Patient Safety and Respiratory Care Staffing Strategies:

Presented

By

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Conflict of Interest

- I have no real or perceived conflict of interest that relates to this presentation. Any use of brand names is not in any way meant to be an endorsement of a specific product, but to merely illustrate a point of emphasis.

Objectives: Following this presentation, the participant will:

1. Cite 3 patient safety issues associated with understaffing.
2. Identify CMS and TJC regulatory requirements for staffing RC services.
3. Identify state and AARC actions/resources regarding staffing and Patient safety.
4. Implement actions to ensure patient safety and adequate staffing.

Outline

*Background: Why is this issue important?

*Where does number of RC staff come from?

*Staffing metrics: How valid are they?

*Surveys research for Patient Safety and Staffing.

*State and AARC Actions:

*How can this information be used for action in your hospital?

Background

*NC Respiratory Care Licensing Board received RCP complaints from licensed RCP's of "mathematically impossible workloads".

*NC Managers for Respiratory Care reported ongoing patient safety issues resulting from external hospital consultants, using inadequate metrics to determine RC staffing, productivity, and overall number of staff Full Time Equivalents (FTEs).

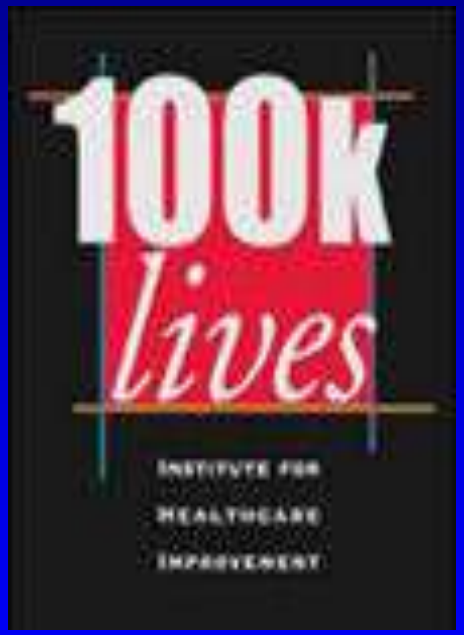
Background: Why is this issue of Patient Safety and RC Staffing Important?

Question: Are there more frequent news headlines than the following:

1. "Healthcare Costs Continue to Increase"

2. "Hospital Effort to Reduce Errors and IHI 100,000 lives Campaign".

Why are RC Staffing and Patient Safety Important?



Nurse Staffing and Inpatient Hospital Mortality

N Engl J Med 2011; 364:1037-1045 March 17, 2011

Needleman, J et al

CONCLUSIONS:

"In this retrospective observational study, staffing of RNs below target levels was associated with increased mortality, which reinforces the need to match staffing with patients' needs for nursing care. "

The Boston Globe

Ventilator errors are linked to 119 deaths.

Warnings are often ignored, missed by overtaxed caregivers

By *Liz Kowalczyk*

| Globe Staff December 11, 2011

Where does number of RC staff come from?

* Process is usually data-driven; submitted by department director/manager and approved by finance/administration/hospital board.
* Historical, geographical, and new service data considered.
* Ideally, staffing is budgeted and adjusted on annual basis based upon valid metrics.
* Comparative data between hospitals used to determine total numbers of staff.
* Productivity (workload) targets used to adjust staff.

Step 1: The staffing budget is submitted

Step 2: Staffing budget overcomes approval hurdles.

Step 3: Final approved staffing budget returned to Director/Manager.

Background: Staffing Metrics

Metric: Fundamental statistic upon which staffing resources are based.

The AARC Uniform Reporting Manual recommends using the Relative Value Unit (RVU) as the metric to determine FTE resources, staffing levels, productivity, and for use with comparative data.

RVU Example: 1 RC Consult procedure = 22 minutes.

NC Survey for Patient Safety and RC Staffing

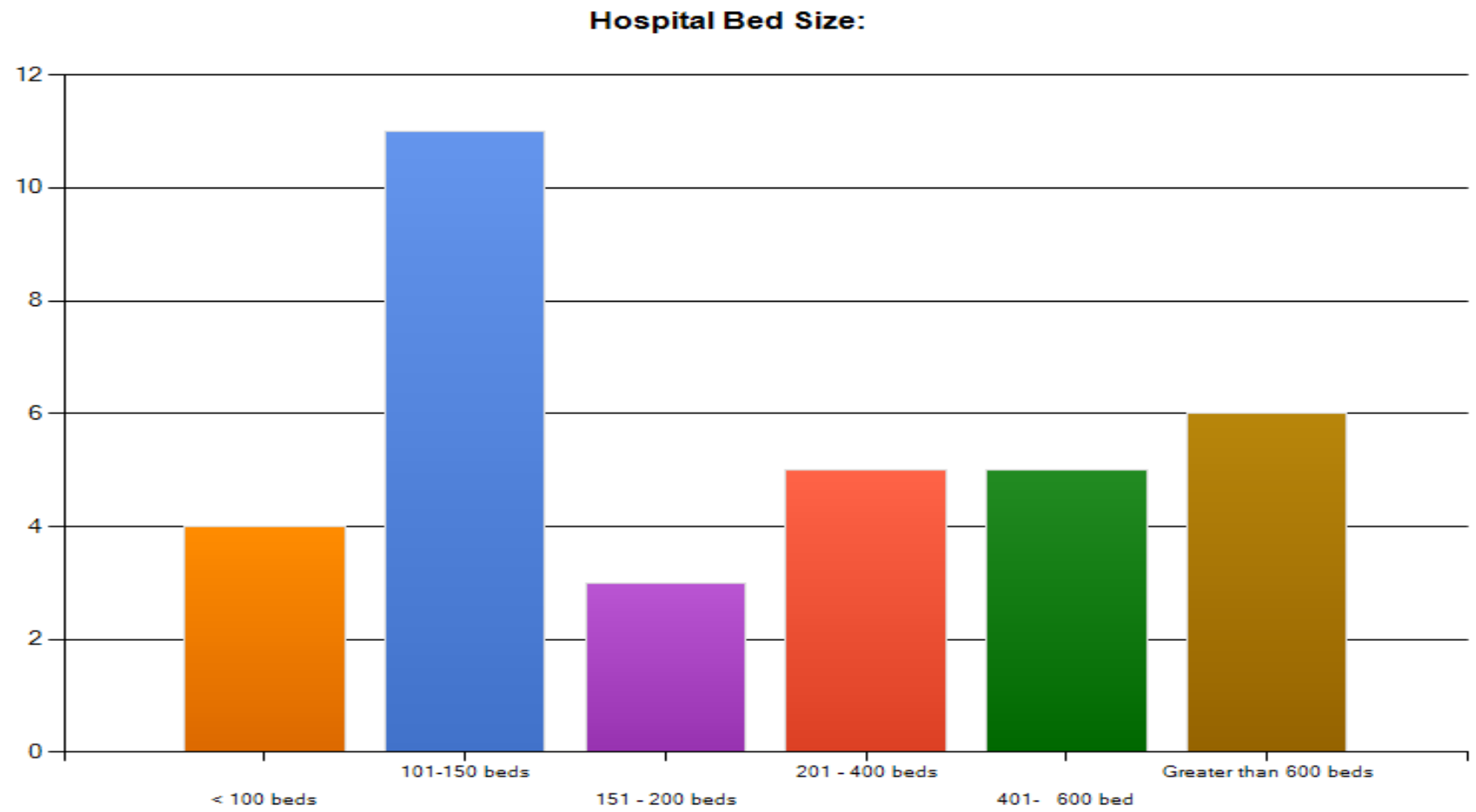
In June 2011, the NC Respiratory Care Board conducted a survey of hospitals (about 150) to determine relationships between patient safety issues and staffing.

As of June 21, a total of 35 (n = 35) RC Directors/managers completed the survey, for a 23% response rate (35/150 = .23)

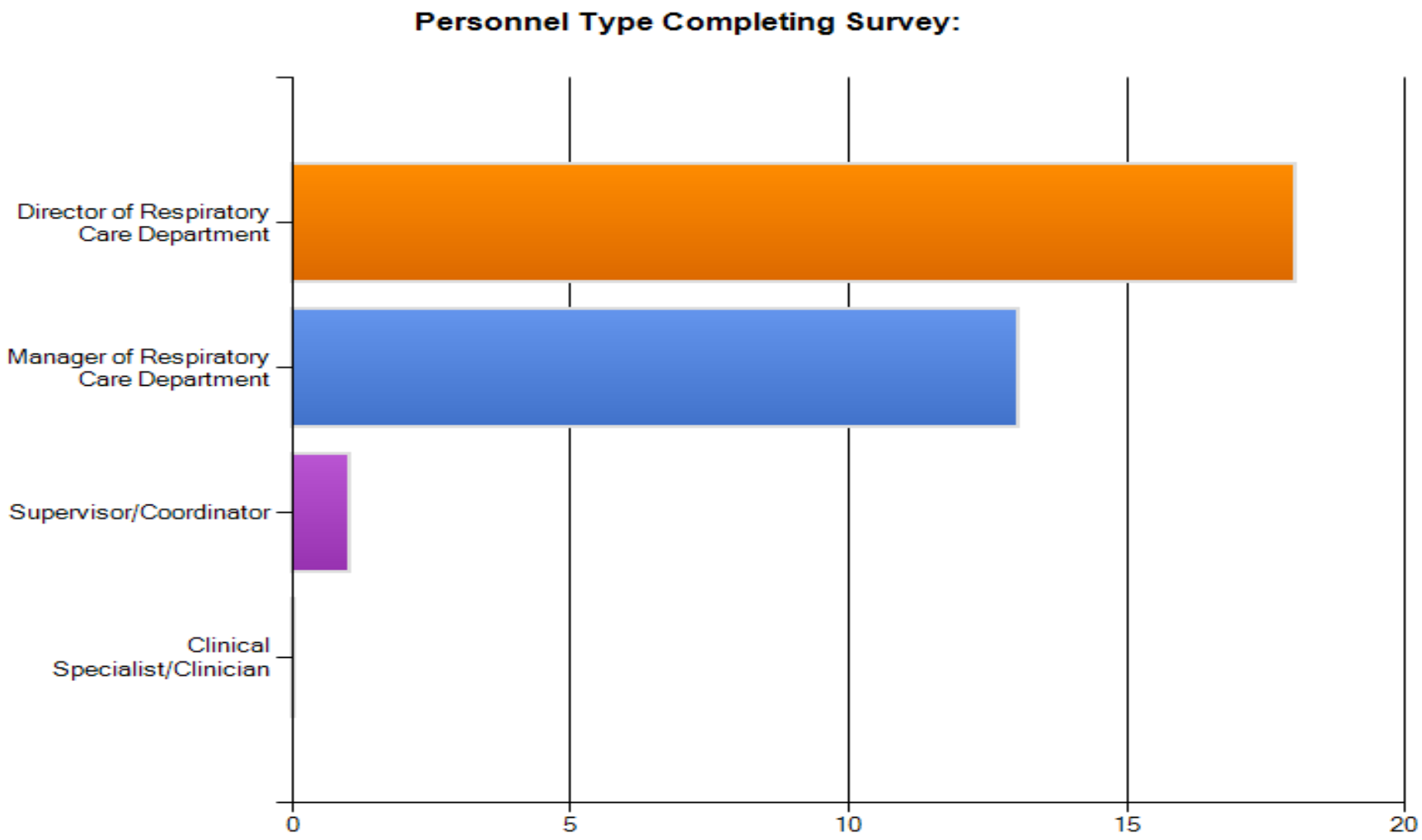
NC Survey for Patient Safety and RC Staffing

NC Survey Results:

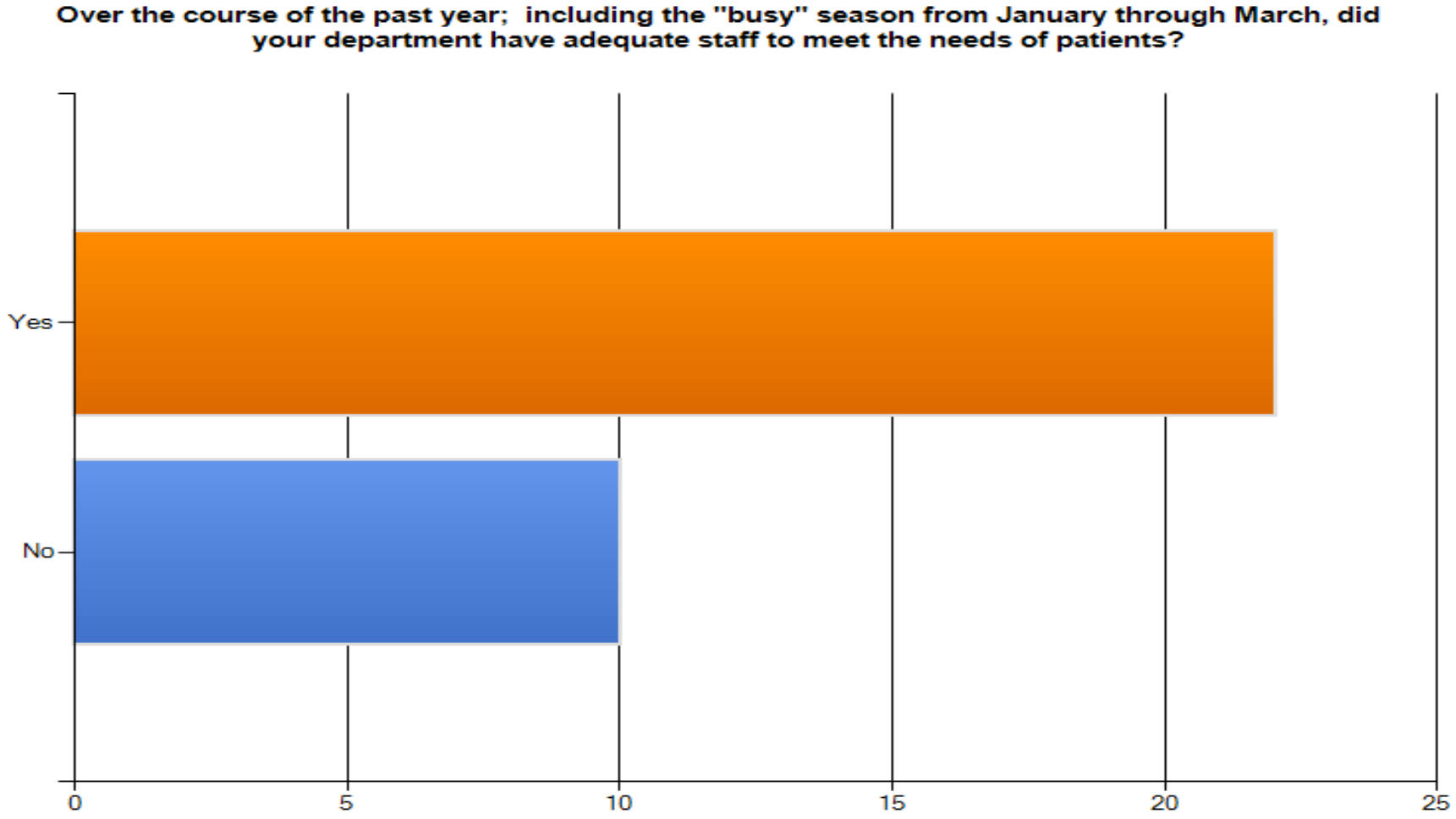
Hospital Bed Size:



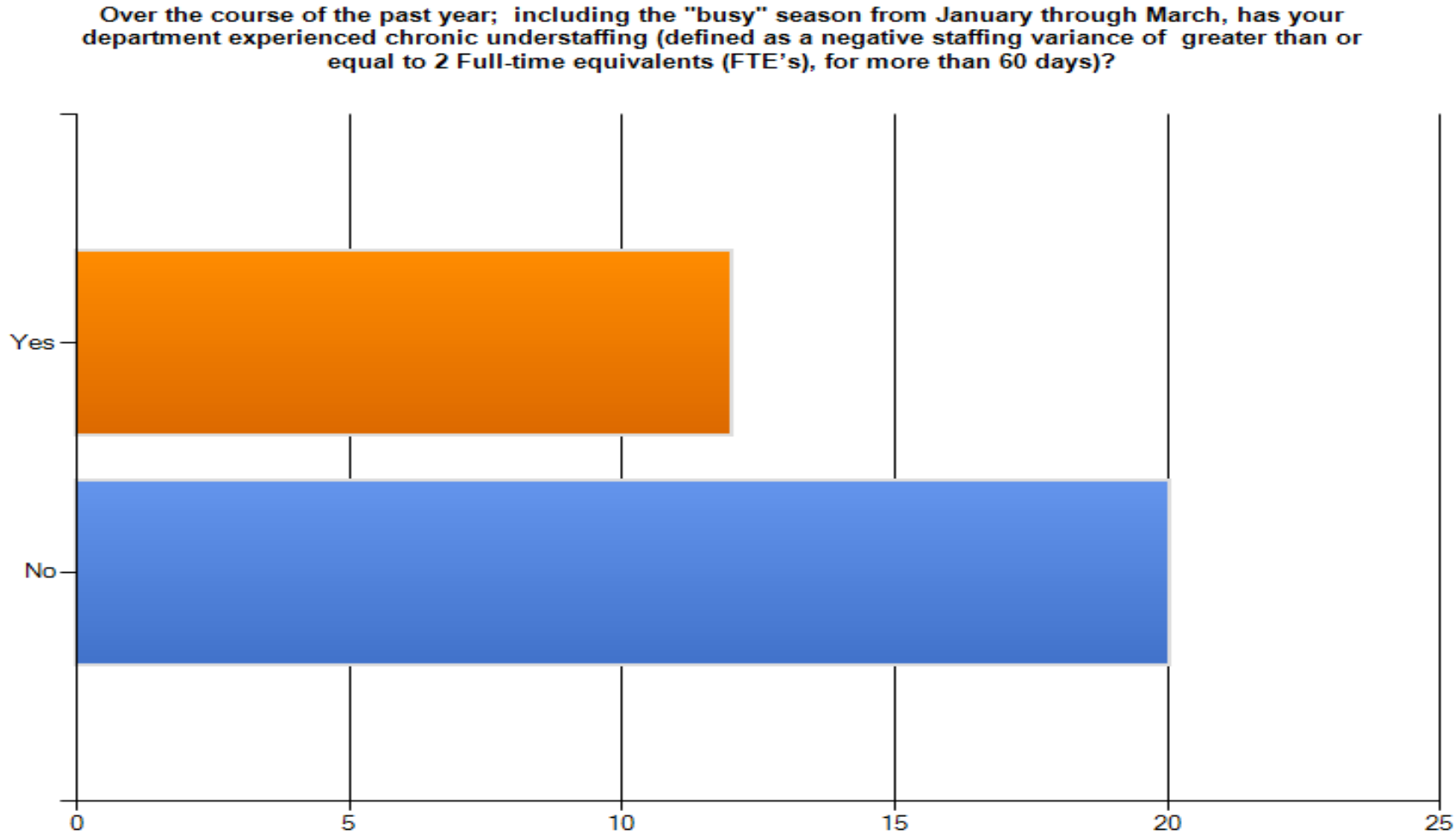
Personnel Type Completing Survey:



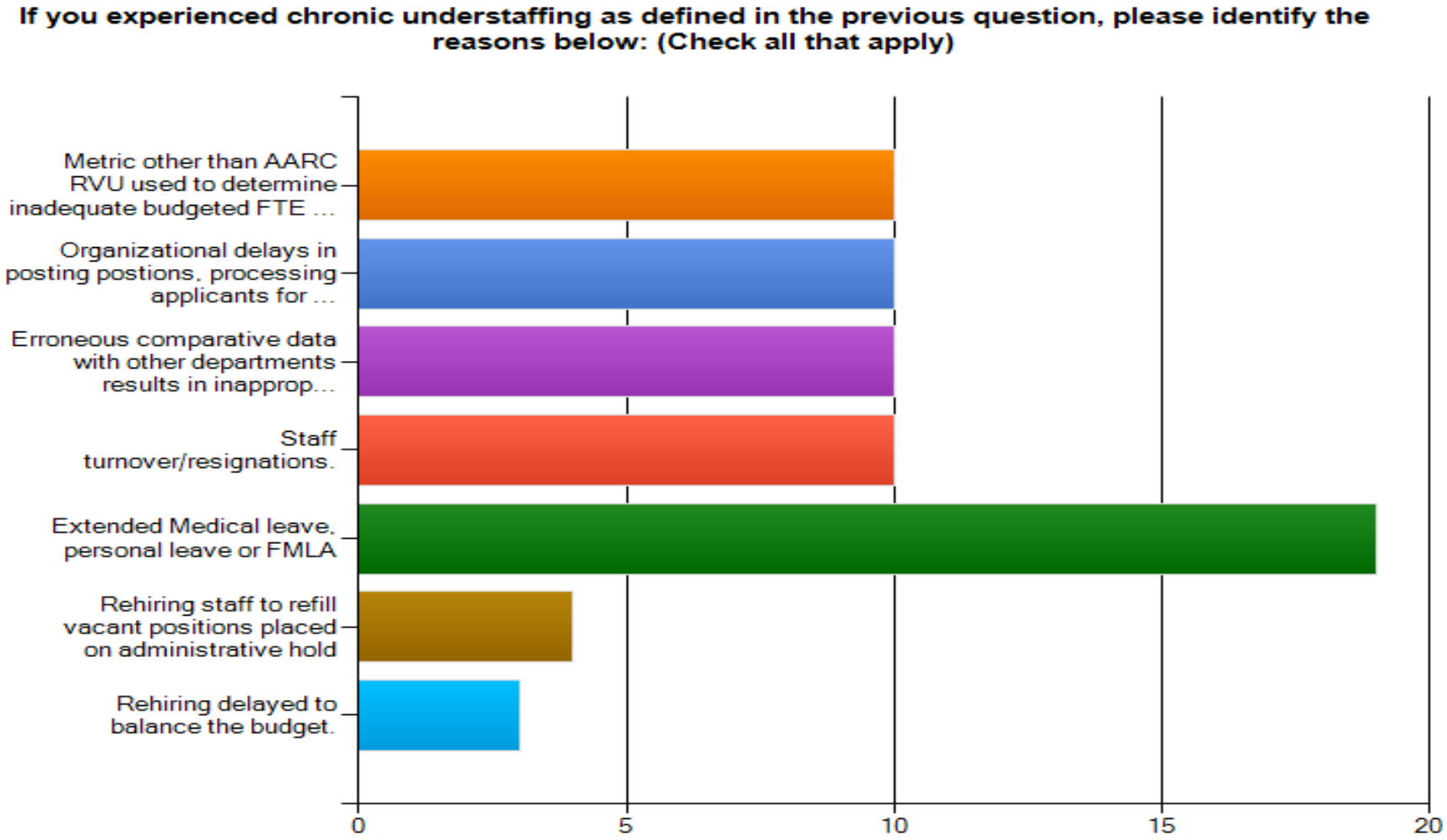
From January through March, did your department have adequate staff to meet the needs of patients?



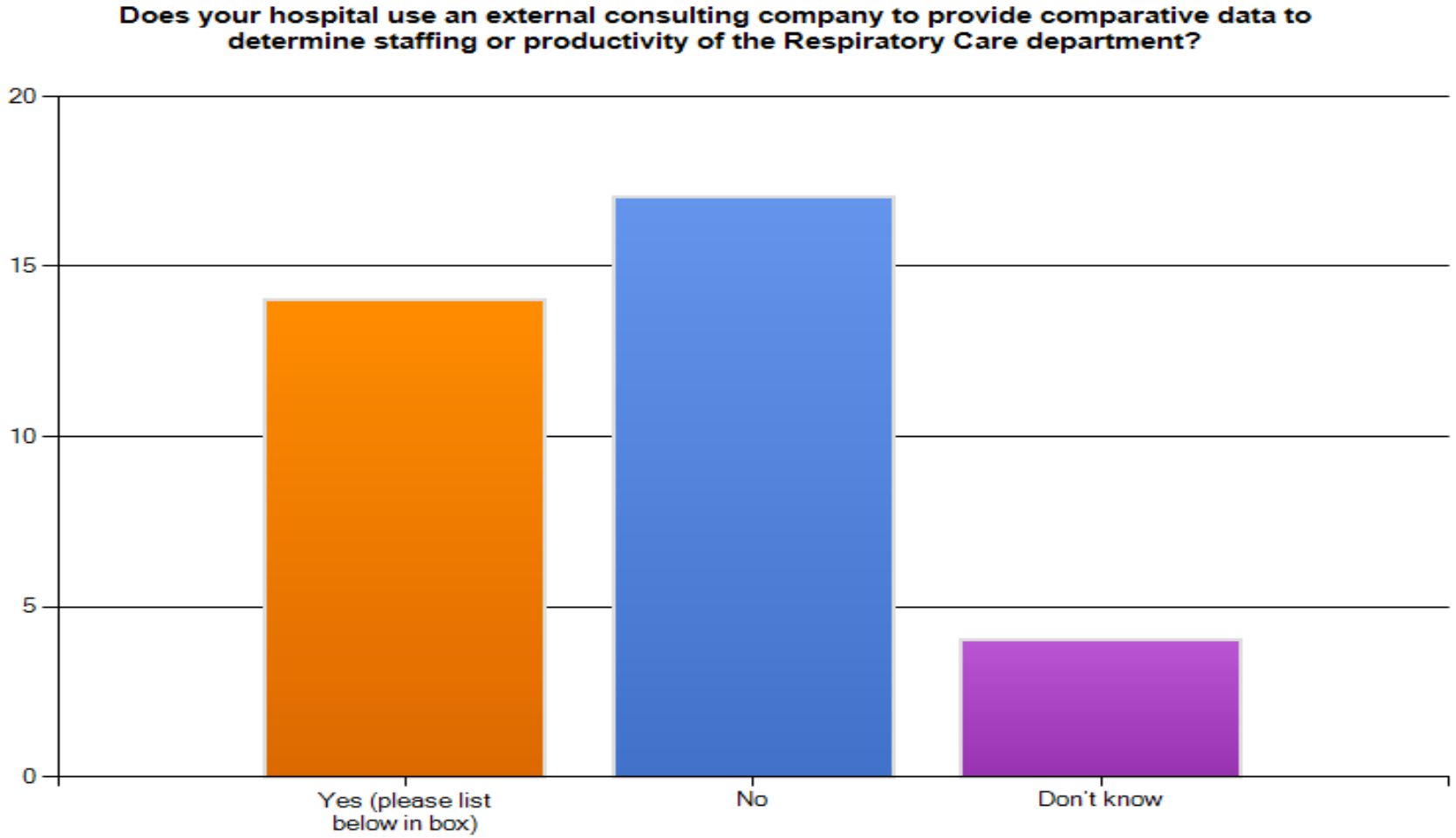
From January through March, has your department experienced chronic understaffing (defined as a negative staffing variance of greater than or equal to 2 Full-time equivalents (FTE's), for more than 60 days)?



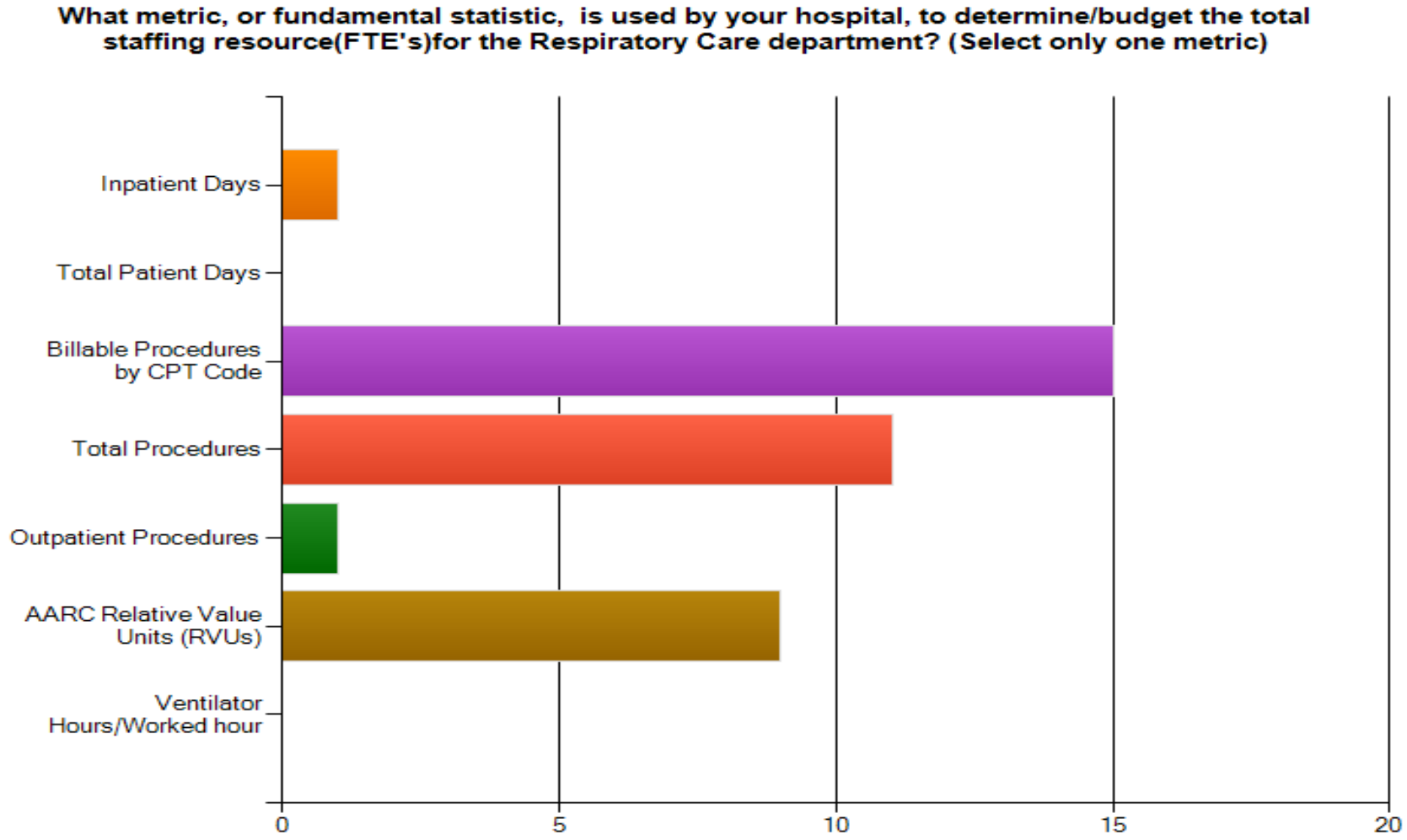
If you experienced chronic understaffing as defined in the previous question, please identify the reasons below:



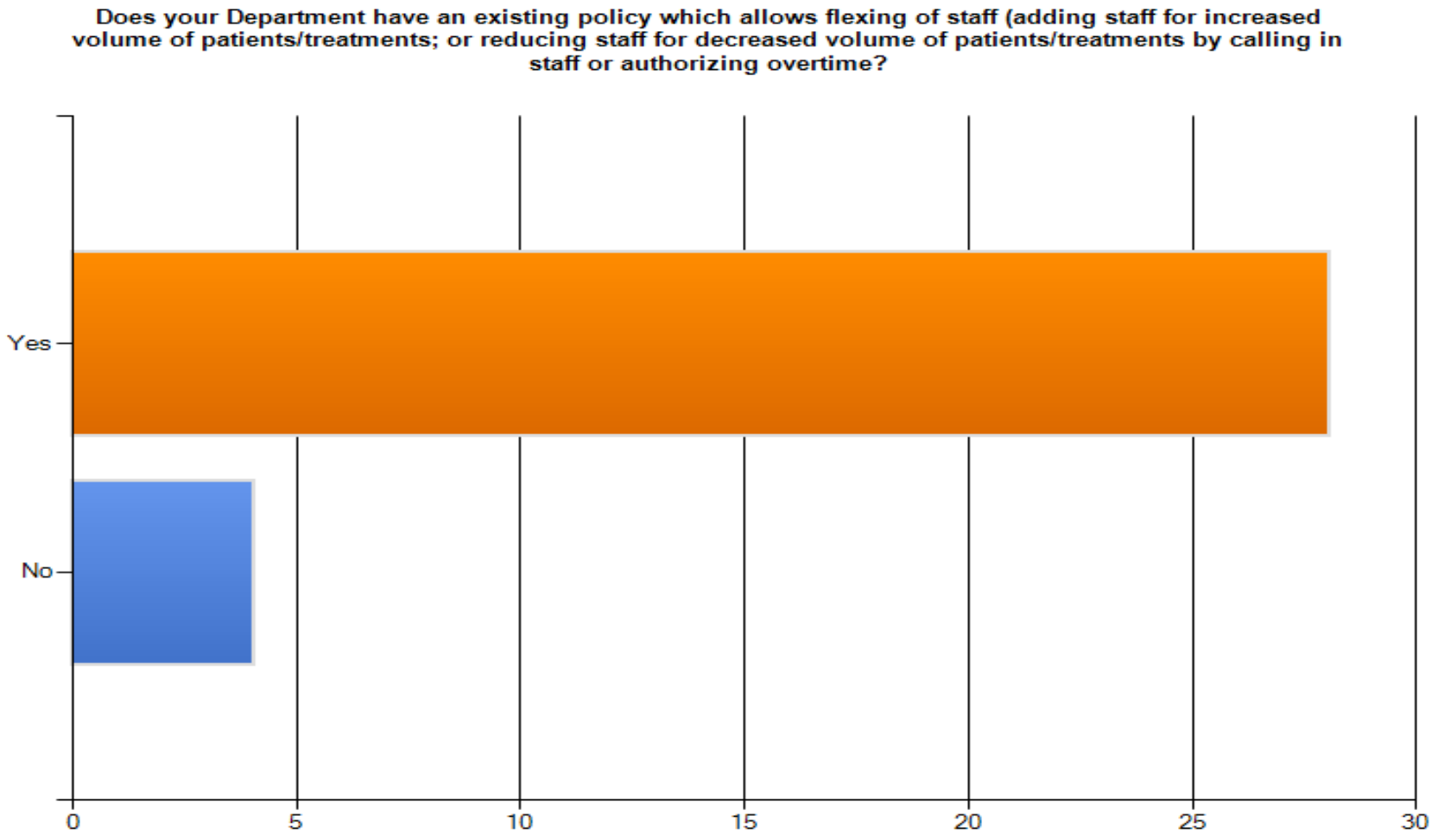
Does your hospital use an external consulting company to provide comparative data to determine staffing or productivity of the Respiratory Care department ?



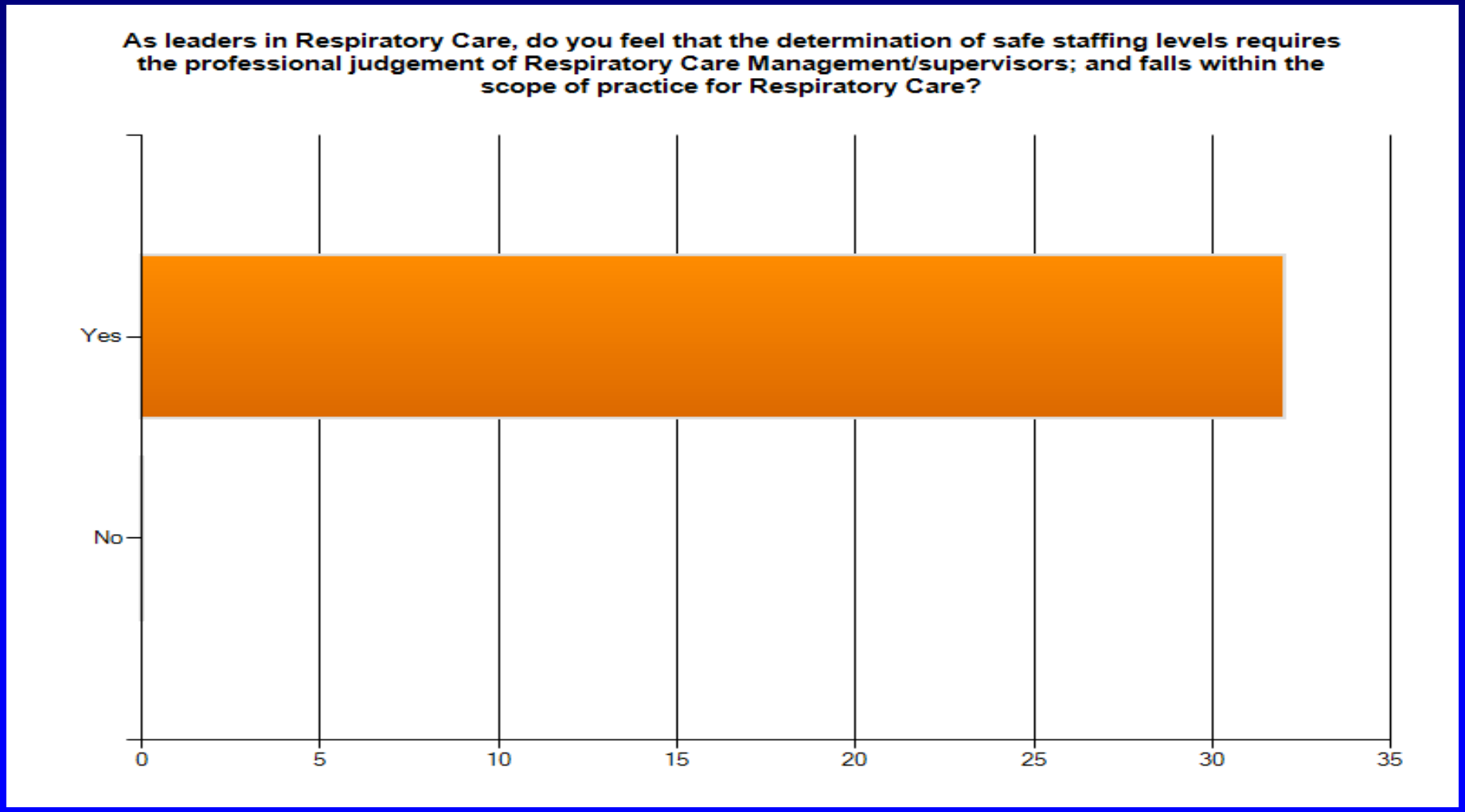
What metric, or fundamental statistic, is used by your hospital, to determine/budget the total staffing resource(FTE's)for the Respiratory Care department?



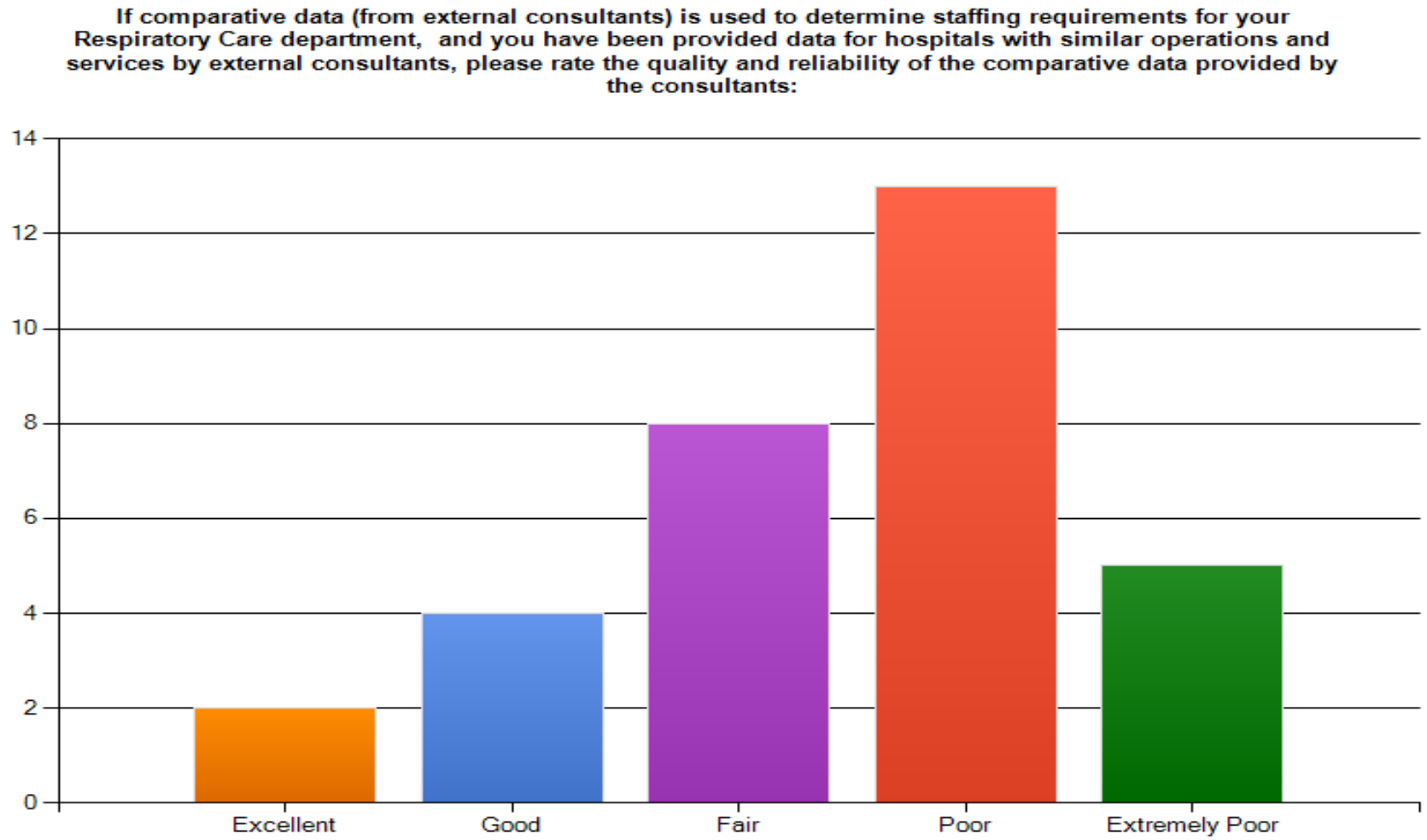
Does your Department have an existing policy which allows flexing of staff (adding staff for increased volume of patients/treatments; or reducing staff for decreased volume of patients/treatments by calling in staff or authorizing overtime?



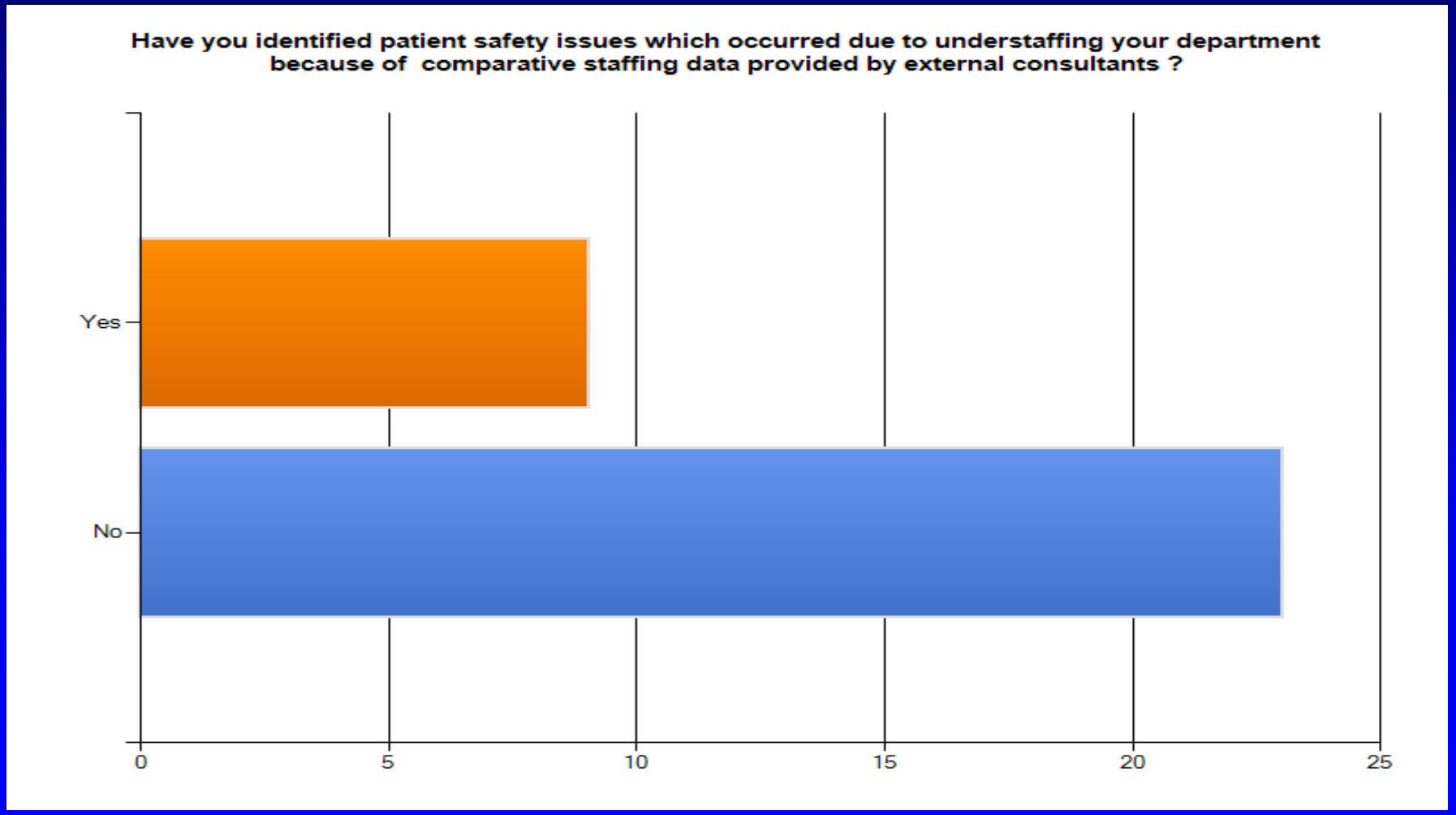
As leaders in Respiratory Care, do you feel that the determination of safe staffing levels requires the professional judgement of Respiratory Care Management/supervisors; and falls within the scope of practice for Respiratory Care?



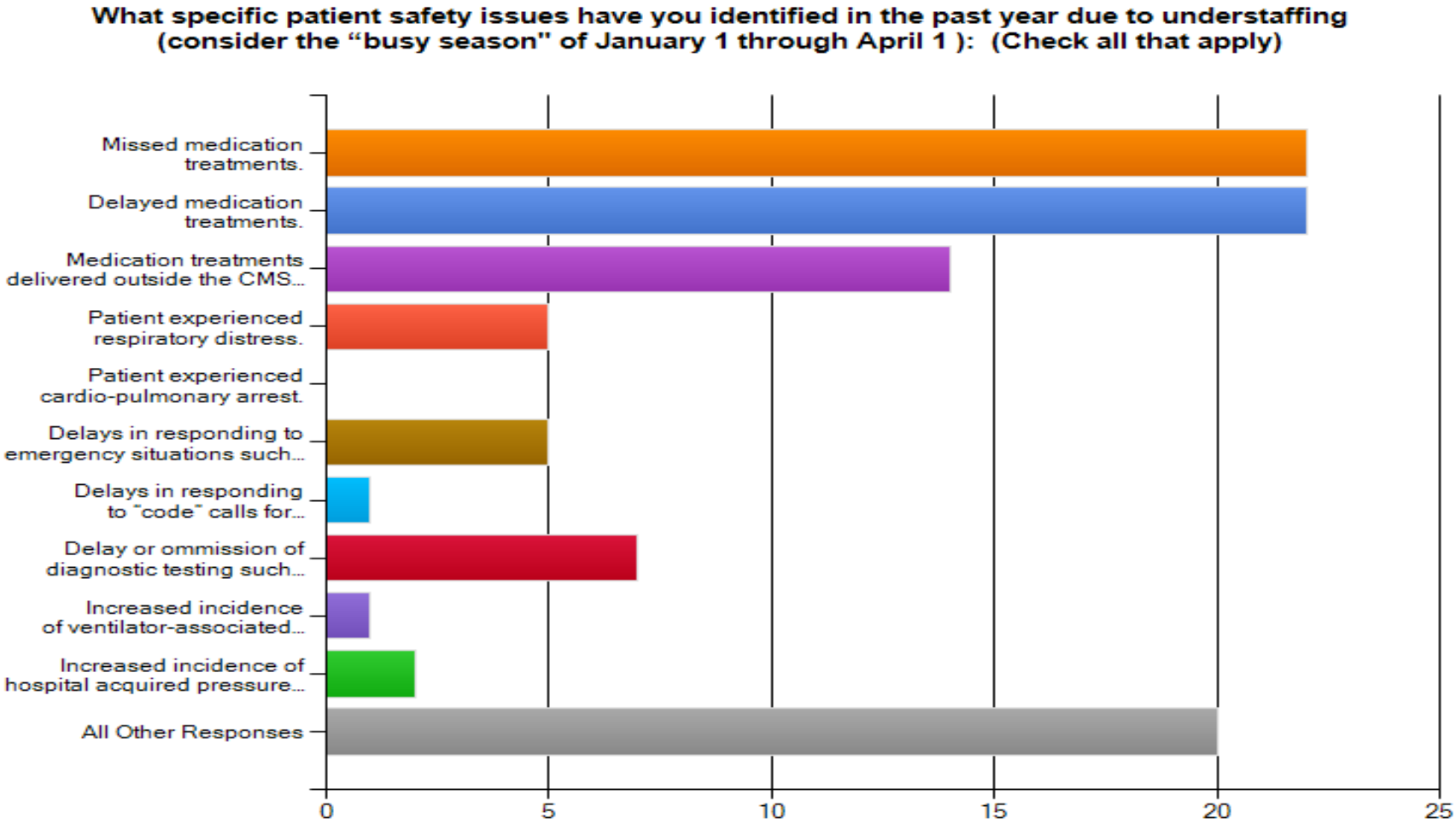
If comparative data (from external consultants) is used to determine staffing requirements for your Respiratory Care department, please rate the quality and reliability of the comparative data provided by the consultants:



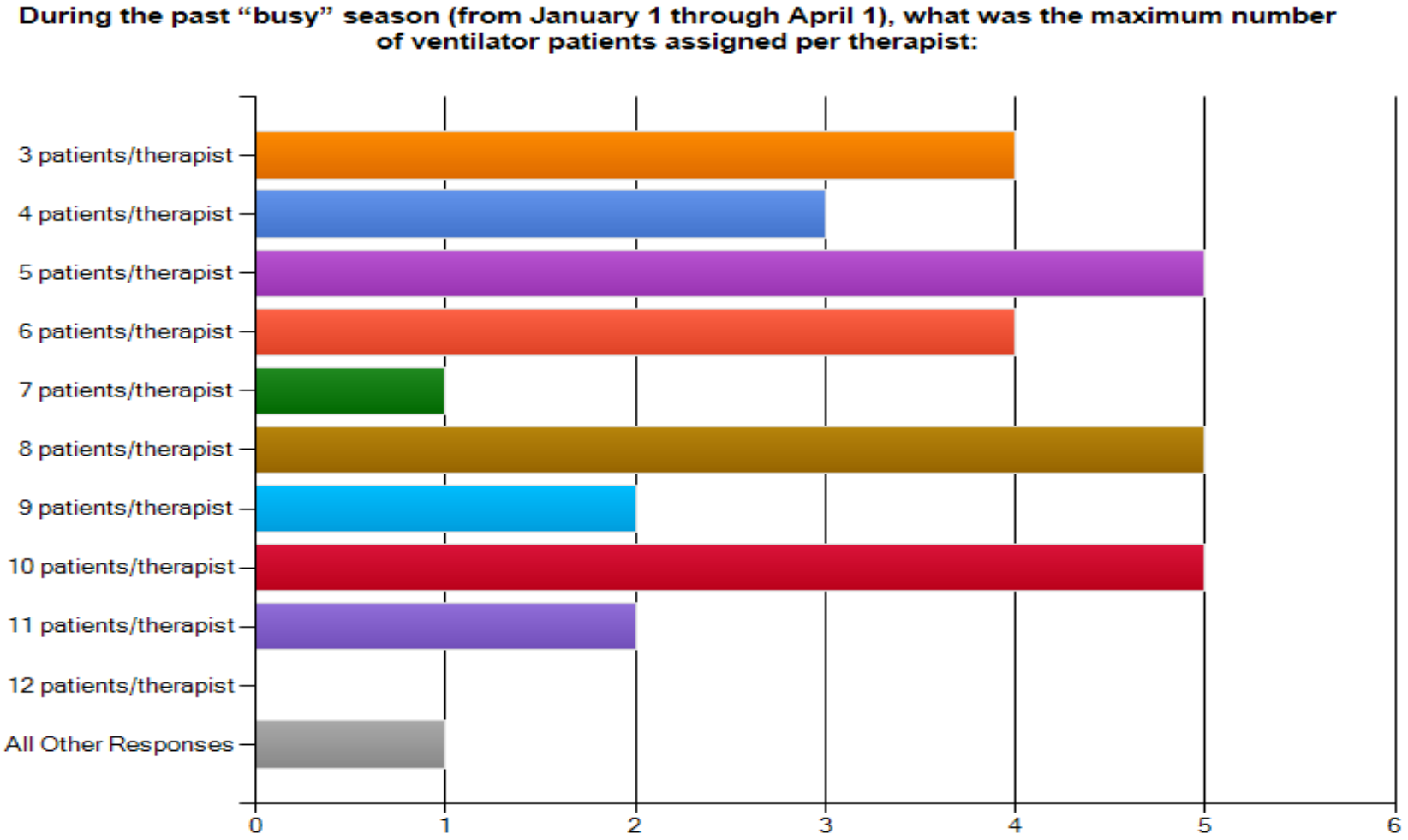
Have you identified patient safety issues which occurred due to understaffing your department because of comparative staffing data provided by external consultants ?



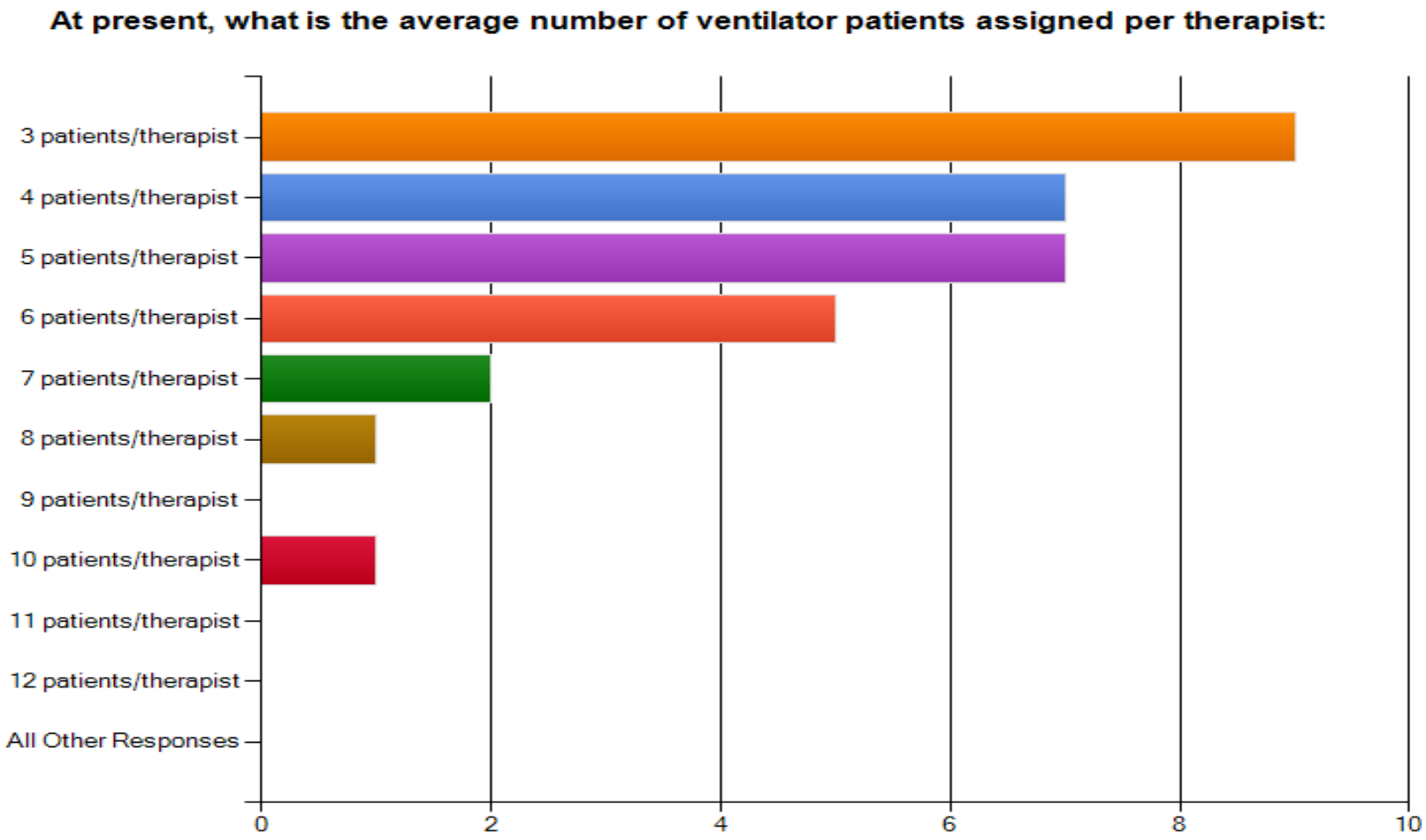
What specific patient safety issues have you identified in the past year due to understaffing (consider the “busy season" of January 1 through April 1):



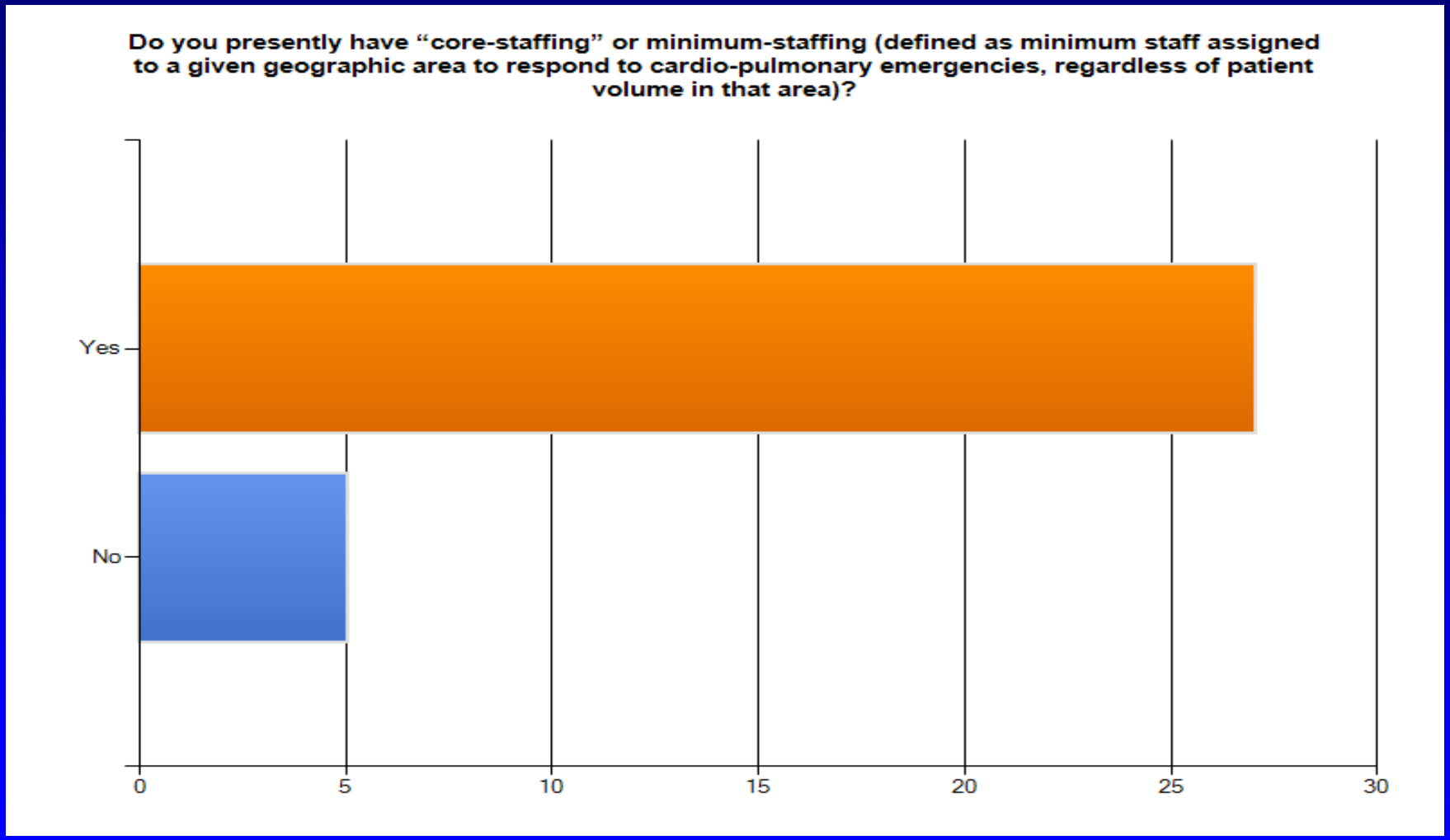
During the past “busy” season (from January 1 through April 1), what was the maximum number of ventilator patients assigned per therapist:



At present, what is the average number of ventilator patients assigned per therapist:



Do you presently have “core-staffing” or minimum-staffing (defined as minimum staff assigned to a given geographic area to respond to cardio-pulmonary emergencies, regardless of patient volume in that area)?



Selected Director/Manager Comments from the NC survey:

1. "Stop consulting groups from practicing respiratory care by using incorrect staffing metrics and incorrect productivity targets".
2. " Flexible staffing models based on volumes and patient acuity, Standards that address RT to Vent patient ratio."
3. "Assign reliable RVU's to all activities and establish goals for the total number of RVU's per scheduled pratitioner on each shift."
4. "Determine a national acceptable work target for each therapist....so that it may be utilized for any size hospital...."

Comparison of Data Between States

To date, Patient Safety and RC staffing survey research conducted in:

*North Carolina

*California

*Ohio (Preliminary Data- Different sampling method).

Comparison of Patient Safety and Staffing Data Between States

Question	NC	CA	Ohio*
Adequate Staff ? (answered "No")	10/32 = 31%	39/130 = 30%	5/28 = 18%
Chronic Understaffing ? (Answered "Yes")	12/32 = 36%	28/130 = 21%	5/28 = 18%
Patient Safety Issues due to Understaffing /Consultant Data ?	9/32 = 28%	36/130 = 27%	5/28 = 17%
Top 3 Patient Safety Issues due to Understaffing	1. Missed Tx. 2. Delayed Tx. 3. Concurrent Tx	1. Delayed Tx. 2. Missed Tx. 3. Concurrent Tx	1. Missed Tx. 2. Delayed Tx. 3. Concurrent Tx.

Existing Regulatory Requirements for Staffing Respiratory Care Services

1. CMS (Centers for Medicare and Medicaid Services) Conditions of Participation.

2. The Joint Commission Standards.

3. State RC Licensing Boards.

§ 482.57 CMS Condition of participation: Respiratory care services.

(2) “There must be adequate numbers of respiratory therapists, respiratory therapy technicians, and other personnel who meet the qualifications specified by the medical staff, consistent with State law.”

Joint Commission Standards

Standard PI.02.01.01

Adequacy of staffing includes the number, skill mix, and competency of all staff.

How Valid are Staffing Metrics?

- A recent correlation study using different metrics showed poor correlations between the AARC standard (RVU's), and other staffing metrics recommended by external consulting companies.

Comparison of Metrics for a Respiratory Care Department in an 800 Bed Medical Center

Metric	Correlation with AARC RVU's (R^2)	Sample Size (Days)
Non-Billable Procedures	0.002	n = 835
Adjusted Discharges per patient day (Outpt procedures)	0.10	n = 835
Total Patient Days	0.28	n = 835
Total Inpatient Days	0.28	n = 835
Average Daily Census	0.34	n = 835
Total RC Procedure Volume	0.57	n = 835
Billable Procedure by CPT code	0.61	n = 835

NCRCB and AARC Actions and Resources:

1. NCRCB Position Statement adopted January 2012. (www.ncrcb.org). "Determining staffing is practicing RC management----- must be a licensed RT"

2. AARC Position Statement: Best Practices in RC Productivity and Staffing---- adopted July 2012. (www.aarc.org)

3. AARC White Paper: Best Practices for RC Staffing and Productivity—in Press.
4. AARC Uniform Reporting Manual (5'th edition) updated and available Fall 2012.

Best Practices in Respiratory Care Productivity and Staffing: American Association for Respiratory Care Position Statement

"Understaffing Respiratory Care services places patients at risk for unsafe incidents, missed treatments, and delays in medication delivery, as well as increases the liability of risk for the facilities."

"Patient harm directly related to inadequate staffing must be reported to the appropriate state and federal regulatory agencies."

Recommended Action Plan

1. In order to ensure patient safety by adequately staffing RC services, adopt the metric of the AARC Relative Value Unit (RVU) to determine RC staffing and productivity targets. . (Note: CMS has already adopted RVU's for physician reimbursement.)

2. Develop "Plan for Provision of Care "policy (required by TJC) based upon your departments' chargemaster ---have policy signed by Medical Director and your VP. Include billable and non-billable activities in scope of services in the policy.

3. Adopt the RC department staffing system described in the AARC Uniform Reporting Manual (URM) ,which is RVU-based. Utilize the AARC benchmarking system for comparative data.

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