

## Measure Background

Nurses are critical to ensuring a patient's safety during their stay in a health care facility. While physicians make important diagnostic and treatment decisions for patients, physicians often spend as little as 30-45 minutes a day directly with the patient, limiting their ability to observe changes in the patient's condition over time. Nurses are a regular presence at the patient's bedside, coordinating the patient's care with the health care team of physicians, pharmacists, family members, and other health care professionals. A nurse's role in patient safety includes monitoring the patient for clinical deterioration, recognizing mistakes, understanding the care process and identifying weaknesses within systems, reporting any changes in a patient's condition, and carrying out numerous other duties to ensure patients receive high-quality care.<sup>1</sup>

## Why is Nursing Workforce Important?

Evidence continues to build that a hospital's decisions around nursing staffing have a meaningful impact on the quality and safety of patient care.<sup>2</sup> Numerous studies that have looked at the relationship between nurse staffing and patient outcomes have found increased nursing hours per patient day is associated with lower odds of patient mortality, lower rates of nursing sensitive indicators (falls and pressure ulcers), shorter lengths of stay, and higher patient satisfaction.<sup>3,4</sup> For example, McHugh et al. discovered that hospitals that maintain a minimum nurse-to-patient ratio of 1:4 during morning and afternoon shifts, and 1:7 during night shifts, experience significantly lower odds of 30-day mortality (12% post-implementation vs. 34% at baseline), lower odds of readmission (6% post-implementation vs. 15% at baseline) and a more significant decrease in length of stay (9% post-implementation vs. 6% at baseline) than hospitals that were not subject to ratios.<sup>5</sup> In addition, research has shown the increased use of RNs as a proportion of total nursing hours is associated with lower rates of nursing-related errors and adverse events, shorter lengths of stay, and reduced costs.<sup>6</sup>

Literature on the relationship between the education of nurses and the quality of nursing care supports that increasing the proportion of Bachelor's-prepared nurses in hospital units is linked to reduced patient mortality,

length of stay, and readmissions.<sup>7</sup> As care within the hospital setting continues to grow more complex, and nurses must make critical decisions associated with care for sicker, frailer patients, the demand for more highly educated nurses has followed.<sup>8</sup> According to Kovner et al., recent graduates with a Bachelor of Science in Nursing (BSN) demonstrated notably superior levels of readiness in key areas such as evidence-based practice, research abilities, and assessment of gaps in teamwork, collaboration, and general practice.<sup>9</sup> These competencies are crucial for building a competent nursing workforce for the future.<sup>9</sup>

## Nursing Workforce Standard

Leapfrog asks hospitals to provide data on four nursing workforce measures that are either endorsed by the National Quality Forum (NQF) and/or in use in national databases. These four evidence-based measures are:

- Total nursing care hours per patient day: The number of productive hours worked by employed or contracted nursing staff with direct patient care responsibilities per patient day in all medical, surgical, or med-surgical units\*
- RN hours per patient day: The number of productive hours worked by employed or contracted RN nursing staff with direct patient care responsibilities per patient day in all medical, surgical, or med-surgical units\*
- Nursing skill mix: Percentage of total productive nursing hours worked by RN (employed and contracted) nursing staff with direct patient care responsibilities in all medical, surgical, or med-surgical units\*
- Percentage of BSN prepared nurses: Percentage of RN nursing staff with direct care responsibilities that are BSN-prepared

Leapfrog scores and publicly reports hospital performance on each of the four measures. Hospitals achieving the Nursing Workforce standard:

- Have total nursing care hours per patient day that is at the 50<sup>th</sup> percentile or better when compared to similar hospitals.
- Have RN hours per patient day that is at the national 50<sup>th</sup> percentile or better when compared to similar hospitals.

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- Have a nursing skill mix that is at the national 50<sup>th</sup> percentile or better when compared to similar hospitals.
- Have a at least 80% of their RNs with a BSN degree or higher.

Leapfrog will continue to ask hospitals to report on selected elements of the National Quality Forum's Safe Practice #9 (Nursing Workforce) that are not directly captured through the four national measures. Hospitals recognized as an American Nurses Credentialing Center (ANCC) Magnet<sup>®</sup> hospital or a 2020 Pathway to Excellence<sup>®</sup> hospital will receive full credit for these elements. Performance on these NQF elements will be used to augment scores for hospitals scoring in the bottom performance category ("Limited Achievement") on the three nurse staffing and skill mix measures.

Download the complete 2023 Leapfrog Hospital Survey scoring algorithms document at [Hospital Scoring and Results webpage](#).

## Why Purchasers Need to Get Involved

Nurses play an outsized role in ensuring patient safety in health care facilities. The evidence is clear that nurse staffing levels, skill mix, and nurse education are all vitally important to improving patient safety. It is important that purchasers use their collective voice with hospitals to ask about the hospital's nursing workforce - asking them how they establish their nurse staffing plans, how they are working to raise the education level of their nurses, and what actions are they taking to reduce burnout among their nurses.

## References

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For a comprehensive list of references please review the Nursing Workforce Bibliography, available here: <https://ratings.leapfroggroup.org/measure/hospital/2025/nursing-workforce>