The Global Quest for Practice-Based Evidence—
An Introduction to CALNOC

Presented on Behalf of the CALNOC TEAM
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From CalNOC to CALNOC

The Collaborative Alliance for Nursing Outcomes (CALNOC)
CALNOC Vision

Leading the Global Quest for Patient Care Excellence
Crucial Healthcare Issues

- Access and Equity
- Cost Containment
- Quality and Safety
- Clinical Effectiveness and Outcomes
- Clinician and System Capacity for EBP & Performance Improvement
- Organizational Capacity for Patient Centeredness
The New Bottom Line…

- Accountability
- Transparency
The First U.S. Nursing Quality Benchmarking Registry
The CALNOC Database Project

The California Nursing Outcomes Coalition (CalNOC) Database Project, now known as the Collaborative Alliance for Nursing Outcomes (CALNOC), is a collaborative initiative engaging a diverse team of staff nurses, advanced practice clinicians, educators, researchers, administrators and leaders in nursing, in attaining a shared vision of designing, systematically implementing, and evaluating a robust nursing outcomes database.
CALNOC Mission

Advance global patient care safety, outcomes and performance measurement efforts by:

- Leveraging a dynamic nursing outcomes database and reporting system
- Providing actionable data to guide decision making, performance improvement, and public policy
- Conducting research to optimize patient care excellence
- Building leadership expertise in the use of practice-based evidence
CALNOC Milestones

1996
CalNOC Launched
First ANA Grant
9 Hospitals

2001-2004
First AHRQ and GBMF Grants
Web-based Reports and New Measures

2008-Now
CALNOC NWONE, JBI and Global Partners
NQF Re-Endorsement
CMS Registry GROWTH!

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CALNOC Unit Level Data
Types of Units/Patient Populations

- Adult Acute Care
  - Critical Care
  - Step Down
  - Medical
  - Surgical
  - Medical/Surgical Combined
  - Observation >24 hr

- Pediatrics

- Post Acute (SNF, Distinct Part)

- Acute Rehabilitation
CALNOC Structural Measures

- Hours of nursing care per patient day
  - ✓ RN HPPD
  - ✓ LPN HPPD
  - ✓ UAP HPPD
- Skill Mix*
- % Contract Hours
- Ratios*
  *calculated by CALNOC

- Voluntary Turnover Rate
- RN Characteristics
  - ✓ Education
  - ✓ Certification
  - ✓ Years of Experience
- Unit Rate of Admissions, Discharges and Transfers
CALNOC Process Measures

• **Falls & Hospital Acquired Pressure Ulcers**
  - Risk assessment
  - Time since last risk assessment
  - Risk Score (Pressure Ulcers)
  - Risk Status
  - Prevention protocols in place

• **Medication Administration Accuracy Safe Practice Adherence**

• **PICC Line Insertion Practices** (who inserted, where, presence of a dedicated team)
CALNOC Outcome Measures

- Hospital Acquired Pressure Ulcer Rate by Stage
- Fall Rate & Injury Fall Rate
- Restraint Prevalence Rate
- Central Line-Associated Blood Stream Infections in PICC Lines
- Medication Administration Accuracy Nurse Safe Practice Findings and Error Rates
Proposed New CALNOC Metrics

• NQF 15 NHSN Infection Metrics—VAP, UTI and CLABSI
• NQF 15 Patient Experience—HCAPHS data gleaned from CMS/AHRQ dataset
• NQF 15 Preventable Death Among Surgical Patients (Failure to Rescue) Measure—computed from OSHPD discharge abstracts
CALNOC 2009
National and Global Growth
CALNOC Alliance with NWONE

- Insights
- Learning
- Scaling Up
- Thank you!

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University of Uppsalla,
Akademiska Sjukhuset

1100 beds
7751 employees
Forces Shaping CALNOC
Metrics & Methods

The Strategic Imperative

To reduce the cost of healthcare delivery while improving the quality, effectiveness, safety, reliability and outcomes of patient care.
Transforming the Discussion from QUALITY to SAFETY

Creating a sense of URGENCY

November 1999–IOM Panel Report–Medical mistakes cost $29 Billion and costs 98,000 lives

(NY Times & CNN)

For internal hospitals only
Crossing the Quality Chasm
Clarifying National Aims for Improvement

• **Safety** -- As safe in health care as in our homes
• **Effectiveness** -- Matching care to science; avoiding overuse and underuse
• **Patient Centeredness** -- Honoring the individual, and respecting choice
• **Timeliness** -- Less waiting for both patients and those who give care
• **Efficiency** -- Reducing waste
• **Equity** -- Closing racial and ethnic gaps in health status
Nursing Sensitive Outcomes

A GLOBAL Professional Imperative

Everyone wants data!

Public, consumers, purchasers, professional groups, health care organizations, accreditation agencies, & regulating agencies!
The First US Nursing Sensitive Hospital Performance Measures 2004
What Is the History of Nursing Sensitive Quality Indicators?

• In 1994, The American Nurses Association (ANA) launched a multifaceted effort to bring attention to the impact of nursing on patient care quality, safety and outcomes.

• In 1995 ANA identified the nation’s first measures of nursing quality to create the nation’s first nursing quality report card.

• In 1996 ANA sponsored a series of pilot testing studies to evaluate the feasibility of using the first nursing quality measures.
What Does “Nursing Sensitive” Mean?

Nursing sensitive quality measures are those patient outcomes that research evidence has established to be reliably linked to the “structure”, “processes” or “dose” of nursing care.
NQF 2004
15 Nursing Sensitive Measures

CalNoc
Leader in the quest for global patient care excellence.
NQF Measure Evaluation Criteria

• Important
• Scientifically Acceptable
• Usable
• Feasible
NQF 2009 Re-Endorsed 12 Nursing Sensitive Measures

1. Death Among Surgical Inpatients with Treatable Serious Complications
2. Pressure Ulcer Prevalence **
3. Patient Falls **
4. Falls with Injury **
5. Restraint Prevalence (vest and limb) **
6. Urinary Catheter-Associated Urinary Tract Infection Rate (NHSN)
7. Central Line-Associated Bloodstream Infection Rate (NHSN)
8. Ventilator-Associated Pneumonia Rate (NHSN)
9. Skill Mix **
10. Nursing Care Hours per Patient Day **
11. Practice Environmental Scale- Nursing Work Index
12. Voluntary Turnover **
Impacts of National Adoption of Nursing Sensitive Measurement

- Voluntary Public Reporting
- Mandated Public Reporting
- Mandated Reporting of Adverse Events
- Conditional payer reimbursement
- Participation in nurse sensitive “registry” as structural indicator and required for federal reimbursement!!!
Why Public Reporting?

Provides information for key decision makers:

• Outside the organization -- consumers and purchasers identify where to seek care; drives purchasing

• Within the organization -- identify strengths and opportunities; drives priorities for PI
Secrecy shields medical mishaps from public view

Cathleen F. Crowley, Eric Nalder, Hearst Newspapers
Sunday, August 9, 2009

Richard Flagg drowned in his blood.

Stanley Stinnett choked on his vomit.

Both were victims of the leading cause of accidental death in America - mistakes made in medical care.

Experts estimate that 98,000 people die from preventable medical errors each year. More Americans die each month of preventable medical injuries than died in the terrorist attacks of Sept. 11, 2001.

Meanwhile, a federal Centers for Disease Control and Prevention study concluded that an additional 99,000 patients a year succumb to hospital-acquired infections. Almost all of those deaths, experts say, also are preventable.

These numbers are not absolutes. There is no
California’s SB 1301—Health & Safety Code sec. 1279.1
Mandatory Public Reporting

Hospitals must report “adverse events” within 5 days after the adverse event detected or within 24 hours if ongoing, urgent, or emergent; must inform the patient by the time the report is made → DHS follow-up & public disclosure.
Six Categories of Adverse Events

1. Surgical events
2. Product or device events
3. Patient protection events
4. Environmental events
5. Criminal events
6. Care management events
Care Management Events

Death or serious disability associated with:

1. A medication error
2. Admin of ABO incompatible blood or blood products
3. Hypoglycemia onset in the hospital
4. Failure to ID or treat hyperbilirubinemia
5. Spinal manipulation in hospital
6. Maternal death
7. **Stage 3 or 4 hospital acquired pressure ulcer**
Washington & Oregon Legislation

- Mandates Hospital Staffing Committees
- Staffing Committees must evaluate staffing plans against evidence & NSQI
- Mandates Public Posting of Staffing Schedules
- Requires changes to Adverse Reporting processes with the State DOH
- The legislation is accompanied by a MOA

- Mandates as of Jan 1, 2006 all Hospitals must have Staffing Committees
- Staffing committees must “develop, monitor, evaluate and modify required staffing plans”.
CMS Roadmap
– The ultimate strategic goal –
“The right care for every person every time.”
Pay for Performance
Linking Outcomes & Reimbursement

- Now emerging as CMS practice
- Clearly generalizable
- Changes the public reporting equation
Where CMS Is Going Next?

NQF Nursing Sensitive Endorsed Measures!

Department of Health and Human Services
Centers for Medicare & Medicaid Services

42 CFR Parts 412, 413, 415, et al. Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and Fiscal Year 2010 Rates; and Changes to the Long Term Care Hospital Prospective Payment System and Rate Years 2010 and 2009 Rates; Final Rule
Nursing Sensitive Indicators
Linked to Reimbursement: CMS

• Beginning in 2009, withholds reimbursement for treatment related to hospital acquired pressure ulcers.
  – California publicly reports hospital acquired pressure ulcer prevalence through the California Hospital Assessment and Reporting Taskforce

• Reduction in reimbursement for treatment of vascular catheter associated blood stream infections.
  – Many states also have begun to gather and report these data – including California via the CDC NHSN Database.
Nursing Sensitive Indicators Linked to Reimbursement: *Proposed CMS FY 2011*

- Patient Falls**:
- Falls with Injury**:
- Catheter Associated Urinary Tract Infection.
- Central Line Associated Blood Stream Infection in the ICU and high risk neonatal intensive care unit.
- Ventilator Associated Pneumonia in the ICU.
- Pressure Ulcer Prevalence **
- Restraint Prevalence** (vest and limb).
- Skill Mix**: Percentage of hours worked by: RN, LPN/LVN, UAP, Contract/Agency.
- Hours per patient day** worked by RN, LPN, and UAP.
- Practice Environment Scale-Nursing Work Index.
- Voluntary turnover** for RN, APN, LPN, UAP.

**CALNOC NQF Endorsed Indicators**
Benchmarking Nursing Sensitive Quality Indicators
Benchmarking is a systematic and continuous measurement process; a process of continuously measuring and comparing an organization’s clinical processes with evidence-based better performers to gain actionable information to guide process improvements.

(Adapted from Watson, p. 3).
Why Benchmarks Matter

• Nursing leaders are challenged to identify appropriate benchmarks for comparative data.
• Benchmarking is an indispensable tool to gauge progress with strategic priorities.
• Benchmarking with other similar hospitals in a confidential context is an important component of improving performance on public report cards.
Maximizing the VALUE of CALNOC

• Leadership leveraging data for decision support and strategic planning
• Expediting extraction of information and evidence FROM practice
• Expanding strategic benchmarks
• Customizing dashboards
• Integrating data sources
• Education
• Capacity development
The Leadership Imperative

- Ensure the accuracy and reliability of Your CALNOC data
- **Use** data for drive decisions; model this.
- Develop **capacity** of all staff to be consumers of CALNOC’s metrics; know your performance and be engaged in evidence-based improvement as a priority.
- **Integrate** nursing metrics into key strategic discussions and dashboards
Magnet Recognition Program: A Journey to Excellence
Optimizing the Contribution of CALNOC Data to the Magnet Journey

• ANCC requires applicants benchmark to the highest representative level—this is indicator dependent

• ANCC requires specific NQF measures and provides applicants with options for other measures that are key to performance improvement in that setting

• CALNOC provides the highest level of representative benchmarking for its medication administration accuracy measure and is studying its representativeness for other metrics.
THE CALNOC ADVANTAGE

Patient Care Excellence
Advocacy & Public Policy
Industry Best Practices
Practice Based Analysis
Indicator Development & Research
Nurse Sensitive Database Registry

Leading the Quest for Global Patient Care Excellence
Impact of Medical Surgical Acute Care Microsystem Nurse Characteristics and Practices on Patient Outcomes

Nancy Donaldson, RN, DNSc, FAAN
Carolyn Aydin, PhD
The Emerging CALNOC Tool Kit
Pressure Ulcers: Prevalence Study & Coding Instructions

Population Surveyed

All adult patients on medical-surgical areas or critical care areas who are present at the time the study is conducted are included in the survey. Include all units that are participating in the CALNOC.

Include the following groups in the study:

- All adult patients (16 years or older)
- Short stay patients
- Recently admitted patients, no minimum stay required

Exclude the following groups from the study:

- Patients under 16 years of age
- Patients for whom the exam would be inappropriate (e.g., patients too unstable to turn)
- Patients not on the unit during survey (e.g., off the unit for tests, etc.)
- Patients who refuse to participate

Frequency of Data Reporting

Data reported as often as monthly and at least annually. Quarterly prevalence studies are recommended.
Observing Medication Administration:
A Critical Skill for Reducing Medical Errors
2 of 2
November 2007

CalNOC “101”
1 of 2
November 2007

CalNOC 2007 Orientation DVD
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Patient Safety and Quality: An Evidence-Based Handbook for Nurses
SAVE – THE – DATE!!

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