Collaborative Rural Nurse Peer Review

A Quality Improvement Project

Stephanie D. Drobny, MS-HSL, RN; Amy Snell, RNC-OB, BSN; Lisa Morris, MSN-ED, RN-BC, CEN; Cathy Harshbarger, MHA, BSN, RN; Pat Village, MS, RN; Shelly A. Fischer, PhD, RN

ABSTRACT

Background: Peer review is an essential element of professional nursing practice.

Local Problem: Implementing nursing practice peer review is a challenge in any organization; some characteristics of small and rural hospitals can make the task especially daunting.

Methods: A team of nursing leaders and staff nurses from rural and critical access hospitals within 1 health care system was formed to make recommendations about implementing nursing practice peer review in the small rural facilities. Barriers included limited numbers of nurse reviewers by nursing specialty and inherent bias of reviewers due to personal knowledge of cases and nurses involved.

Interventions: A collaborative rural nursing practice peer review council was created, with staff nurse and leader representation from 6 geographically distinct facilities.

Results: The rural collaborative council has developed processes for case referral, reviewer assignment, investigation, and scoring founded on Just Culture principles. Satisfaction among staff nurses, reviewers, and Chief Nursing Officers has been high.

Conclusions: Barriers to implementation of nursing practice peer review in rural hospitals can be mitigated through a collaborative approach, resulting in efficient and effective processes for small, rural, and geographically distinct hospitals.

Key words: nursing practice peer review, nursing professional practice, peer review, quality improvement, rural hospitals

Tursing practice peer review (NPPR) is an essential element of professional nursing practice. NPPR is defined as "the process by which practicing registered nurses systematically access, monitor, and make judgments about the quality of nursing care provided by peers as measured against professional standards of

weaknesses, identify opportunities to improve quality and safety, and inform recommendations for change. The American Nurses Association¹ began pro-

Author Affiliations: Banner Fort Collins, Colorado (Ms Drobny); Page Hospital, Page, Arizona (Ms Snell); Fay W. Whitney School of Nursing, University of Wyoming, Laramie (Dr Fischer); Sanford Health, Fargo, North Dakota (Ms Morris); Banner Lassen, Susanville, California (Ms Harshbarger); and Banner Health, Loveland, Colorado

Our team thanks Carla Wade, MSN/MBA-HCM, RN, for her visionary leadership and support for this project.

The authors declare no conflicts of interest.

Supplemental digital content is available for this article. Direct URL citations appear in the printed text and are provided in the HTML and PDF versions of this article on the journal's Web site (www.jncgjournal.com).

Correspondence: Shelly A. Fischer, PhD, RN, Fay W. Whitney School of Nursing, University of Wyoming, 1000 E. University Ave, Laramie, WY 82071 (sfische1@uwyo.edu).

Accepted for publication: February 5, 2018 Published ahead of print: June 8, 2018 DOI: 10 1097/NCQ 0000000000000331

moting peer review as a professional nursing responsibility as early as 1972, and published guidelines for NPPR in 1988; yet broad implementation has been slow. In contrast to the field of medicine, which established peer review as an integral function of professional practice with the advent of the Professional Standards Review Organization law in 1972,² many nursing organizations have put structures and processes for peer review in place only within the past decade.³ Furthermore, there is a surprising lack of published literature to guide the implementation of NPPR, especially in the rural nurse setting. Much of the extant literature describes the implementation of NPPR in large, urban, Magnet-designated hospitals.

practice." The purpose of NPPR is to evaluate

the quality of nursing care, identify strengths and

Registered nurses (RNs) in rural settings face unique barriers when instituting professional practice structures and processes such as NPPR. Rural hospitals differ greatly from those in the urban setting, largely in terms of the number of resources typically available to support professional practice structures and processes.³⁻⁵ The purpose of this article is to share one system's journey in the implementation of NPPR in the rural acute care environment, to describe barriers encountered and solutions negotiated to mitigate them.

BACKGROUND

Rural nursing practice is strongly influenced by social factors unique to rural and remote areas. Rural communities have a limited pool of residents to become nurses and few amenities to draw newly graduated nurses, both of which limit the number of nurses residing in the rural community. In addition to the challenge of nursing workforce limitations, Winters⁶ describes another practice challenge unique to the rural setting: lack of anonymity. Nurses in rural practice are frequently known by their patients through personal relationships, extended family relationships, and social activities. The nurse's actions in his or her activities outside work can influence the perception of the nurse by patients, colleagues, and managers, in both positive and negative ways. Winters⁶ further describes the concept of "insider/outsider" influencing the practice of nurses in rural communities. Patients may be reluctant to seek care from "outsiders," further limiting the number of nurses who can be successfully integrated into practice in a rural community. Compounding this unique social experience, nurses in rural areas also frequently perceive a sense of professional isolation.⁷ This isolation is not only due to the geographic distance from metropolitan areas, but also relates to the fact that the nurses may work in isolation within their own hospitals, due to limited patient volumes.

In addition to nursing workforce limitations, social factors, and professional isolation, other barriers to the implementation of NPPR that are common and unique to rural nursing include small numbers of nurses on staff, fewer experienced nurses, high volume of temporary nursing staff, and limited access to resources⁶ to support evidence-based practice. In a rural hospital, there is a much smaller pool of nurses from which to select reviewers. It is not uncommon for a hospital with 25 licensed beds to employ only 25 to

35 RNs. In addition, travel nurses are commonly used to fill staff vacancies, further limiting the pool from which to draw nurse reviewers. Because of the small size of the nursing staff and the close-knit nursing community, the RN peer reviewer in the rural facility frequently either has participated in or is familiar with the case he or she is reviewing. They often have personal relationships with the patient and the nurses involved in the case. Although the reviewer may not perceive a conflict of interest or bias, the perception of an objective, practice-focused evaluation may be difficult to achieve.

Another operational problem secondary to the limited number of staff RNs is that rural nurse peer reviewers must often complete investigations and attend NPPR meetings during their scheduled shifts. There are limited resources to cover the peer reviewers' patient care responsibilities during meetings, which creates practical challenges to staffing both patient care needs and professional practice needs. Even when it is possible to schedule meetings when all members are off duty, the commute made by nurses living in remote areas makes attending meetings while off-duty a significant burden to the nurse.

Compounding the challenge of limited numbers of staff RNs in rural hospitals is the expectation that a peer reviewer is a nurse practicing at the same rank and in the same specialty as the nurse involved in the case review. Ideally, the peer reviewer should practice in the same specialty area as the case. A rural hospital may have only a few experienced nurses in each specialty area, with the remainder being travel nurses, new graduate nurses, or inexperienced nurses. As a result, it is difficult to adhere to the professional standards of peer review within a single rural hospital by assigning a nurse with specialty experience to the cases.

An additional barrier to professional NPPR in the rural setting found in the literature is the lack of time and resources for nurses to find and read nursing research. Medical librarians, clinical nurse specialists, and nursing professional practice departments are resources commonly used to mitigate this barrier in urban hospitals. These resources are generally unavailable in a rural hospital.

Guiding framework

Banner Health created its own professional practice framework, the Professional Nursing

Practice and Development Framework, to guide and inform nursing practice and to drive outcomes of excellent patient care.¹¹ The framework articulates 3 spheres of nursing influence and contribution: society, profession, and patients. The model is designed to "enhance[s] the nurse's understanding of expectations as a professional regardless of his/her practice setting."¹¹ Procedurally, NPPR supports the framework at all 3 levels, by fostering professionalism, improving competence of nurses within the system, and ultimately improving the quality of patient outcomes.

The purpose of NPPR encompasses the concepts of quality of care incorporated with evidence-based practice and standards of care, regardless of the size of the facility. Given the limitations and barriers inherent to small and remotely located hospitals, the challenge was how to meet quality standards by implementing an effective NPPR process. The solution came in partnering hospitals. The NPPR partnership allowed smaller facilities to function similarly to a robust NPPR program in a larger facility. The process of developing this program began with a vision and a strong leadership team to charter the program.

METHODS Setting

Banner Health is a large not-for-profit health care system, operating 28 hospitals in 6 states within the United States. Of these hospitals, 10 are in rural areas. While there is currently no universally accepted definition for "rural," they have established criteria to classify its hospitals as urban or rural. At least 2 of the following must be met for a hospital to be considered rural: the hospital must have 100 or fewer licensed beds, be recognized as a critical access hospital, or must be located outside a metropolitan statistical area. The 10 hospitals meeting "rural" criteria formed a collaborative for the purposes of sharing best practices among like facilities, creating a forum for decision support related to system initiatives that affect the rural hospitals, sharing limited resources, and forming a unified voice to represent rural interests.

Intervention

In the spring of 2015, the NPPR executive committee was formed, consisting of Chief Nursing Officers (CNOs), a Regional Director of Professional Practice (DoPP), and 2 Quality Senior

Managers. First, the committee chartered a Regional Nursing Practice Peer Review Council and associated processes. Six critical access hospitals were included in the original peer review group. The hospitals' bed capacity ranged from 16 to 25 licensed beds, and they employed roughly 100 employees apiece, caring for approximately 400 to 500 admissions per year. The facilities were all located in rural settings in Arizona, California, Colorado, Nebraska, and Wyoming.

As in all implementations of NPPR, selection of reviewers was paramount to the success and effectiveness of the process. Expert nurses to perform case review and recommendations are foundational, and nursing leadership support is essential. As such, the next challenge was to establish a process for recruiting and vetting RN reviewers. Nurse peer reviewers were chosen from the 6 facilities to represent their specialty through a nomination and application process. Each nominated applicant was required to submit an application, resume, letters of reference, and evidence of leadership support. Applications were reviewed and approved by the NPPR Executive Committee, resulting in a final group of 21 members, including 12 RN peer reviewers. Supportive resources included the DoPP and representatives from participating hospitals in the following roles: CNOs, pharmacist, clinical informatics coordinator, clinical nurse specialist, clinical assessment and performance improvement senior managers, and a clinical education specialist.

Once formed, the NPPR Council made decisions about how to modify the NPPR processes for use in the rural collaborative effort. Standardized referral criteria did not require modification nor did the process to trigger referral for NPPR. The review process itself also fit the rural collaborative council's needs. The review process adopted employs Just Culture principles. Just Culture ensures balanced accountability for both individuals and the organization by providing an algorithm for evaluating nursing practice and decision-making. The greatest adaptations to the process entailed the development of a virtual environment for conducting the collaborative NPPR.

Leveraging technology

The NPPR Executive Committee was challenged with developing a virtual environment within which to trigger and accept referrals, "meet"

regularly, and review patient records, despite geographical barriers of participating hospitals residing in 5 different states. The virtual environment included several platforms including teleconference meetings, an electronic medical record (EMR), and centralized digital event reporting.

The rural hospitals in the collaborative effort use videoconferencing to facilitate the routine communication needs. In the case of NPPR implementation, this type of technology was essential for connecting participants monthly. Videoconferencing platforms enable real-time audio, video, and a shared screen for viewing case review materials, Just Culture algorithm, and case documentation forms. All protected health information (PHI) is secured within the software platforms and is deidentified with EMR numbers and assigned case numbers.

Events are reported by any provider in the rural facilities using a centralized software program. As is the case with paper incident reporting systems, the report is distinct from the EMR, serves as a quality assurance tool, and is protected information. All information entered, including PHI, is secured within the information technology system, complete with firewalls, secure access, and audit trail capabilities. From these occurrence reports, and subsequent occurrence review and investigation processes, cases are identified for NPPR. Referrals are triggered, also through the software program. Standardized criteria provide decision support for referrals, though any case may be referred to NPPR for any reason, including a hunch that the case may present opportunity for learning and improvement. Criteria for referral include high-risk/high-volume procedures, as well as individual incidents with adverse outcomes or irregular processes. Sources of NPPR referrals vary, including nursing leadership, patient safety and risk management, physician peer review, and patient/family complaint investigations. The hospitals utilize a centralized EMR, enabling peer reviewers to access medical records across hospitals.

Review process and documentation

After the initial review by a nurse peer reviewer, including interview and discussion with the RN(s) involved in the case, the findings are presented by the nurse reviewer to the committee. Practice aspects of the case are discussed and

consensus on scoring is reached by the group. Scores are assigned in the areas of clinical care, behavior, and documentation, based on the group's determination of whether the practice was appropriate, based on human error, or based on at-risk or reckless behavior. Care and documentation issues are tracked and trended to guide and inform decisions related to education needs. Once consensus is achieved, a letter is sent from the DoPP to the nurse involved in the case and to the facility CNO, detailing the findings. Just Culture algorithm guides all NPPR processes, from evaluation through follow-up at the facility level. Emphasis is placed on system issues and opportunities for learning and practice development.

Ethical considerations

Confidentiality for all involved in the NPPR processes is of greatest concern. Patients and their PHI must be protected in all phases of NPPR. This is accomplished by assuring that PHI is deidentified using assigned numbers in lieu of patient names. Nurses with cases in review must also be protected. A confidentiality training session is conducted for all NPPR participants, reviewing the essential and privileged nature of the reviews and discussions, to assure adherence to confidentiality at all times. The review itself is confidential, and all communications are labeled as privileged, confidential, and not discoverable. Policies are in place to protect the information referred for review, as well as information resulting from the review, in the context of quality assurance processes.

RESULTS

To evaluate the collaborative NPPR process and outcomes, the authors distributed a survey to determine whether the new process was perceived positively or negatively to all participating RN reviewers (12) and the CNOs (5) of the participating hospitals 6 months after the inception of the rural collaborative. Survey response rates were 75% and 80%, respectively. Respondents had overwhelmingly positive perceptions of the process and outcomes (Supplemental Digital Content, Table 1, available at: http://links. lww.com/JNCQ/A429). The CNOs all strongly agreed that the NPPR collaboration adds value to the nursing practice at their facilities and that the results are worth the labor investment (Supplemental Digital Content, Table 2, available at:

http://links.lww.com/JNCQ/A430). The peer reviewers all reported that they feel comfortable sharing their thoughts with the team and that participation on this team has helped develop their nursing practice.

In addition to the positive responses to the survey questions, narrative comments confirmed the positive impact that the peer review collaboration has had on participants' professional development. One comment says it all: "This dynamic, knowledgeable group is making a positive impact on nursing practices and ultimately patient safety. I learn and grow personally with each meeting." The next step in evaluation of the process will be to extend the survey to the bedside nurses of the participating facilities for a more robust analysis of the broader impact of this strategy.

Twenty-five formal referrals for review were received over the course of the first 6 months after implementation of the regional NPPR. This represented a small percentage of the total number of adverse event incident reports submitted from the 6 hospitals during the same period, which is consistent with findings from literature related to initial expectations for referral.3 It is understood that there is reluctance to submit cases during the implementation phase of NPPR, until trust forms.⁵ From these referrals, 22 cases were moved forward to NPPR. The peer reviewers evaluated the cases by reviewing EMRs and interviewing nurses electronically, by telephone, or in person. From these investigations, the reviewers developed a summary of the findings and identified key issues. The peer reviewers presented the cases to the committee for discussion and scoring at the following monthly meeting. After committee review and scoring of an NPPR case, the DoPP sent a letter to the nurses and their CNOs involved in the case, delineating findings and recommendations.

During case review, peer reviewers identified system issues that were referred to system teams for resolution. Combining efforts gives the rural hospitals a collective voice about concerns that could affect the larger system. For example, the peer reviewers identified opportunity for error when entering respiratory therapy (RT) orders into the EMR. Entering orders for a breathing treatment requires a 2-step process. The physician enters the order for treatments and then the RT enters the order for the medication. Because rural hospitals commonly do not have 24/7 RT

coverage, this task falls to the nursing staff. Especially on nights where newer nurses start and where there frequently are limited resources, the nurse could miss this order and, subsequently, the treatment. Each hospital had created a different workaround to try to mitigate this risk, but none was fully effective. By collaborating with each other, the rural hospitals brought this problem to the attention of the system clinical consensus groups to develop a solution that ensures safer and more accurate patient care related to RT orders and treatment.

In addition to the positive local and system outcomes, some unintended consequences have been encountered with the regional NPPR structure and process. For example, there have been issues related to differing scopes of nursing practice among the states represented. These are resolved with the support of the regional DoPP and advisory opinions from the state boards of nursing as needed. Also, many rural areas do not have pharmacies that are open late in the evenings or over the weekend. This gap in coverage by pharmacy services necessitates hospitals providing home medication packs upon discharge from the emergency department (ED). Each state represented has different language and interpretation of orders for dispensing home medication packs by ED nurses, and as such the team has required support from Centers for Medicare & Medicaid Services⁸ and pharmacy to assure regulatory compliance by each hospital.

DISCUSSION

Developing NPPR in a critical access hospital can be a daunting process. This is evidenced by the fact that, although research findings had promoted NPPR for nearly 3 decades, none of the 6 rural facilities had managed to implement it. However, since its inception, the collaborative process has run smoothly. Perhaps this is because rural nurses experience professional isolation to a much greater extent than urban nurses and therefore value NPPR more readily.¹³ In contrast to a previous report of decrease in attendance after the first few months,14 attendance has not been an issue with the regional model. Fear of reprisal is also mentioned⁵ as a challenge when working to change culture to embrace NPPR, and this was a concern initially with the collaborative model as well. The role of the chair and executive committee was integral to resolving issues related to trust and fear of reprisal by using Just Culture¹² principles and maintaining a focus on systems and processes, rather than on individual performance. The team has become increasingly adept in the application of a Just Culture algorithm and feels they are able to review cases in a nonpunitive manner.

While organizational culture varies considerably among hospitals, even among units, we believe that this structure and process is transferable to other rural hospitals. By embedding the essentials of adequate training, secure information technology, and Just Culture principles, comparable results might be obtained by other rural hospitals that are part of a health care network with centralized systems and support.

CONCLUSIONS

Multiple challenges face nursing leaders when attempting to implement NPPR in a rural setting. As identified in the literature review, applying urban nursing professional practice models such as NPPR to a rural setting is not effective without modification to accommodate challenges unique to the rural hospital environment. The collaborative approach to implementing NPPR described is one example of a strategy to make minor adjustments to the NPPR model to fit the unique needs and challenges of the rural setting. We have demonstrated that a collaborative approach can mitigate the barriers of size, distance, and relative isolation while enhancing nursing professional practice and, ultimately, patient outcomes across a large organization. The initial results of this collaboration show that this team has identified process issues that affect a health system at large and has offered solutions to the policymakers. The RN peer reviewers and CNOs have reported a positive impact on nursing professional practice in their facilities because of this collaboration.

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