The VA Expert Panel:
Value Through a System-Wide Nurse Staffing Model  March 26, 2014

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Portland VA Medical Center
Overview

- How the VA came to an Expert Panel approach to nurse staffing
- Description of the Model
- Policies and Processes
- Interdisciplinary Involvement
- Next Steps
WELCOME TO THE MIDDLE OF NOWHERE
OPEN 9-6
History

- Acuity System implemented in the 1980s


- Early 2000s – VA Central Office queries the field

- 2007 – Staffing Effectiveness Steering Committee

- 2008 – Extensive Literature Review, including the Principles for Nurse Staffing (ANA, 1998); Decision to enhance the existing Expert Panel Methodology
Goal

- Standardized staffing methodology for VA nursing personnel:
  - Conduct and evaluate a pilot (2008 – 2009)
  - Publish a national directive
  - Develop an automated data collection system
  - Analyze correlations between patient outcomes and staffing
“Staffing decisions require evidence-based professional judgment, critical thinking, and flexibility. Staffing needs are individualized to specific clinical settings and cannot rely solely on ranges and fixed staffing models, staff-to-patient ratios, or prescribed patient formulas.”
Expert Panel Process

- Minimum of annually
- Appoint the panel
- Input from nurses and key disciplines
- Collect data
- Data analysis
- Tracking and trending patient outcomes
- Tracking and trending performance indicators
- Make recommendations to Facility Expert Panel (FEP)
- FEP makes recommendations to the CNE
- CNE submits to facility Director (CEO)
- Director approves
- Ongoing monitoring
The Panels: Med-Surg

- Unit-based or combined units
  - Unit Manager – Medical
  - Unit Manager – Surgical
  - Surgical CNS
  - Three staff nurses
  - Pharmacist, Social Worker, Physical Therapist, etc.

Facility Expert Panel

- Staff nurses
- Assistant Nurse Executives
- Evening and night supervisors
- Nurse managers
- Finance office personnel
Inputs into the Process

- Performance on nursing sensitive indicators
- Whether current NHPPD allows for completion of required direct care responsibilities.
- NHPPD comparisons
- Additional factors that have unusual impact, i.e. number of isolated patients, turbulence, special procedures
- Education of staff, education of students, time for performance improvement, time for shared governance
- Replacement factor
- Planned changes, e.g. patient mix, number of beds
Calculation Tool

- Non-productive factor (SVH, etc.)
- Patient turnover rate (turbulence)
- Staff mix
- Fixed staff (managers, sitters, CNS)
- Salary budget calculation
OR Staffing Methodology

Association of Perioperative Registered Nurse (AORN)

- Based on individual patient needs, patient acuity, technological demands, staff member competency, skill mix, practice standards, health care regulations, and accreditation requirements.
- Staffing requirements are relative to department functions and assigned role expectations.
Perioperative Unit Based Panel

- Nurse Manager
- Assistant Nurse Manager(s) Operating Room
- Same Day Surgery Nurse Manager
- PACU Nurse Manager
- Staff RN(s)
- Surgical Technologist
- Educator/Clinical Nurse Specialist/CNL
Perioperative Facility Expert Panel

- Nurse Manager from OR, Same Day Surgery, PACU
- Staff RNs
- Nursing Directors of Perioperative, *Inpatient Care*
- Fiscal representative
- Labor representative
- **Chief of Surgery**
- **Chief of Anesthesia**
- **Chief of Sterile Processing**
## Inputs into the Process: Complexity

<table>
<thead>
<tr>
<th>Category Simple (1-2) to Complex (3-5)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pt. Position</td>
<td>Supine</td>
<td>Supine or other</td>
<td>Complex</td>
<td>Complex</td>
<td>Complex</td>
</tr>
<tr>
<td># of positioning aids</td>
<td>1</td>
<td>2 or more</td>
<td>multiple</td>
<td>multiple</td>
<td>multiple</td>
</tr>
<tr>
<td># staff needed to position</td>
<td>0</td>
<td>0</td>
<td>1 to set position</td>
<td>1 or more to help prep and position</td>
<td>1 or more for entire case</td>
</tr>
<tr>
<td>Instrument trays</td>
<td>Minor basic</td>
<td>Major basic</td>
<td>2 major</td>
<td>3 or more</td>
<td>Extensive use during case</td>
</tr>
<tr>
<td># of specimens</td>
<td>1</td>
<td>1-2</td>
<td>Multiple</td>
<td>Multiple + special prep</td>
<td>Multiple + special prep</td>
</tr>
<tr>
<td># lab tests</td>
<td>0</td>
<td>0</td>
<td>1 or more</td>
<td>Multiple</td>
<td>Multiple</td>
</tr>
<tr>
<td># risk factors</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>Life threatening</td>
<td>Life threatening</td>
</tr>
<tr>
<td># extra staff (additional besides</td>
<td>0</td>
<td>0</td>
<td>1 to help start or finish case</td>
<td>1 RN for special equipment</td>
<td>2 surgical teams + extra staff for entire case</td>
</tr>
<tr>
<td>primary circulating nurse) for counts/specialty equipment needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case prep time</td>
<td>&lt;10 min</td>
<td>&lt;20 min</td>
<td>&lt;30 min</td>
<td>&gt;30 min</td>
<td>&gt;30 min</td>
</tr>
</tbody>
</table>
Inputs: Workload indicators

- Nursing Assessment: Documentation:
  - Preoperative Assessment / Time Out Checklist - Briefing & Debriefing / Care Plan
  - VistA Screens: 10 mandatory intraoperative menu screens
- Intraoperative Care plan / Intraoperative specialty documentation: laser logs, prosthetic sheets, blood, etc.
- Postoperative Documentation: SBAR handoff to PACU
- Medication and/or X-ray orders
- Irrigation and set up (may require medication to be added)
- Transfusions/Cell Saver
  - Specialty Equipment and/or Monitoring Systems: Types + Complexity
    - Video towers, microscopes, headlights, fluid/irrigation pumps
Inputs: Workload Indicators

- Specimens: Amount + Complexity + Accurate handling and documentation
- Volume of instruments/trays and set-up design requirements and counting all items before and after case.
  - 1 tray with just 23 instrument to 15 trays with hundreds of instruments.
- Special Prep & Positioning Protocols/Equipment
  - Wilson frame for prone, spider shoulder holder, stirrups for lithotomy position, etc...
- Amount of Supplies: basic vs. specialty case
- Case Time: Set up/Break down (consider dressings-immobilizers/transport requirements)
Inputs: Workload Indicators

- Patient/family Education

- Patient/family Communication

- Coordination of interdisciplinary team: Radiology, Respiratory Therapy, Laboratory, Pharmacy, Students: Nursing, Allied Healthcare, Residents/Medical Students, Pre and Post op units to include patient handoffs
Inputs: Administrative Indicators

- Case Set up and Turn Over needs
- Special Equipment needs (Loaner Sets/Laser)
- Special Prosthetic Needs (Delivery of special order implants)
- Special Biological needs (Management & Documentation)
Inputs: Administrative Indicators

- Special Supply Needs (Dressings/Transport)
- Operating Room Efficiency Matrix: First Time Starts, Utilization, Lag Time & Cancelations
- Staff Experience Levels: (novice to expert)
- Turnover Rate of Staff
- Orientation (novice OR nurse verses trained OR nurse)
- Cross-training to multiple surgical subspecialties
**Inputs: Environmental factors**

- Unit Physical layout
- Accessibility of Equipment
- Accessibility of Resources
- Accessibility to Support and Personnel
- Additional information the committee should know and understand
Projected Workload Assumptions

- Expected growth based on initiatives, changes based on models of care, access?
- Adding new surgical subspecialty?
- Changes in mix of case complexity?
- Increased technological support for new programs?
AORN OR Staffing Methodology

- **Step 1.** \( \# \text{ rooms} \times \# \text{ hours per day} \times \# \text{ of days per week} = \text{total hours to be staffed} \)

- **Step 2.** Total hours staffed per week \( \times \# \text{ people needed per room} = \text{total working hours per week} \)
## Room Configuration

<table>
<thead>
<tr>
<th>OR Room Description</th>
<th>Room Operation per day</th>
<th>Hours of Operation per day</th>
<th>Days per Week</th>
<th>Staffed Hours per Week</th>
<th>Staff per room</th>
<th>Working Hours per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0700-1530</td>
<td>8</td>
<td>5</td>
<td>40</td>
<td>2.5</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>0700-1530 (Locals)</td>
<td>8</td>
<td>5</td>
<td>40</td>
<td>2</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>0730-1530</td>
<td>8</td>
<td>5</td>
<td>40</td>
<td>2.5</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>0700-1730</td>
<td>10</td>
<td>5</td>
<td>50</td>
<td>3</td>
<td>150</td>
</tr>
<tr>
<td>5</td>
<td>0700-1730</td>
<td>10</td>
<td>5</td>
<td>50</td>
<td>2.5</td>
<td>125</td>
</tr>
<tr>
<td>6</td>
<td>0700-1730</td>
<td>10</td>
<td>5</td>
<td>50</td>
<td>2.5</td>
<td>125</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total: 680**
Calculation of Total Benefit & Relief Hours

- Average Vacation Hours per Year
- Available Sick Hours per Year
- **Call Replacement**
- Education per year
- **Military leave**
- **Orientation (12 Weeks)**
- **Break Hours**
- **Lunch Hours**
- **Turn Over Time**
## Calculations

### Basic FTEE Requirements

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Hours per Week</td>
<td>670</td>
</tr>
<tr>
<td>Employee Work Hours per Week</td>
<td>40</td>
</tr>
<tr>
<td><strong>Basic FTEE</strong></td>
<td><strong>16.75</strong></td>
</tr>
</tbody>
</table>

### Relief Factor Calculation

<table>
<thead>
<tr>
<th>Requirement</th>
<th>RN</th>
<th>ST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Vacation Hours per Year</td>
<td>200</td>
<td>156</td>
</tr>
<tr>
<td>Available Sick Hours per Year</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Education per year</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Military leave</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Orientation</td>
<td>107</td>
<td>0</td>
</tr>
<tr>
<td>Other - FTEE detailed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Break Hours</td>
<td>260</td>
<td>260</td>
</tr>
<tr>
<td>Lunch Hours</td>
<td>195</td>
<td>195</td>
</tr>
<tr>
<td><strong>Total Benefit Hours</strong></td>
<td>962</td>
<td>811</td>
</tr>
<tr>
<td>Replacement FTEE</td>
<td>0.46</td>
<td>0.39</td>
</tr>
<tr>
<td>Staff mix</td>
<td>70%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Replacement Factor</strong></td>
<td>0.32</td>
<td>0.12</td>
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<tr>
<td>Weighted Replacement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relief Factor</td>
<td>1.44</td>
<td></td>
</tr>
</tbody>
</table>

### Notes
- (# of staff oriented * weeks of orientation * 40) / # of FTEE
- 15 minute break + 15 minute handoff x 260 days divided by 60 minutes = 130 hours.
- Breaks require a thorough handoff. If staff is scrubbed it takes additional time in order to take lunch, or other break, on the front and back side of the break. One break in the AM and one in the PM so a total of 260.

Total benefit hours divided by 2080 hours.
Calculations Continued

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relief FTEE</td>
<td>16.75</td>
</tr>
<tr>
<td>Basic FTEE</td>
<td>16.75</td>
</tr>
<tr>
<td>Replacement Factor</td>
<td>0.44</td>
</tr>
<tr>
<td>Total Relief FTEE</td>
<td>7.38</td>
</tr>
<tr>
<td>Call Relief FTE</td>
<td>0.423077</td>
</tr>
<tr>
<td>Actual usage of call hours</td>
<td>880</td>
</tr>
<tr>
<td>Call Relief FTE</td>
<td>0.42</td>
</tr>
<tr>
<td>Total Direct Care FTEE</td>
<td>24.56</td>
</tr>
<tr>
<td>Basic FTEE</td>
<td>16.75</td>
</tr>
<tr>
<td>Relief FTEE</td>
<td>7.38</td>
</tr>
<tr>
<td>Call Relief FTEE</td>
<td>0.42</td>
</tr>
<tr>
<td>Total FTEE Direct Patient Care</td>
<td>24.56</td>
</tr>
<tr>
<td>Total RN FTEE</td>
<td>17.19</td>
</tr>
<tr>
<td>Total ST FTEE</td>
<td>7.37</td>
</tr>
</tbody>
</table>

AORN supports indirect patient staff (IPC) up to 1/2 direct patient staff (DPC).

IPC includes but is not limited to transport, MAS with relief factor, Scheduler, business manager, inventory manager, contract/consignment, Charge nurse, and Nurse Manager.

Indirect Care Providers

“The number of indirect care staff members vary according to function, but traditional compliment is one indirect caregiver to two direct care givers.” — AORN

- Nurse Manager or Director
- Assistant Nurse Manager
- Schedulers
- Charge Nurse
- Educators

- Secretaries
- Environmental Services
- Health Technicians
- Transport
- Nursing Assistant
From Unit Panel to Facility Panel

Department of Veterans Affairs

Memorandum

Date: 11/20/13
From: Unit Staffing Methodology Expert Panel
Subject: Unit Staffing Methodology Expert Panel
To: Facility Staffing Methodology Expert Panel
Thru:

Facility:
Unit:
Unit Panel Members:

<table>
<thead>
<tr>
<th>Member</th>
<th>Staff Position</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Add rows as needed*

Unit-Based Expert Panel Staffing Recommendation and Analysis

Executive Summary:
- Talking Points (highlight important notes)
- Recommended NHPD, Staff Mix, and FTEEs

Background:
- Unit Details
- Geography
- Staff Flow
- Patient Population
- Patient Population Demographics (include risk rates)
- Staff Demographics
- Programs (brief overview)

Projections:
- Major changes anticipated to the unit
  - Geography
  - Patient Population

Leave Factor Estimates (Create a table):

<table>
<thead>
<tr>
<th>Factors</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>Use historical, projected, or earned</td>
</tr>
<tr>
<td>SL</td>
<td>Use historical, projected, or earned</td>
</tr>
<tr>
<td>Holidays</td>
<td>Possible Formula</td>
</tr>
</tbody>
</table>

Several paragraphs
10 holidays per year
- Typically staff work ¼ of holidays
- (10%) * shift hours = Holiday Hours

Education
- List Annual Hours:
  - List and quantity all required education hours nursing personnel will perform within the year (suggestions: TMS hours, facility education hours, qualifications/competencies, unit specific education hours, etc.)

Systems Improvement
- Systems Improvement (list and quantify)
- Shared governance (list and quantify)
- Committee participation (list and quantify)
- Evidence based practice (list and quantify)
- Research (list and quantify)

Students/Preceptor
- List and quantify hours

Authorized Absence
- List and quantify hours any union stewards with official union time, VISN/Central Office level committee face-to-face time, etc.

LWOP
- Use historical, projected, or earned
- Note: FMLA is subdivided into AL, SL, and LWOP

Military Leave
- See military example below

NOTE: List and quantify as much as possible and provide a brief explanation on how those numbers were derived. All hours should be averaged across all budgeted staff.

Example: One staff member is a reservist, serving 1 weekend a month and 2 full weeks throughout the year. This can be figured a couple different ways, but we know for sure 80 hours will definitely be used, and we can guess that anywhere between 0 to 192 hours will be replaced for those weekend times. Taking a conservative approach we may add in the full 192 to the 80 to equal 272 hours. These hours will then be divided by the unit’s budgeted FTEEs, in this case the one staff member is an RN, so they would be divided by the 32 budgeted RNs to equal 8.5 hrs. That says the unit has 8.5 hours of military time that should be accounted for in the leave factor.

NHPDD Rationale:
- Comparison Data (VA comparisons, LMI, NDNQI, etc.)
- Complexity (Frequency, Duration, and Intensity) of Nursing Care:
  - Top 5 diagnoses
  - Patient Population Variables and Comments
- Program Details (specifically nursing programs and programs nursing collaborate with)
- Support Services
  - Support the unit has
  - Support nursing provides
- Geographical factors that affect NHPDD
- Other unit specific details that take nursing personnel from direct care
- Rationale conclusion to comparison data in relation to unit and NHPDD

Staff Mix Rationale:
- Justification for recommended staff mix

Cost Analysis:
- Quantify current costs due to staffing related inefficiencies (work outside the scope of direct care duties, fee services, retention/recruitment, overtime, agency fees, etc.)
  - Compared to variances due to FTEE costs

Possible resource restructuring (effective management of duties to appropriate personnel)

Possible Process Improvement Areas:
- List areas the inefficiencies the unit has identified (these areas can be process improvement projects as opposed to staffing related issues)

Recommendation:
- Conclusions (quick highlights and summary of calculating tools results)

Name ___________________________ Date ______

Name ___________________________ Date ______

Name ___________________________ Date ______

Appendix:
Put in data tables including Leave Factor and Staffing Calculator
Facility Expert Staffing Panel Concurrence

Department Presenting: ________________________________

Date of Presentation: ________________

Notes:

__________________________________________

__________________________________________

__________________________________________

__________________________________________

Recommendation:

☐ Approve. Forward to ADPCS

☐ Approve with the following recommendations:

__________________________________________

__________________________________________

__________________________________________

☐ Disapprove. Return to Department Expert Panel for further work on:

__________________________________________

__________________________________________

__________________________________________

Print Name: ________________________________

Signature: ___________________________ Date: ________________

Date form created/Modified: 3/23/11-08/PA Location of form: S:\Nursing\2011 Staffing Methodology\Facility Expert Panel
Staffing Methodology for VHA Nursing Personnel: Complete Course

VA 14411
Revision: 1 - 8/27/2012 01:00 PM America/Los Angeles

Online Content Structure

The sub-objects need to be completed in sequential order

☑ 11/2/2013

Launch Brochure - Staffing Methodology for VHA Nursing Personnel: Complete Course

- Staffing Methodology for VHA Personnel
- Staffing Methodology for VHA Personnel: Expert Panel Implementation
- Staffing Methodology for VHA Personnel: Toolkit
- Staffing Methodology for VHA Personnel: Evaluation
- Link to Evaluation
Implementation Resources and Tools for the Field
(tools still being finalized and will be added as they become available)

- Staffing Methodology OR Template NEW
- Staffing Methodology Draft Memo Template
- OIG CAP Nurse Staffing Review Guide Evaluation of Nurse Staffing List of Units Station Staffing Data
- DSS RUG IV CLC Nursing Acuity Bed Products on SM CLC Workbook CLC Workbook RUG (Oct. 2013)
- Staffing Methodology FAQs
- Staffing Methodology Guidebook
- Expert Panel Decision Form
- 2009 VHA Nursing Hours Per Patient Day Inventory Report
- Staffing Methodology Indicators
- OHI CAP Review Guide
- Staffing Methodology Data Sources Toolkit (Nov. 2013)

Minutes

December 2013
September 2013
August 2013
April - September calls cancelled
March 2012
Attachment: Calculating Nursing Need

August 2011
July 2011
June 2011
May 2011
Next Steps

- Ensure 100% RN education and implementation

- Pilot in specialty areas: Emergency Room, Spinal Cord, Operating Room, Specialty Clinics (Primary Care Ratios)

- Full automation – data entry through report production

- Evaluation Centers in Tampa and Ann Arbor
  - What are the triggers for moving to the next staffing levels?
  - What percent of variance is acceptable?
  - What are the benchmarks by unit type and facility complexity?
  - What patient care outcomes can be attributed to this model?
Value

- Shared governance
- Gives nursing control
- Articulates the work of nursing
- Staffing becomes a conversation with heightened understanding
Parting Thoughts

- Life will never surrender its secrets to a yardstick
  
  Dee Hock, Plexus Institute
Questions?