Peer-Review Competency Assessment Engages Staff and Influences Patient Outcomes

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abstract

Background: Nurse educators must guide competency assessment in a way that influences safe patient care. The goal of this innovative competency assessment was for RNs to demonstrate performance of sound practice related to anticoagulation medication, pressure injuries, and pain management using a peer-review format.

Method: The process was initiated through the unit-based team. The clinical RN was required to bring forth the information that he or she had met the competency requirements. Rubrics provided consistency in evaluation.

Results: The process was perceived to have evaluated actual performance and allowed demonstration of performance. For patient outcomes, anticoagulation safety measures were sustained, pressure injury measures were improved, and pain outcome measures were not improved during and after the competency period.

Conclusion: A peer-review process for clinical RN competency assessment enhanced professionalism through professional practice evaluation, was perceived as favorable, and was associated with positive patient outcomes.


Continued competence of the RN is important to ensure that safe patient care can occur within a rapidly changing health care environment. Since the 1990s, continued competency assessment has been a formal part of professional nursing practice (Institute of Medicine, 2003). Nurse educators are challenged to continue competency assessment in ways that adhere to current professional and regulatory standards. This article describes the development and outcomes of an innovative peer-review competency assessment process for RNs working in acute care at a tertiary and quaternary academic medical center.

LITERATURE REVIEW

Competency Assessment

The Institute of Medicine’s 2003 report, Health Professions Education: Bridge to Quality, recommended that “all licensed health care professionals periodically demonstrate the ability to safely deliver patient care” (p. 9). This ongoing assessment should be based on the core competencies of the profession and include direct measurement. Competency is “an expected level of performance that integrates knowledge, skills, abilities, and judgment” (American Nurses Association, 2015, p. 86). Measurement methods include “technical competence, patient assessment, evaluation of patient outcomes, and other evidence-based assessment methods” (Institute of Medicine, 2003, p. 9). A summit of nurse leaders concluded that “Competency evaluation includes thinking in action, confidence and clarity in decision making, and information retrieval throughout the career trajectory for the inclusion of best practices” (Allen et al., 2008, p. 85).

Scott Tilley (2008) reported that “a consequence of a focus on competency in education is a narrowing of the gap between education and practice, leading to improved...
patient outcomes, clinical judgment, and accountability and self-assessment of learners” (p. 63). In nursing, common methods for competency assessment include cognitive examination, return demonstration, observation, peer review, simulation, or narrative exemplar. Competency assessment has been reported to promote collegiality, identify clinical experts, identify areas of variation, improve confidence, decrease patient complaints, and decrease reported safety concerns (Carreon, Sugarman, Beener, & Agan, 2013; Overman, Hauver, McKay, & Aucoin, 2014).

Peer Review

In the nursing profession, the peer-review process is designed to stimulate professionalism through increased accountability and self-regulation of practice. Peer review is “a collegial, systematic, and periodic process by which registered nurses are held accountable for practice and which fosters the refinement of one’s knowledge, skills, and decision-making at all levels and in all areas of practice.” (American Nurses Association, 2015, p. 89). Standard 15 of the Nursing: Scope and Standards of Practice (2015) is professional practice evaluation. This standard guides the RN to “seek formal and informal feedback regarding one’s own practice from consumers, peers, colleagues, supervisors, and others,” as well as to provide “peers and others with formal and informal constructive feedback regarding their practice or role performance” (American Nurses Association, 2015, p. 81).

Principles of peer review include that it is practice focused, feedback is timely, and the process fosters a culture of safety and best practice and considers the RN’s developmental stage. Peer review is not anonymous or punitive (Foster, 2015; Haag-Heitman & George, 2011). Importantly, peer review is different from the annual performance review. The annual performance appraisal documents an individual’s performance goals, contributions, and areas for improvement, whereas professional peer review assesses the quality of nursing care as measured against standards of practice (George & Haag-Heitman, 2012). RN-to-RN peer review has been reported as common on clinical units, but it has not been associated with patient safety and satisfaction data (Pfeiffer, Wickline, Deetz, & Berry, 2012). Identified barriers to effective peer review include “lack of clarity around what constitutes peer review; fear of peer retribution; concerns with language and cultural barriers; and concerns regarding lack of mutual respect and professionalism” (Pfeiffer et al., 2012, pp. 396-397).

Professional/Shared Governance/Shared Decision Making

The model of shared governance is an approach that has been adopted by the profession of nursing to increase involvement of RNs in the decision-making processes that will have an influence on their practice. This empowerment is supported by partnership, equity, accountability, and ownership. Barden, Griffin, Donahue, and Fitzpatrick (2011) identified the significance of continued development in nursing professionals. Nursing professional practice models define role behaviors of the nursing specialty to increase job satisfaction, improve patient outcomes, and reduce associated expenses in use of health care resources. These role behaviors outline the organization expectations of nursing’s responsibilities toward overall achievement of the organization’s strategic plan. Promoting quality through accountability and shared governance also supports the Magnet® standards of practice (Silverstein, 2012).

When nurses participate in decision making through shared governance, it enhances their perception of empowerment and autonomy. Kutney-Lee et al. (2016) identified increased retention levels in hospitals that foster nurse autonomy and engagement in the decision-making process within the organization. Shared governance supports evaluation of current nursing practice and progression toward future goals. Studies show a relationship between shared governance and nurse autonomy with increased nurse job satisfaction scores and improved patient outcomes (Kutney-Lee et al., 2016). Organizations that employ empowerment strategies to increase respect, status, and recognition of nursing staff demonstrate higher levels of recruitment. The inclusion of shared governance during the competency process is identified as a method of improvement which will empower nurses in the decision-making process.

Theoretical Framework

The Wright Competency Assessment Model provided the framework for the peer-review competency program (Wright, 2015). The foundation of the model is based on the following four principles: competencies are selected that matter to both the people involved and the organization; the right verification methods are chosen for each competency; the roles and accountability of the manager, educator, and employee in the process are clarified; and employee-centered competency verification creates a culture of engagement and commitment (Wright, 2015).

The principles that guide the competency model are ownership, empowerment, and accountability. Ownership begins by collaborating with employees to select competency topics. Competency topics are based on current needs of the organization and of the job. Considerations for competencies are based on what is new, changing, high risk, or problematic in the job. Empowerment puts the employee at the center of the verification
process and has the employee bring forth the evidence that shows competence in a given topic. Accountability involves both the leaders and employees. Leaders must create an environment for success by conveying expectations, eliminating barriers, and holding employees accountable (Wright, 2015). Employees are accountable for supporting the process through working as a supportive team, which is especially important with peer-review competency. For success, peers must accommodate others’ requests for review.

**Structure**

The organization’s Nursing Competency Program provided the structure for the program. The program defines competency as an employee’s actual performance in a particular situation. Competency assessment and selection are directed by patient populations served, procedures conducted, conditions or diseases treated, and equipment used. Identification of competency topics is guided by quality improvement data, regulatory requirements, professional standards, risk management, policy, procedure, and nursing subcommittees. The program supports various methods to evaluate competency.

**METHOD**

**Purpose and Aims**

The goal of the competency assessment was to allow the RN to demonstrate performance of sound practice related to selected topic areas. The theoretical framework guided the design and the organization’s nursing competency program provided the structure for the competency assessment.

**Role of the Nursing Professional Development Practitioner**

The first role of the nursing professional development practitioner (NPDP) in this activity was to serve as a learning facilitator. As a facilitator, the NPDP supports the employee to complete the competency and provide a structure that clearly defines expectations and addresses barriers (Wright, 2015). The NPDP also worked to establish a collaborative partnership with the unit-based team (UBT) to identify topics and methods for competency assessment. In this partnership, the NPDP brought forth competency management skills related to developing, coordinating, facilitating, and evaluating the competency process (Harper & Maloney, 2016). The UBT brought forth information on current trends and issues related to unit-level nursing practice. UBTs are defined by the organization as clinical shared governance teams who work collaboratively to solve unit problems, improve unit performance, and enhance unit quality. Further information on the collaborative partnership is described below.

**Design**

The competency assessment was designed to address Standard 15 of the Nursing Scope and Standards of Practice: professional practice evaluation (American Nurses Association, 2015). The project was designed to align with the principles guiding the competency assessment model. Ownership was incorporated by involving the UBT to evaluate competency options and make recommendations for competency topics. The aim of peer review was to empower staff and stimulate professionalism by giving them the tools to assess the performance of peers against established standards. Accountability involved both leadership and clinical RNs. Leadership conveyed clear expectations, monitored the environment for barriers and held all accountable to the process. Clinical RNs were accountable for completing one’s own competencies as well as for accommodating others’ requests for peer review.

**Sample and Setting**

The participants were 96 RNs employed in a 36-bed acute care intermediate and solid organ transplant unit. The organization’s institutional review board determined that the project was exempt from full board review.

**Procedures, Interventions, and Implementation**

The peer-review competency process was initiated through the UBT. At a team meeting, the NPDP gave a brief presentation on peer review, competency and the Wright Competency Assessment Model. Following that introduction, the team analyzed unit level data and internal evidence related to Joint Commission National Patient Safety Goals (e.g., anticoagulation safety, care planning, alarm management, infection control and isolation, pain management) and Nursing Sensitive Indicators (e.g., pressure injuries, fall prevention, catheter associated urinary tract infections, and central line associated blood stream infections). The team discussed the data in relation to unit-level nursing practice, the nursing professional practice model, and the department of nursing’s areas of emphasis related to the organization’s strategic plan. Through a collaborative shared decision-making process, the team chose three topics for peer-review competency: anticoagulation medication safety, pain management, and pressure injury assessment, prevention, and management.

The organization’s Nursing Competency Program had a template to guide competency development and tracking. The template was modified slightly to accommodate the peer-review process. The NPDP developed a separate template for each competency topic. The templates aided
in competency documentation in a way that was consistent and based on established standards. The templates included a rubric that was used to identify whether the clinical RN met or did not meet each specific area of the competency. The rubric also incorporated adult learning principles, as it clearly communicated evaluation criteria and supported self-direction, where the RN could determine when and by whom the evaluation would occur (Frentsos, 2013). The form for each competency included patient information, clinical RN name, date, the criteria for successful completion, a place for the clinical RN peer reviewer’s signature, and a section to determine whether the competency was met or not met. The competency elements were based on organizational policy, as well as professional standards of care and the best available evidence.

To measure effectiveness, data were gathered to monitor the process. The competency period was from February through May of 2016, which encompasses first and second quarters of 2016. The preintervention period for baseline data was the third and fourth quarters of 2015. The postintervention period for outcome data was the third and fourth quarters of 2016. Two options were given for each competency. Providing two paths for demonstrating competency gives nurses the opportunity to make choices based on their experience and learning style preferences (Morrell & Campbell, 2016). The clinical RN was required to bring forth the information from electronic health record documentation that he or she had met the requirements on one of the two options during the competency period. For anticoagulation medication safety, the choices were anticoagulation patient education or verification of correct heparin infusion protocol dosing. The pain management competency had one peer-review option: pain assessment, intervention, care plan, and documentation. The other option for pain management was a quiz constructed by an NPDP and reviewed by a clinical RN in the unit and an additional NPDP. The pressure injury competency choices were assessment, care plan, and documentation of either pressure injury prevention or a pressure injury.

The clinical RNs were introduced to the peer-review competency program during mandatory team meetings. The NPDP provided an overview of the process similar to that provided at the UBT meeting and also described the involvement of the UBT in determining the competencies. Information on how to communicate with peers and give feedback was also presented. The time line and process for competency completion was also discussed. Each clinical RN was given a packet that included the competency forms and supporting information about the competency program, such as definitions and a question-and-answer sheet. Each clinical RN chose one’s own reviewer; a rubric was used to guide consistent practice. Clinical RNs who did not have the opportunity to complete the competencies in clinical practice had the opportunity to attend open laboratory sessions during the last week of the competency period to complete the competencies.

During the competency period, the NPDP made rounds on the unit to ascertain any concerns and questions that came about. Time was given on the agenda of each UBT meeting during the competency period to formally discuss the process. The unit’s leadership team held staff accountable for completing the competencies.

Variables and Measurement
This competency process was unique in that it leveraged Standard 15 of the Nursing Scope and Standards of Practice: Professional Practice Evaluation. In doing so, each clinical RN was empowered to work with another clinical RN to determine whether the peer met each element of the competency. This structure assumes that each clinical RN participating practices ethically and reaches out to the NPDP to clarify questions or concerns. Because this unique method may not hold to the same rigor and consistency as if the NPDP was the sole evaluator, patient outcome data were monitored throughout the process. Although there are many factors that contribute to patient outcomes beyond this project, they were monitored to ensure this process did not have a negative effect and evaluate whether it could be linked to positive outcomes.

To evaluate the effectiveness of the peer-review competency program, data were collected to evaluate participation, critique of the process by the clinical RNs involved in the program, and patient outcomes related to the competency assessment topics. Patient outcomes included warfarin education compliance, pressure injury prevalence and incidence, patient satisfaction data related to pain management, and patient incident reports.

RESULTS
Participation
The three competencies were completed by 93 clinical RNs. Of these 93 clinical RNs, 82 (88%) peer reviewed at least one other RN’s competency. Sixty-four percent of RNs were peer reviewers for the anticoagulation safety competency, 61% for the pain management competency, and 61% for the pressure injury competency. As each clinical RN had the ability to choose one of two available options for each competency, it is interesting to note the options utilized. For the anticoagulation safety competency, 77% chose the patient education option and 23% chose the heparin infusion management option. The clear majority chose the peer-review option for pain management (90%), with only 10% choosing the pain manage-
ment quiz option. Finally, for the pressure injury competency, 76% completed the pressure injury prevention competency, whereas 24% completed the pressure injury management competency.

Clinical RN Input
Input was gathered from those participating in the peer-review process to inform the future design and implementation of peer-review competency. An audience response system was utilized at a staff meeting to gather input on variety of items. A 4-point Likert-type scale (strongly agree, agree, disagree, strongly disagree) was utilized to rate the items. Results are presented in Table 1. Those who participated in the competency process felt that it evaluated actual performance, allowed demonstration of how one is performing according to expectations, and that the topics were important to nursing practice. Most felt comfortable and confident in being a peer reviewer and that they were easily able to find someone who was friendly and open when seeking someone to peer review their work. Participants also expressed that they had adequate patients to complete the competencies.

In addition, written comments were obtained regarding the peer-review competency process and analyzed for themes. Positive themes included collaboration, professional nursing practice and patient care, convenience, flexibility, and choice, and process components. Negative themes included understanding of the process, time constraints, and availability of peers or patients for review (Table 2).

Although acquisition of knowledge is not the intent of the competency process, staff expressed that the collaborative process allowed staff to learn from peers through idea sharing and patient care discussion. The communication, education, and feedback among equals was appreciated and helped them to become comfortable giving feedback to one another and strengthened professional relationships.

Patient Outcomes
Patient outcomes related to the competency process were mixed. All patient outcomes were trended by tracking data over three points in time, the two quarters prior to the competency period, the two quarters during the
competency period, and the two quarters after the competency period ended. There were no identifiable changes in patient incident reports related to any of the three competency topics during or after the competency period from baseline. For the anticoagulation safety competency, warfarin education compliance was at 100% during the competency period and the period after the competency ended. This result is associated with sustaining of performance (Figure 1).

The pain management competency outcomes showed a negative trend during and after the competency period. Hospital Consumer Assessment of Healthcare Providers and Systems patient satisfaction and Press Ganey© patient satisfaction scores related to pain management showed a slight downward trend from baseline during the intervention period and in the two quarters after the competency ended. This negative trend may be because patient satisfaction was not directly assessed in the competency process, instead the focus was on pain management principles. It was hoped that appropriate pain management may also influence patient satisfaction. In addition, it is the only competency method that included an option other than peer review; a quiz could be chosen. However, only 10% chose the quiz option, whereas 90% chose peer review, so this explanation is not likely.

Pressure injury prevalence and incidence decreased from baseline, a positive finding (Figures 2-3). Pressure injury prevalence is the percentage of hospital acquired stage II or greater, as measured during one day each quarter. Prevalence was 5% prior to the competency period, 1.79% during the competency period, and decreased even further to 1.72% in the 6 months following the competency assessment. Pressure injury incidence is the number of patients who developed a hospital acquired stage II or greater pressure injury per 1,000 patient-days. The incidence of pressure ulcers was 3.03 (per 1,000 patient-days) prior to the competency period, 2.70 during the competency period, and 2.20 after the competency assessment ended. Both pressure injury prevalence and injury showed a positive improvement during and after the competency period.

LIMITATIONS

Limitations of this work include that it represented only acute care nurses in one nursing unit at one institution. The questions used to gather clinical RN input about the process were constructed by a NPDP and do not have established reliability and validity. A limitation of the pain management competency patient outcomes is that they were based on patient satisfaction reports and did not directly measure RN adherence with pain management standards or policy. In addition, the ability of each clinical RN to choose his or her own reviewer introduces bias to the process.

DISCUSSION

This competency process aligned with the outcomes from the peer-review competency experiences of Carreon et al. (2013) and Overman et al. (2014), as it was reported to be a positive experience for staff that motivated them to find opportunities to collaborate and empowered them to provide excellent patient care through professional nursing practice. The peer-review competency program raised awareness of expectations, verified that practice met standards, and added insight into other’s processes and critical thinking skills.

Similar to the findings of Pfeiffer et al. (2012), this project did not find an association between peer review and patient satisfaction trends related to pain management. However, this project’s findings differed from the literature in that peer review was associated with patient safety related to anticoagulation medication safety and pressure injury prevalence. Although Pfeiffer et al. (2012) identified several barriers to peer review, the only barrier identified in this project was lack of understanding.
It is also important to note that the peer-review competency process had a high level of involvement, not only did all clinical RNs have another clinical RN peer review their work, 88% served as a peer reviewer for at least one other clinical RN’s competency. This makes a strong case for the peer-review competency process being a factor in the measured outcomes. Specifically, for pressure injury prevalence and incidence rates, the positive outcomes may be associated with the RN’s choice of competency: 76% completed the pressure injury prevention competency, whereas 24% completed the pressure injury management competency. The large majority chose to focus on pressure injury prevention (instead of treatment) and this resulted in a decrease in pressure injury rates.

IMPLICATIONS
A peer-review competency program developed through the support of a shared governance structure was viewed positively by the clinical RNs involved and had favorable patient outcomes. Continuing education and staff development professionals should consider this innovative method of competency assessment and collaborate with clinical RNs to determine competency topics, as well decide the best methods for delivery and measurement. Peer review proved to be a good fit for the topics selected and aligned with professional practice evaluation—a nursing standard of practice. Future work in peer-review competency development should ensure clinical RN understanding of peer-review competency, carefully align competency topic with an evaluation method that is a good fit, and thoughtfully choose topics that are important to nursing practice at both a global and local level.

CONCLUSION
Competent nursing care is an expectation of patients, organizations, and the nursing profession. A peer-review process for clinical RN competency assessment enhanced professionalism through professional practice evaluation was seen as favorable by participants and was associated with positive patient outcomes. The process was an effective way to evaluate competence and is sustainable in today’s health care environment.

REFERENCES


