

July 19, 2010

STAFFING METHODOLOGY FOR VHA NURSING PERSONNEL

1. PURPOSE: This Veterans Health Administration (VHA) Directive provides a nationally standardized method of determining appropriate direct care staffing for VA nursing personnel at all points of care to be implemented in each facility no later than September 30, 2011. This methodology is intended to determine full-time equivalent (FTE) employees for long-range planning and budget projections. This Directive defines the steps that all VHA facilities must follow to determine appropriate levels of nursing staff (numbers and types) at all points of care. Staffing requirements determined through this methodology support and maintain a standardized approach to ensuring adequate nursing personnel across the organization.

2. BACKGROUND

a. The Department of Veterans Affairs (VA) must be able to demonstrate that it provides appropriate, high-quality health care to Veterans. Given the continuing evolution of the VHA mission and structure, workforce, recruitment and retention issues, and requirements related to accreditation, VA must have a methodology for relating staffing levels and staff mix to patient and resident outcomes, clinical effectiveness, and efficiency.

b. The VHA Office of Nursing Services (ONS) conducted a preliminary review of the staffing literature in 2007, followed by a systematic literature review by Haddock & Fasoli (2008), to identify best practice staffing methodologies. Although the findings from these reviews and from the American Nurses Association (ANA)'s Principles for Nurse Staffing (1998) support the continued use by ONS of the Expert Panel Staffing Methodology, the recent review also provided some new recommendations. These recommendations focus on data that enhances the Expert Panel decision-making process for staffing in the current health care environment. Incorporating such data into the Expert Panel Staffing Methodology uses existing evidence to strengthen decisions about staffing.

c. The development of a standardized, fully-automated staffing methodology for nursing personnel will be accomplished in three phases. This Directive represents the first phase of providing a nationally-standardized methodology process to determine staffing for VA nursing personnel requirements for all inpatient points of care. The second phase will provide guidance to include additional points of care, including Emergency Department (ED), Operating Room (OR), specialty clinics, and Ambulatory Care. The third and final phase will provide guidance for a fully-automated system for all points of care that encompasses initial data entry through report production. This includes automated methods that integrate with VA databases including the Decision Support System (DSS), the pay system, and the VA Nursing Outcomes Database (VANOD). VANOD reports enable personnel to correlate nursing sensitive indicators to evaluate staffing effectiveness.

THIS VHA DIRECTIVE EXPIRES JULY 31, 2015

VHA DIRECTIVE 2010-034

July 19, 2010

d. 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. The staffing methodology described in this Directive requires the systematic collection of a minimum set of core evidence-based data to support staffing decisions and a foundation of professional judgment, critical thinking, and flexibility with an emphasis on patient or resident outcomes. ONS has excluded the use of the 1980's VA patient classification system in Automated Management Information System (AMIS), also known as VISN Workload Measurement (VWM) for any metrics, as it is an outdated system and does not accurately measure the complexity of care. No other evidence-based patient acuity data is currently known or available for acute care.

e. VANOD is used as the primary source of VA data for nursing sensitive indicators. Resident Assessment Instrument (RAI) Minimum Data Set (MDS) is used in long-term care facilities nationwide to assist in planning care and monitoring quality data. Information management systems continue to grow in sophistication to support development of standardized data for health care providers in varied care settings. The intent is to use standardized information data management strategies that facilitate analysis of the relationships among staffing numbers, mix, care delivery models, and patient outcomes for multiple points of care. The goal is to develop standardized information for a data-driven and evidence-based approach used to determine staffing plans that support high-quality patient and resident care in the most effective manner possible.

f. **Definitions.** The following definitions apply throughout this Directive:

(1) **Direct Care.** Direct care responsibilities are defined as all patient or resident-centered nursing activities performed by staff assigned to the unit in the presence of the patient or resident and patient or resident-related activities that occur away from the patient or resident. Examples include: nursing assessment; planning, treatment, and preparation time; medication orders and administration; nursing rounds; admission, transfer and discharge activities; patient or resident teaching; patient or resident communication; coordination of patient or resident care; and documentation.

(2) **Expert Panel.** An expert panel is an advisory group comprised of individuals with in-depth knowledge of evidence-based factors impacting staffing needs at the point of care. The panel is best-suited to make judgments to deliver recommendations regarding staffing levels and overseeing outcome analysis and modifications to staffing recommendations.

(3) **Nursing Hours Per Patient Day (NHPPD).** NHPPD refers to the number of direct care hours related to the patient or resident workload. This applies mostly to inpatient care settings.

(4) **Nursing Sensitive Indicators.** Nursing-sensitive indicators reflect the structure, process, and outcomes of nursing care. The structure of nursing care is indicated by the supply of nursing staff, the skill level of the nursing staff, education, and certification, if

applicable, of nursing staff. Process indicators measure aspects of nursing care such as assessment, intervention, and registered nurse (RN) job satisfaction. Patient outcomes that are determined to be nursing sensitive are those that improve if there is a greater quantity or quality of nursing care (e.g., pressure ulcers, falls, and intravenous infiltrations). Some patient outcomes are more highly related to other aspects of institutional care, such as medical decisions and institutional policies (e.g., frequency of primary C-sections, cardiac failure) and are not considered "nursing-sensitive" (source: <http://vaww1.va.gov/nursing/staffing.asp>). *NOTE: This is an internal VA web site not available to the public.*)

(5) **Patient and Resident Outcomes.** Patient and resident outcomes are measures that describe a patient or resident's health status or level of functioning following, or during, an episode of health care or components of care delivery.

(6) **Performance Indicators.** Performance indicators are measurement tools used to monitor and evaluate the quality of important functions. It is numerical information that quantifies input, output, and performance dimensions of programs, projects, and services (see the Office of Quality and Performance website at: <http://vaww.oqp.med.va.gov>). *NOTE: This is an internal VA web site not available to the public.*

(7) **Performance Measures.** Performance measures are indicators that are used to quantify achievement of established targets.

(8) **Points of Care.** Points of care are the locations in which patient or resident health services are provided. These locations of care delivery can also be described and quantified in nomenclature for treating specialties, resource utilization groupings (RUGs), current procedural terminology (CPT) codes, and stop codes among others. Examples include inpatient units, ambulatory clinics, specialty treatment and diagnostic areas, community living centers (CLCs), home care, and telehealth medium such as secure messaging, telephone, or videoconferencing.

(9) **Replacement Factor.** A replacement factor is a multiplier used to compute the numbers of FTE employees required for staff replacement during predicted absences.

(10) **Resident Assessment Instrument (RAI) Minimum Data Set (MDS).** The RAI MDS is a standardized, valid, reliable, and interdisciplinary assessment used for residents in CLCs for treatment planning and follows a process incorporating assessment, problem identification, care planning, care delivery, and evaluation of outcomes. The MDS is the assessment portion of the process.

(11) **Resource Utilization Groups (RUGs).** RUGs are an industry-accepted metric that measures the interdisciplinary resource required for a nursing home resident. Derived from the RAI MDS, they reflect both the Case Mix Index (CMI) and the Activities of Daily Living (ADLs) in determining the group.

(12) **Staffing Methodology.** Staffing methodology is a process for determining staffing levels based on an analysis of multiple variables to include patient or resident

VHA DIRECTIVE 2010-034

July 19, 2010

needs, environmental and organizational supports, and professional judgment to recommend safe and effective staffing levels at various points of care.

(13) **Staffing Plans.** Staffing plans are written documents by service, discipline, and organization. Staffing plans for nursing personnel are developed using the guidance contained in the Attachment A to this Directive.

(14) **VA Nursing Outcomes Database (VANOD).** VANOD is a national database of clinically relevant, nursing-sensitive indicators to support strategic and operational decision-making and operations.

3. POLICY: It is VHA policy to that this VHA staffing methodology for VHA nursing personnel process must be used to plan staffing levels appropriate at each facility to ensure that a qualified and competent nursing workforce is available to provide safe, quality health care.

4. ACTION

a. **Principal Deputy Under Secretary and Deputy Under Secretary for Health for Operations and Management.** The Principal Deputy Under Secretary and Deputy Under Secretary for Health for Operations and Management are responsible for:

(1) Standardized information data management strategies that will permit analysis of the relationships among staffing numbers, mix, care delivery models, and patient or resident outcomes for multiple points of care.

(2) Standardized evidence-based approaches to staffing and the use of such information to provide high quality patient and resident care in the most efficient manner possible.

b. **Chief Nursing Officer.** The Chief Nursing Officer is responsible for implementing this methodology no later than September 30, 2011 (see Att. A and Att. B), to include:

(1) The overall coordination of the development and implementation of a standardized staffing methodology for nursing personnel to include trending reports for automating appropriate data for input, consideration of necessary modifications for nursing sensitive indicators, and updating resource web links, as needed.

(2) Working in close collaboration with other program offices and VHA elements to assess trends in workforce and workload measurement systems in order to identify and implement additional metrics, information systems, and outcome measures. This assists Veterans Integrated Service Network (VISN) and facility leadership in determining staffing levels.

(3) Working in collaboration with the VHA Chief Information Officer to identify and develop the information systems requirements needed to correctly capture point of care staffing information

(4) Providing consultation and oversight to assist VISN and facility leadership to determine accurate and appropriate staffing levels and mix.

c. **VISN Director.** Each VISN Director is responsible for providing oversight to ensure the alignment of facility-based resources for staffing requirements within available resources as determined by the methodology defined in this directive.

d. **Facility Director.** Each facility Director is responsible for:

(1) Implementing this Directive no later than September 30, 2011.

(2) Supporting and implementing the staffing plans within available resources as identified from the staffing methodology process in Attachment A and B no later than 12 months after publication of this directive.

(3) Providing the necessary resources to implement the staffing plans and facilitate operations to accurately capture the necessary information. This includes ensuring local access to the nursing sensitive indicators, available at this link: <http://vaww1.va.gov/nursing/staffing.asp>.
NOTE: This is an internal VA web site not available to the public

(4) Reevaluating the staffing plans, at a minimum on an annual basis, and incorporating projected staffing needs into annual review of the nursing personnel budget.

e. **Facility Associate Director for Patient Care Services or Chief Nurse Executive.** The Associate Director for Patient Care Services or Chief Nurse Executive is responsible for:

(1) Implementing this staffing methodology; at a minimum of annually, within their facility in conjunction with the facility executive leadership team.

(2). Ensuring numbers, types, and assignments of nursing personnel are consistent with the provisions of this Directive and the facility strategic plan, regardless of organizational structure.

(3) Ensuring that input is solicited from nursing staff and interdisciplinary partners in determining required staffing levels and staff mix in alignment with the needs of all patient or resident care areas.

(4) Developing a facility expert panel to review unit recommendations for system impact.

(5) Partnering with the Chief of Staff on the development and review of the effectiveness of the staffing plans.

(6) Ensuring first-line supervisors and service line managers, or equivalent management positions undertake the development and implementation of staffing plans for areas under their direction, to include: collection of data; data analysis; tracking and trending variations in patient and resident outcomes; performance indicators and monitors to assess their effectiveness.

f. **Facility Nurse Manager as First Line Supervisor.** The Nurse Manager is responsible for:

VHA DIRECTIVE 2010-034

July 19, 2010

- (1) The development of a unit-based expert panel consisting of nursing staff who:
 - (a) Work on the unit;
 - (b) Represent all nursing roles (RN, Licensed Practical Nurse, Nursing Assistant, Health Care Technician);
 - (c) Express a desire and willingness to support this work;
- (2) The development and implementation of approved staffing plans for areas under their direction

g. **The Unit-Based Expert Panel**. The unit-based expert panel is responsible for:

- (1) Supporting data collection of nursing sensitive indicators;
- (2) Conducting a comparative analysis of staffing needs using appropriate measures, for example NHPPD and RVUs as appropriate for the care setting;
- (3) Making recommendations for the target NHPPD if appropriate for the care setting;
- (4) Calculating projected and daily staffing requirements using the tools provided.

5. REFERENCES

- a. Title 38 United States Code (U.S.C.) §8110, §7421, and §7422.
- b. Title 5 U.S.C. §7106(b)(1).
- c. VA Directive 5001, General Introduction and Administration.

6. FOLLOW-UP RESPONSIBILITY: The Office of Nursing Services (108) has responsibility for the content of this Directive. Questions may be addressed to 202-461-6700.

7. RESCISSIONS: None. This VHA Directive expires July 31, 2015.

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Under Secretary for Health

DISTRIBUTION: E-mailed to the VHA Publications Distribution List 7/20/2010

ATTACHMENT A

THE STAFFING METHODOLOGY PROCESS

1. Nurse Manager and the Unit-Based Expert Panel Formulate Staffing Recommendations

The following standardized process identifies the steps required by facilities to determine appropriate nursing staff resources and allocation for all points of care. This process is to be followed annually, at a minimum for purposes of projecting and budgeting full-time employee (FTE).

a. The Nurse Manager and Unit-Based Expert Panel review the current staffing plan for the unit and note the current Nursing Hours per Patient Day (NHPPD) if NHPPD is appropriate for the care setting.

(1) If previously established NHPPD is not available, the Nurse Manager determines NHPPD through the VA comparison grid available at: <http://vaww.oqp.med.va.gov>). **NOTE:** *This is an internal VA web site not available to the public.* A comparative analysis of NHPPD data from other resources is also recommended, such as the Labor Management Institute (LMI) available at <http://www.lminstitute.com>, and the National Database for Nursing Quality Indicators (NDNQI) available at <http://www.nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/PatientSafetyQuality/Research-Measurement/The-National-Database.aspx>).

(2) NHPPD calculations must reflect direct care staff responsibilities based on the following guidelines:

(a) Direct care staff responsibilities are defined as all patient or resident-centered nursing activities performed by staff assigned to the patient or resident. Examples of such patient and resident-centered activities include:

1. Nursing assessment;
2. Planning, treatment, and preparation time;
3. Medication orders and administration;
4. Nursing rounds;
5. Admission, transfer and discharge activities;
6. Patient or resident teaching;
7. Patient or resident communication;
8. Coordination of patient or resident care; and

VHA DIRECTIVE 2010-034
July 19, 2010

9. Documentation.

(b) Staffing categories included are:

1. Assistant Nurse Manager while performing direct patient care activities;
2. Charge Nurses;
3. Clinical Nurse Leaders;
4. Staff registered nurses (RNs);
5. Graduate nurses (not yet licensed) who have completed unit orientation;
6. Licensed practical nurses (LPNs) or vocational nurses (LVNs);
7. Nursing assistants (NAs); and
8. Patient care health technicians.

(c) Staffing categories excluded are:

1. Nurse Managers;
2. Assistant Nurse Manager while performing administrative activities;
3. Advanced Practice Nurses (i.e. NP, CNS);
4. Unit secretaries or clerks;
5. Monitor technicians;
6. One-on-one (1:1) sitters, whose only role is observe patients;
7. Escorts;
8. Students who are fulfilling educational requirements; and
9. Therapy assistants.

b. Nurse Managers work in conjunction with the Unit-Based Expert Panel to determine unit workload as follows, to:

(1) Select a period of time within the past year that is representative of a unit's typical census and workload trends.

(2) Evaluate the impact of appropriate indicators. VA Nursing Outcomes Database (VANOD) will be used where applicable. Mandatory and optional nursing sensitive indicators to be considered must use ONS endorsed data sources. Mandatory is defined as the indicators required to populate the calculator tools. Optional indicators are determined locally based on specific unit characteristics.

(3) Develop a narrative summary describing the impact of appropriate indicators to reflect the overall complexity of care on the unit. This is to be presented to the Facility Based Expert Panel in support of staffing recommendations.

c. Nurse Managers work in conjunction with the Unit-Based Expert Panel to determine whether or not current NHPPD allows for completion of required direct care responsibilities and desired outcomes using:

(1) Analysis of common and unit-specific nursing sensitive indicators from VANOD where applicable, and

(2) Comparative analysis between similar units using VA and community standards where common definitions occur and comparisons can be made using the NDNQI® and LMI.

d. Nurse Managers determine the number of required employees using the FTE Calculator Tool that:

(1) Includes a required minimum replacement factor of 1.2 which accounts for annual leave, sick leave, holiday leave, education offerings, and systems improvement activities (i.e., quality improvement, evidence-based practice, shared governance). **NOTE:** *The replacement factor may be adjusted and applied using the worksheet replacement factor calculator.*

(a) The replacement factor of 1.2 may be increased based on unique facility demographics but may not be decreased from 1.2.

(b) Systems improvement includes time for shared governance, committee participation, and time devoted to evidence-based practice with a total of 3 percent of nursing time dedicated to these activities.

(2) Provides the required nursing staff for each of the identified organizational units based on skill mix, i.e., RN, LPN, (NA), Health Care Technician.

e. Nurse Managers develop a narrative that describes the projected FTE by skill mix and shift, based on the worksheet calculations. This narrative needs to include:

(1) An analysis and justification of the variances from existing NHPPD (if NHPPD is appropriate for the care setting) and staffing levels in terms of the specific impact associated with adding or deleting staff.

VHA DIRECTIVE 2010-034

July 19, 2010

(2) The rationale for variances in the replacement factor for activities that impact staffing such as administrative, clinical, education, quality improvement and research.

(3) A projection of staffing by personnel category further delineated by day of week and shift using the worksheet provided.

f. The Nurse Manager in conjunction with the service line manager submits a completed unit-based expert panel package to the facility based expert panel at the facility established times, no less than annually. The completed package will contain the following:

- (1) Narrative justification
- (2) Replacement calculator worksheet
- (3) FTE calculator worksheet
- (4) Additional tools use to collect unit specific data

2. Facility Based Expert Panel Review and Approval Process

a. Nurse Managers submit the completed unit-based expert panel package to the facility expert panel for review.

(1) The expert panel is advisory to the Nurse Executive who is ultimately responsible for the provision of nursing services.

(2) The expert panel is comprised of individuals knowledgeable in the uniqueness of the facility who are best able to make staffing judgment based upon the many factors involved. This includes at a minimum, representatives of the following staff categories:

- (a) Staff nurses and other nursing staff providing direct patient care;
- (b) Associate or Assistant Nurse Executive(s) having clinical area responsibilities;
- (c) Evening and night supervisory staff; and
- (d) Nurse Managers from the various areas involved, such as medicine, surgery, spinal cord injury, critical care, long-term care, and operating room.
- (e) Finance office personnel

(3) The Expert Panel reviews the information and forwards recommendations to the Nurse Executive.

- b. The Nurse Executive reviews the staffing plan for nursing personnel and FTE requirements and utilizes the facility resource allocation process for final approval of the staffing plans.
- c. The facility Director documents endorsement of the final staffing plan.

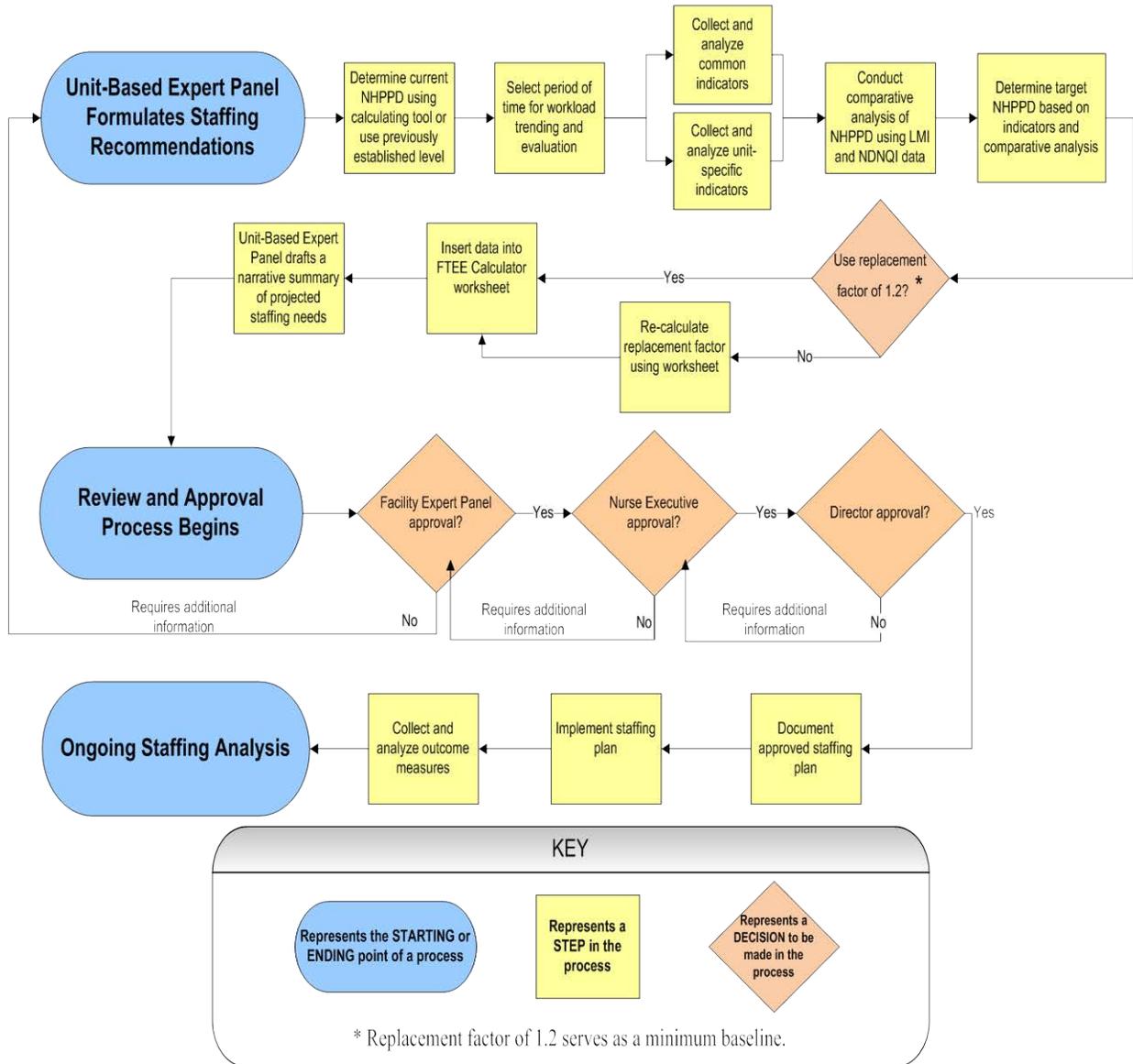
3. Ongoing Staffing Analysis

- a. The Nurse Executive and other nursing managers must establish a timeline to evaluate the staffing plan annually, or more frequently if needed.
- b. Review of the staffing plan is required when there are significant changes to the unit or when peer review activity suggests that outcomes may be impacted by staffing levels. Examples of review triggers may include:
 - (1) Combining two units;
 - (2) Any significant change in services;
 - (3) Unusually-high staff turnover;
 - (4) Addition of a hospitalist (a provider whose focus is hospital medicine) or Intensivist (a physician who specializes in the care of critically ill patients); or
 - (5) Adverse patient or resident outcomes.

ATTACHMENT B

THE STAFFING METHODOLOGY PROCESS DIAGRAM FOR NURSING PERSONNEL

STAFFING METHODOLOGY FOR VHA NURSING PERSONNEL



VHA DIRECTIVE 2010-034

July 19, 2010

1. (Oval) Unit-based expert panel formulates staffing recommendations. (Square) Determine current NHPPD using calculating tool or use previously established level.
 - a. (Square) Select period of time for workload trending and evaluation. (Square) Collect and analyze common indicators or,
 - b. (Square) Collect and analyze unit-specific indicators.
 - c. (Square) Conduct comparative analysis of NHPPD using LMI and NDNQI data.
 - d. (Square) Determine target NHPPD based on indicators and comparative analysis.
 - e. (Diamond) Use replacement factor 1.2 (serves as a minimum baseline) (Square) If no: Recalculate replacement factor using worksheet. And proceed to (Square) Insert claim data into FTEE Calculator worksheet.
 - f. (Square) If yes: proceed directly to Insert claim data into FTEE Calculator worksheet.
 - g. (Square) Unit based expert panel drafts a narrative summary of projected staffing needs.
2. (Oval) Review and approval process begins. (Diamond) Facility expert panel approval? If requires additional information, proceed to 1. Unit based expert panel formulates staffing recommendations.
 - a. If yes: (Diamond) Nurse executive approval? If no: return to Facility expert panel approval?
 - b. If yes: (Diamond) Director Approval?
 - c. (Diamond) Director approval? If no: return to Nurse Executive approval?
 - d. If yes: proceed to (Square) Document approved staffing plan.
 - e. If yes: (Square) Document approval staffing plan; Implementing staffing plan; Collect and analyze outcome measures.
3. (Oval) Ongoing staffing analysis