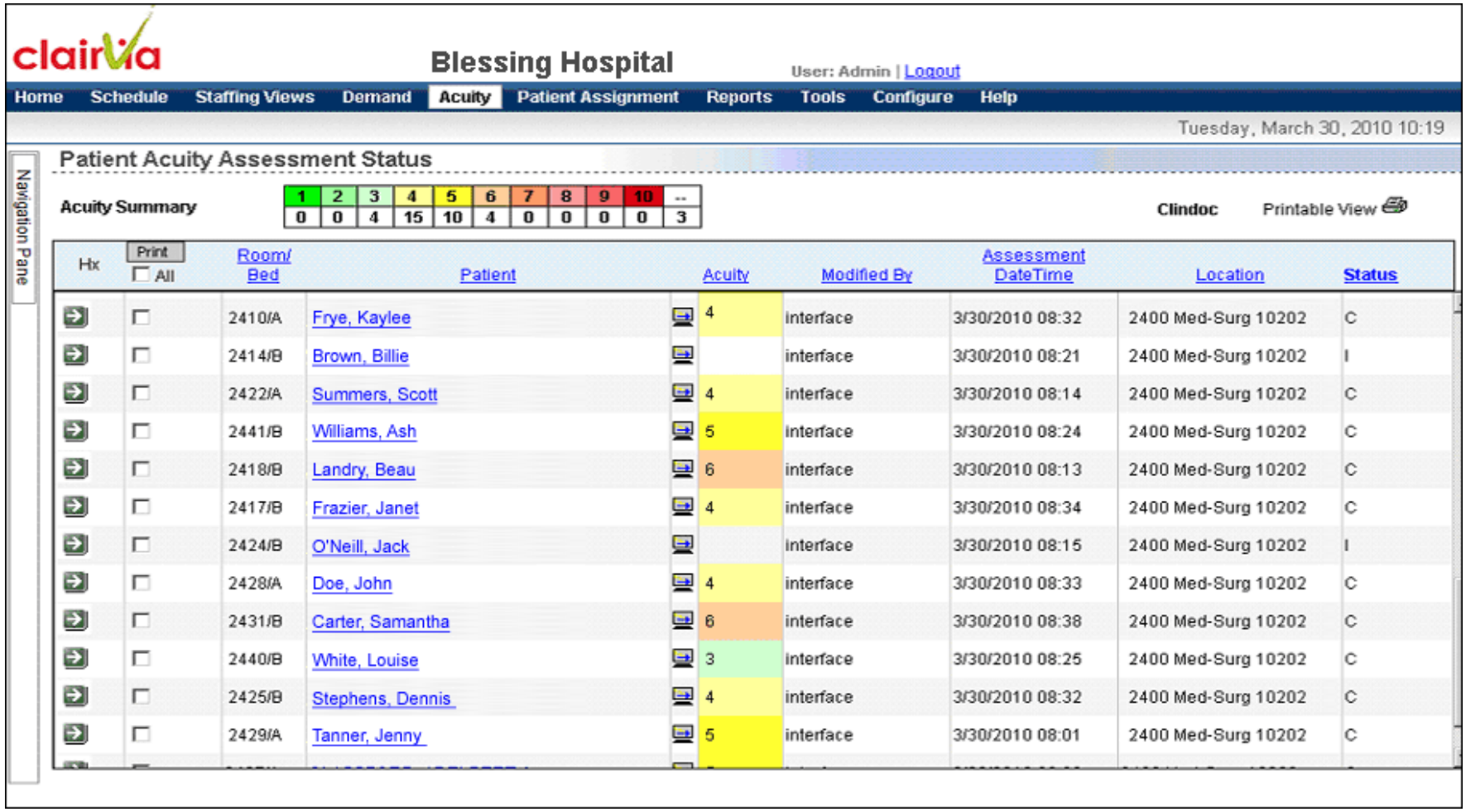
Respiratory Status Mapping Summary

Observation/Intervention/Lab	Value	Likert Rating
Rhythm/Pattern	Irregular	4
Excursion/Accessory Muscle/Retractions	Suprasternal retraction	3
Breath Sounds All Lobes	RUL, LUL Wheezing	3
Cough	Non-productive	4
Pulse Oximeter	90%	3

Documentation Translated into an Outcomes Assessment



Assessment Status



Reliability

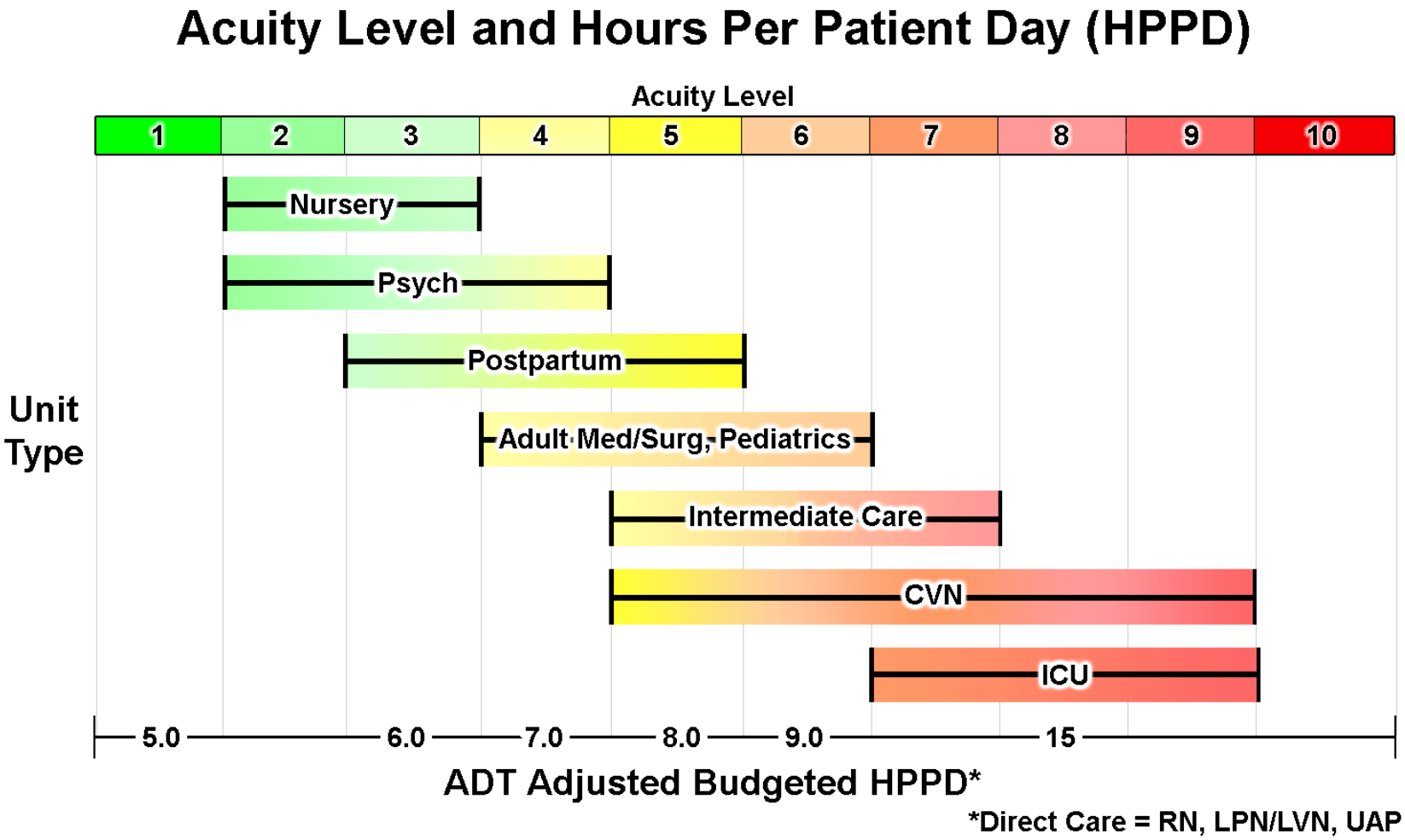
- Reliability – major criterion for assessing the quality and adequacy of an instrument. Stability, consistency, and dependability (Polit & Hungler,2007).

- Automated inter-rater reliability – for the clinical experts during training for discussion and testing of competency

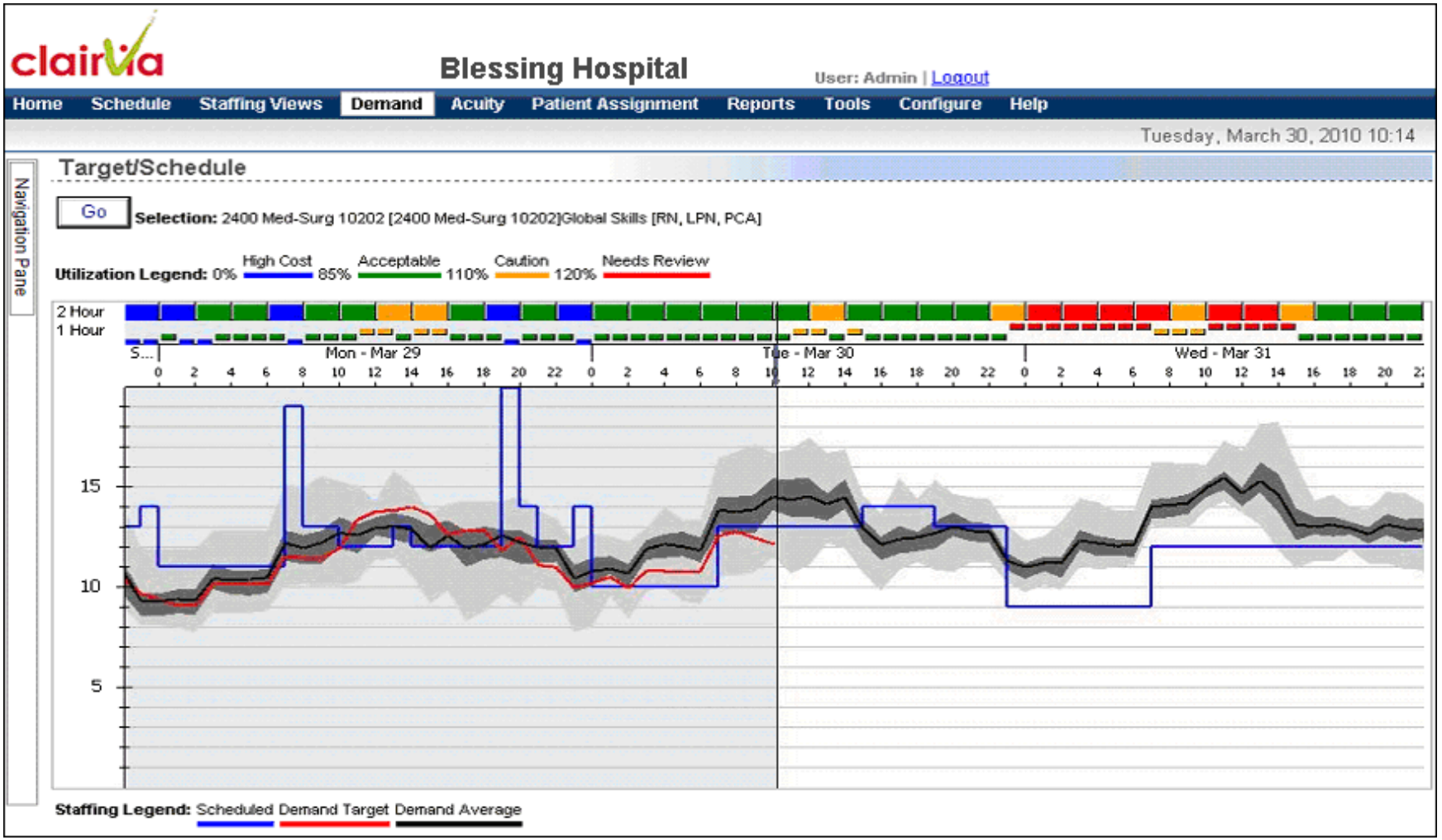
Auditing for Validation

- Incorporated into routine chart auditing process
- Documentation of patient condition matches the acuity level
- Early validation- required discussion of mapping
- Documentation feedback to nursing staff
- % of audits in a timely manner

Acuity Level and HPPD



Acuity-driven Staffing



Results/Outcomes

- Achievement of Clinical and Financial Outcomes
  - Nursing Leaders armed with innovation tools for improved decision making and productivity management
  - Improved Clinical Documentation
  - Improved Staff utilization based on real time and predictive patient demand

Improved Utilization of Staff

- Patient acuity levels calculate real time and with projected resource demand, driving accurate staffing adjustments
- Resource deployment decisions by staffing office made days in advance, reducing cost and last minute crisis calls
- Historically in the CVU, staffing was 1 nurse to every 2 patients
  - Budgeted staffing in CVU based on “feel” for staffing
  - Data verified that selected CVU patients were less acutely ill than previously budgeted HPPD

Documentation Improvement

- Free Texting: Opportunity to reduce free texting
  - Implementation lead to review of free text fields and identified holes in SCM documented fields
  - New fields added to give complete acuity assessment
- Discovered gaps in documentation
  - Patient Acuity assessment requires documentation on patient education and family participation
  - Allowed these Joint Commission required gaps to be identified and updated in SCM
- Complete documentation
  - Patient Acuity requires a minimum of 70% complete documented assessment for a new Acuity score

Documentation Improvement

- Back Date/Time
  - Incomplete acuity assessments shown on Sunrise Patient Acuity
  - Lead to identification of 4-8 hour lag times in entering nursing documentation
  - Awareness of issue illustrated to director level and higher with tools leading to improved nurse practice.

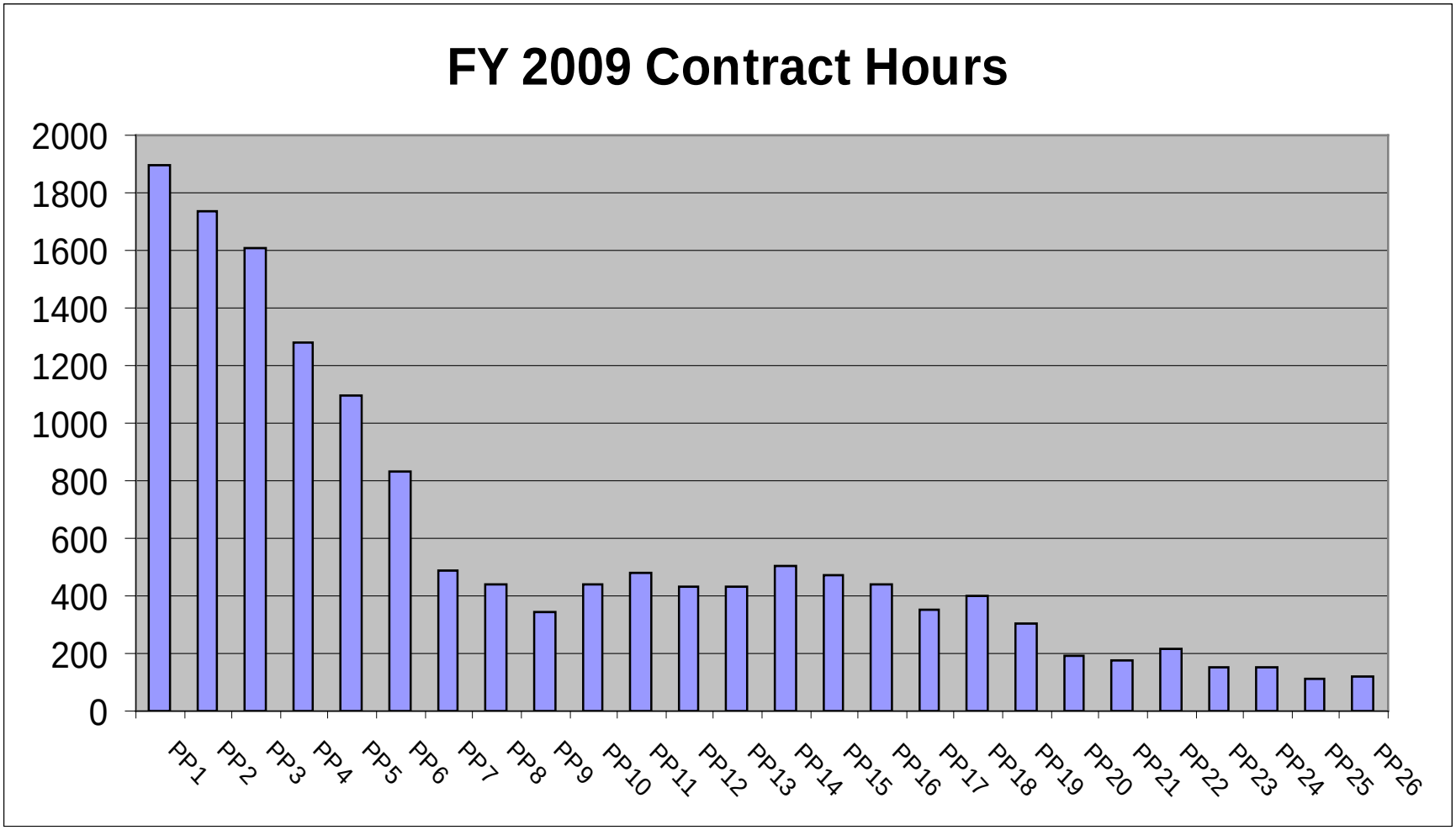
Documentation Improvement

- Educational Updates: Identifying what the RN did/did not know and best practices
  - Implementation of Demand and Acuity lead to review of SCM content as it is mapped to Patient Acuity
  - Identified areas where RNS where unaware of SCM documentation fields
  - Lead to identifying educational opportunities and shared best practices between like units

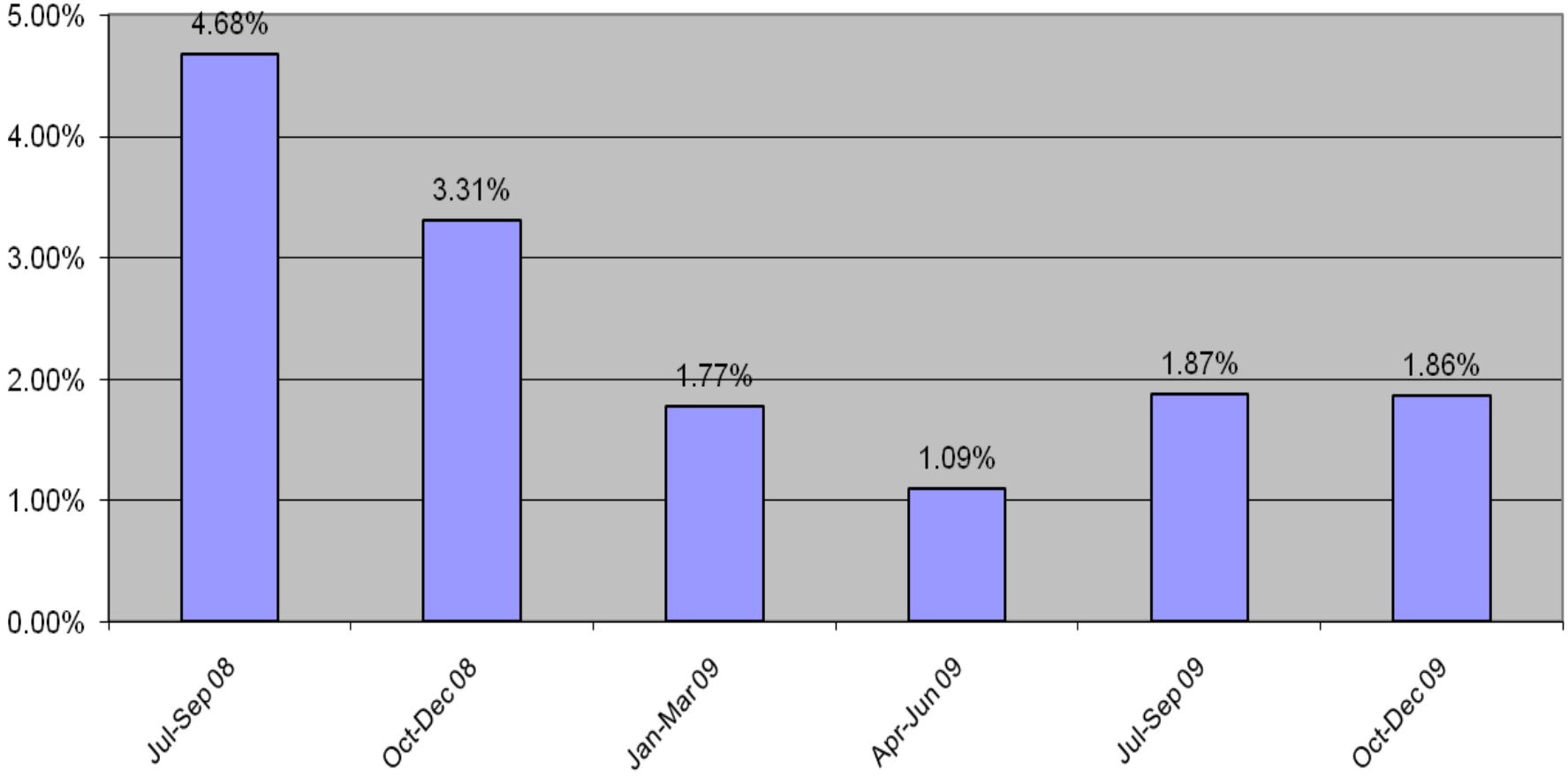
Financial Outcomes

- RN Contract Hours Decreased
- RN Turnover Decreased
- RN Turnover Cost Decreased
- Hours per Patient Day Increased
- Incentive Bonus Pay Decreased

RN Contract Hours



RN Turnover


5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
4.68%
3.31%
1.77%
1.09%
1.87%
1.86%
Jul-Sep 08
Oct-Dec 08
Jan-Mar 09
Apr-Jun 09
Jul-Sep 09
Oct-Dec 09

RN Turnover Cost: 3/08 – 9/08

REF: Labor Management Institute Turnover Calculator Perspectives on Staffing & Scheduling – Jan/Feb. 2007

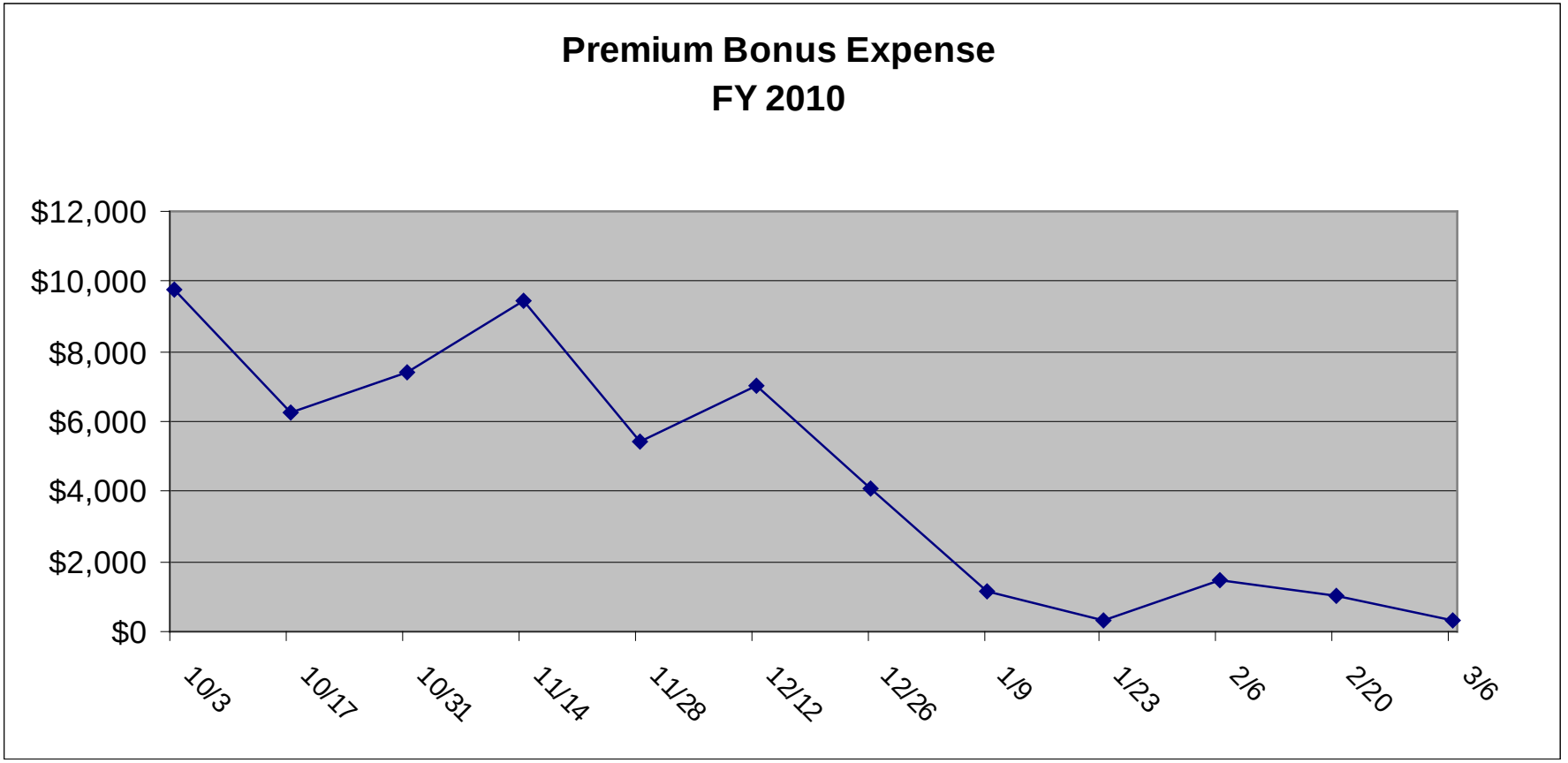
Step	Explanation		
1	Annual Average Wage for the Employee Group	@ $24.72	$51,418
2	Gross-up for Paid Benefits = 1.3% Gross-up for HR Expenses = 0.65% Gross-up for OT, Agency & Traveler Costs for Average Absence =1.05%	X	3.00
3	Total Wages		$154,252.80
4	Turnover Cost based on Average Replacement Time (5.1 Months)	X	0.425
5	Cost per Employee		$65,557.44
6	# of Ex Employees *(includes Terms and Transfer Out)*		55
7	Resignations & Transfers		**$3,605,659.20**

RN Turnover Cost: 3/09 – 9/09

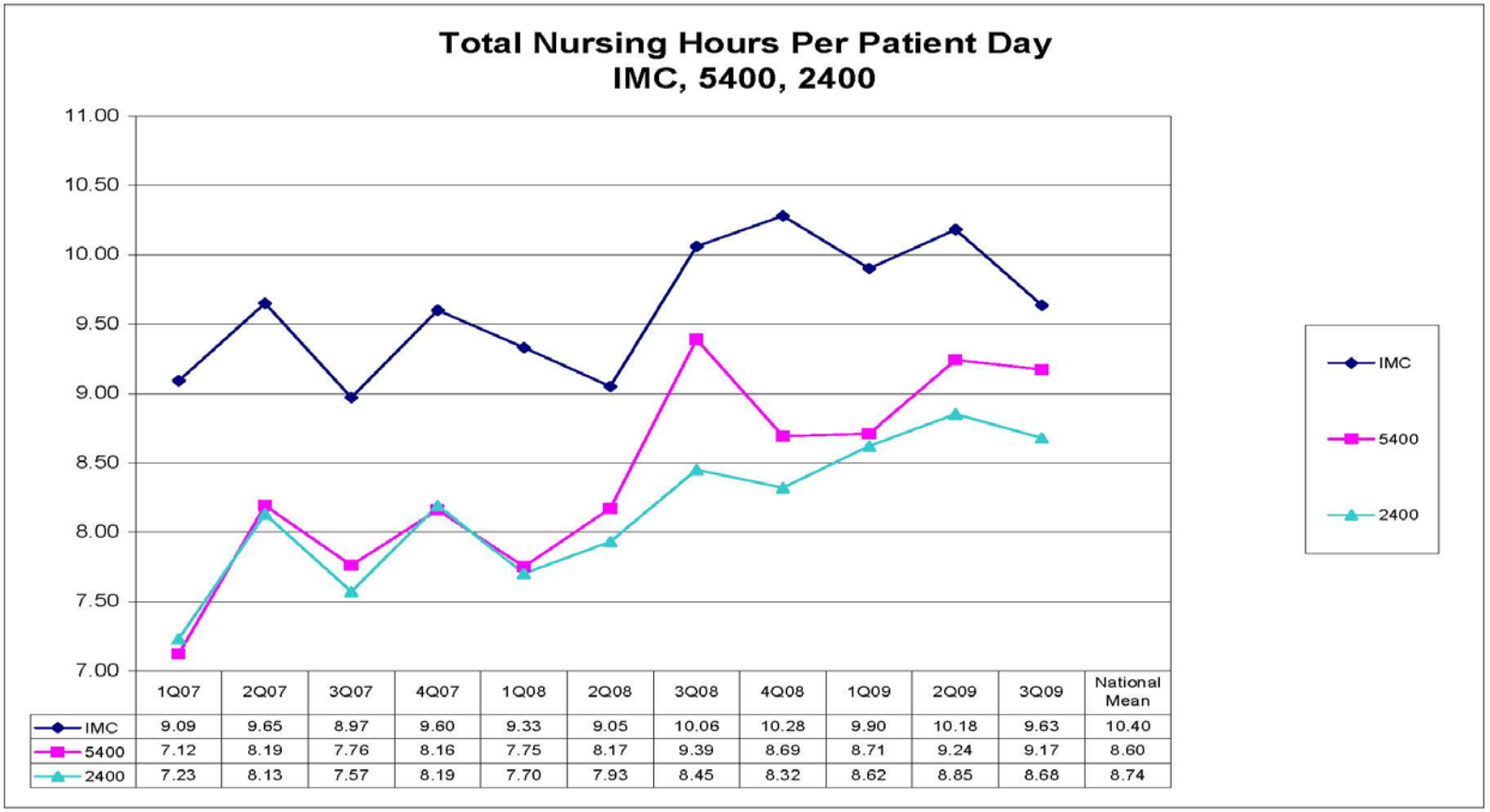
REF: Labor Management Institute Turnover Calculator Perspectives on Staffing & Scheduling – Jan/Feb. 2007

Step	Explanation		
1	Annual Average Wage for the Employee Group	@ $25.88	$53,830
2	Gross-up for Paid Benefits = 1.3% Gross-up for HR Expenses = 0.65% Gross-up for OT, Agency & Traveler Costs for Average Absence =1.05%	X	3.00
3	Total Wages		$161,491.00
4	Turnover Cost based on Average Replacement Time (2.3 Months)	X	0.192
5	Cost per Employee		$30, 952.00
6	# of Ex Employees *(includes Terms and Transfer Out)*		36
7	Total Turnover Cost		**$1,114,289.00**

Premium Bonus Pay



Total Nursing Hours per Patient Day



	1Q07	2Q07	3Q07	4Q07	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	National Mean
IMC	9.09	9.65	8.97	9.60	9.33	9.05	10.06	10.28	9.90	10.18	9.63	10.40
5400	7.12	8.19	7.76	8.16	7.75	8.17	9.39	8.69	8.71	9.24	9.17	8.60
2400	7.23	8.13	7.57	8.19	7.70	7.93	8.45	8.32	8.62	8.85	8.68	8.74

Additional Outcomes

- Improved RN satisfaction
- Improved Report at the end of the shift
  - More outcomes oriented
- As continue to implement Demand Manager will ultimately began seeing additional decreased staffing costs related to overtime

RN Satisfaction

Practice Environment Scale Mean Scores					
Average of All Units in Hospital	**2005**	**2006**	**2007**	**2008**	**2009**
Hospital Affairs	n.d.	n.d.	2.69	2.76	2.92
Quality of Care	n.d.	n.d.	2.95	2.97	3.10
Nurse Manager	n.d.	n.d.	2.86	2.85	3.00
Adequate Resources	n.d.	n.d.	2.59	2.67	2.76
RN/MD Relations	n.d.	n.d.	2.94	2.96	3.00
Mean PES Score	n.d.	n.d.	2.81	2.84	2.95
The higher the score, the more positive the rating on a scale of 1-4					

Next Steps…

- Automated Patient Assignment: Implemented a pilot project in 2 units in Spring 2010
- Research project- engaging staff nurses

Contact Information

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