Nurse Workplace Safety, Surveillance Capacity Drive Health Care Performance

By Diana Mahoney

Nurses who feel confident in their physical and emotional safety at work are in the best position to deliver high-value health care to patients, a study has shown.

Specifically, the results of integrated, cross-domain analyses reported in Press Ganey's 2016 Nursing Special Report show that organizations whose nurses give top ratings on a workplace safety composite measure perform significantly better across multiple nurse, patient, patient experience and payment outcomes than those whose nurses perceive the safety of their workplace to be suboptimal.

Additionally, the report, "The Role of Workplace Safety and Surveillance Capacity in Driving Nurse and Patient Outcomes," which is available here for download, highlights the findings of separate analyses examining the influence on performance measures of nurse perception of surveillance capacity. The results of these analyses indicate that when nurses believe their work units are sufficiently resourced to provide effective surveillance of all patients, organizational performance on many of the same nursing and patient indicators improves, although to a lesser degree than that associated with top workplace safety scores.

These data add to the growing body of evidence linking the nurse work environment to performance on key measures of care quality and value, according to Press Ganey Chief Nursing Officer Christina Dempsey.

"The consistently significant associations between nurse workplace safety and surveillance capacity and multiple nurse and patient outcomes attest to the strategic importance of ensuring that nurses feel their physical and emotional safety is an organizational priority, and that they feel the units in which they work are appropriately resourced to allow them to provide patients with safe, effective, quality care," Dempsey said.

AT A GLANCE

- Organizations with top scores on a composite measure of nurse-rated workplace safety had a 52% lower rate of RN-perceived missed care, a 27% higher rate of job enjoyment and a 22% higher CMS Overall Hospital Quality Star Rating than those with the lowest scores.

- Compared to organizations with low scores on a composite measure of nurse-rated surveillance capacity, those with top scores had a 26% lower rate of hospital-acquired pressure ulcers, a 13% lower rate of RN-perceived missed care and a 5% higher CMS Overall Hospital Quality Star Rating.

- Evidence-based strategies such as adherence to guidelines for safe patient handling and mobility and adoption of surveillance best practices such as checklists and interdisciplinary rounds can improve nurses' perception of safety and surveillance capacity.

Further, the report offers important directional guidance for nurse leaders who are seeking to build and sustain a robust nursing workforce by outlining evidence-based strategies for improving nurse safety and surveillance capacity, Dempsey explained.

For the analyses, Press Ganey researchers developed two distinct composite measures. The RN Safety Composite measure comprises survey items related to safe patient handling and mobility (SPHM) practices, RN-to-RN interaction, the appropriateness of patient care assignments, meal-break practices and shift duration. The RN Surveillance Capacity Composite measure is an adaptation of a hospital nurse surveillance capacity profile developed in 2009 by Kutney-Lee, et al.[1] It includes subscales of the Practice Environment Scale of the Nursing Work Index (PES-NWI) that are linked to nurses' ability to observe, monitor, collect, interpret and synthesize patient information in order to make informed decisions regarding their course of care. It also includes specific RN characteristics, such as staffing, education, clinical competence and years of experience.

For each quartile of performance for both of the composite measures, the researchers evaluated associations with nurse, patient, patient experience and payment outcomes using data derived from Press Ganey's National Database of Nursing Quality Indicators® (NDNQI®) and patient experience databases (2015 survey data) and from the Centers for Medicare & Medicaid Services' (CMS) Hospital Compare website released in July 2016.

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[1] Kutney-Lee A, et al. Development of the hospital nurse surveillance capacity profile. *Res. Nurs. Health*. April 2009; 32(2): 217–228. DOI: 10.1002/nur.20316.

Nurse Workplace Safety

Nurse workplace safety was the strongest predictor across most of the outcomes of interest. The analyses demonstrated significant improvements from the bottom to top quartile scores on the RN Safety Composite for each of the following items:

- Nurse Job Enjoyment mean score (3.59 to 4.57/6-point scale)

- Intent to Stay mean percentage (74% to 89%)

- Meaningful Contribution unit mean score (3.66 to 4.22/5-point scale)

- RN Rating of Care Quality mean score (3.27 to 3.71/4-point scale)

- RN Missed Care Events per last shift mean number (2.62 to 1.24)

- Hospital-Acquired Pressure Ulcer mean prevalence (1.51 to 1.19)

- Patient Fall Rate mean per 1,000 patient days (1.84 to 1.65)

- Patient Experience with Nurses mean "always" percentage (89.8% to 91.1%)

- Personal Issues Well-Addressed mean "always" percentage (86.4% to 87.9%)

- Likelihood to Recommend mean "always" percentage (88.2% to 90.7%)

- Overall Rating of Care mean "always" percentage (90.1% to 91.7%)

- CMS Overall Hospital Quality Star Ratings mean score (2.6 to 3.11/5-star scale)

- Hospital-Acquired Conditions Penalty mean percentage (0.53% to 0.38%)

- Value-Based Purchasing Overall mean score (36.4 to 43.5/0–100 scale)

Subscale analyses examining the relative influence on performance of the individual items within the RN Safety Composite showed that one of the strongest drivers of nurse, patient experience and payment outcomes was nurses' perception of the appropriateness of their last-shift assignment. Other drivers included RN-to-RN interaction (nurse outcomes), SPHM program scale score (patient experience outcomes, payment outcomes) and percent of staff who worked more than 12 hours last shift (payment outcomes).

Nurse Surveillance Capacity

The associations between the bottom and top quartiles of organizational performance on the RN Surveillance Capacity score were significant for multiple nurse, patient and patient experience outcomes. Generally, the associations were not as strong as those seen with the safety composite, except for performance on pressure ulcer and fall rates. Further, while the relationships with payment outcomes trended positively, the associations were not statistically significant. Significant improvements from the bottom to top quartile scores on the RN Surveillance Capacity Composite were seen for the following items:

- Nurse Job Enjoyment mean score (3.94 to 4.28/6-point scale)

- Intent to Stay mean percentage (80% to 84%)

- Meaningful Contribution unit mean score (3.86 to 4.05/5-point scale)

- RN Rating of Care Quality mean score (3.42 to 3.59/4-point scale)

- RN Missed Care Events per last shift mean number (2.03 to 1.76)

- Hospital-Acquired Pressure Ulcer mean prevalence (1.54 to 1.14)

- Patient Fall Rate mean per 1,000 patient days (1.86 to 1.62)

- Patient Experience with Nurses mean "always" percentage (89.8% to 91.0%)

- Personal Issues Well-Addressed mean "always" percentage (86.8% to 87.5%)

- Likelihood to Recommend mean "always" percentage (88.9% to 90.2%)

- Overall Rating of Care mean "always" percentage (90.5% to 91.4%)

Subscale analyses of the RN Surveillance Capacity Composite showed that the strongest drivers of performance were staffing and resource adequacy and nurse manager ability and leadership (nurse outcomes); percent of RNs with specialty certification (patient experience outcomes); Nursing Foundations for Quality of Care (patient experience and payment outcomes); and nursing participation in hospital affairs (payment outcomes).

Driving Improvement

Taken together, the findings highlight the strategic importance of creating work environments that optimize both nurse safety and surveillance capacity, and they point to the value of deep data collection to identify areas in need of improvement. For example, given the strength of the association between nurse ratings of workplace safety and multiple performance outcomes, organizations should consistently employ evidence-based strategies that contribute to a safe work environment, such as strict adherence to the American Nurses Association's Safe Patient Handling and Mobility Standards[2] and guidelines for the appropriate assignments of patient care based on patient acuity.

Similarly, to improve nurses' perception of unit surveillance capacity, it is imperative that nurse leaders adopt, promote and adhere to surveillance best practices, such as checklists, interdisciplinary rounds, clinical information systems and clinical decision support systems.

Additional recommendations are available in the report.

[2] American Nurses Association. Safe Patient Handling and Mobility: Interprofessional National Standards Across the Care Continuum. Silver Spring, MD: Nurses Books; 2013.