Analyzing Nurse Workload and Improvements for Manageable Nurse-to-Patient Ratios

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Identifying the problem, or opportunity, for improvement upon nurse workload

Within the healthcare community, nurse-to-patient ratios are a constant concern brought to light during conversations among healthcare workers. When there is an increased number of patients requiring care, in comparison to the available healthcare team, the workload placed on each nurse is immense. Inadequate nurse staffing has resulted in statistical evidence of an increased rate of burnout, medication administration errors, and an improved standard of poor patient care, which can result in injury or neglect of the patient. Learning from past experiences, through evidence-based practice, will result in the ability to perform performance and quality improvement. Conduction of such occurs with a positive, productive outcome by focusing on a particular area, the critical care unit (CCU) or intensive care unit (ICU), of nurse-to-patient ratio, and overall nurse workload. The students will be addressing the distribution of patients, care required by each patient, and overall nurse workload.

Literature review on nurse-to-patient ratio and overall nurse workload

Evidence-based practice (EBP) is the foundation of healthcare, patient- and family-centered. EBP can be best defined by the American Association of Critical-Care Nurses (AACN) as "A problem-solving approach in practice that involves the conscientious use of current best evidence in making decisions about patient care… [and] incorporates a systematic search for a critical appraisal of relevant evidence to answer a clinical question…" (Munro & Hope, 2019). This statistical information allows any individual the opportunity to explore findings further that better healthcare overall and implementation within everyday practice.

Within healthcare, it is common to have a variety of controversial topics; one such topic includes the number of patients placed upon a singular nurse. The number of patients provides

total patient acuity and overall workload placed on that nurse. A substantial aspect of research literature tends to focus on the nurse-to-patient ratio. The ratio is usually expressed as a dichotomous variable, <1:2 and >1:2, and is the regular basis of staffing measures among practicing nurses (Kiekkas et al., 2008). Evidence-based practice studies may also narrow, and try to be more specific, with the utilization of data from night-time nurse-to-patient ratio, registered nurse (RN)-to-patient ratio. Further specification may include the number of years of experience for each practicing nurse, but this still does not account for the individual acuity of the patient and the demands they require from the assigned nurse (Kiekkas et al., 2008). As a result of overlooking total acuity, there is a belief held a large amount of healthcare system employees that each hospital, not the government, should determine the nurse-to-patient ratio upheld within a facility.

Standardization of nurse workload is hard to determine from hospital to hospital. Each facility has a different method to assess the patients assigned to each nurse. Some establishments depend upon the clinical judgment of the charge nurse to determine patient acuity and other facilities depend upon established acuity tools. In a study conducted at Indiana University Health Ball Memorial Hospital in Muncie, Indiana, on their progressive care unit (PCU), the unit-based council (UBC) at this facility formed a team of staff members. The UBC included the unit manager, charge nurses, clinical nurses, and a nurse researcher to explore the possibilities of improving upon and implementing a new, more accurate, and consistent acuity assessment tool for the unit (Kidd, Grove, Kaiser, Swoboda, & Taylor, 2014). With much deliberation and employee input, the implementation of a new assessment tool began. This new criterion consisted of five categories, including complicated procedures, education, psychosocial/therapeutic interventions, number of oral medications, and involved I.V. drugs and

other medicines. Each class is further broken down based on the nursing time required to complete a task, emotional and physical energy required, the expertise required, frequency of tasks and interventions, and follow-up assessments. Rating options on the acuity assessment run from one to four, one is indicating low acuity and four indicating high acuity, totaling between zero to sixty total points (Kidd, Grove, Kaiser, Swoboda, & Taylor, 2014). From there, the calculated patient acuity scores are transferred to the charge nurse and then is divide assignments among the clinic-nurses based on nurses' expertise and patient needs (Kidd, Grove, Kaiser, Swoboda, & Taylor, 2014).

With the government mandating a standardized nurse-to-patient ratio, without the addition of an acuity assessment tool also implemented, it makes the presence of burnout syndrome increase. Over the last decade, nurse burnout has grown substantially by 60-70%, and turnover rates for registered nurses (RNs), licensed practical nurses (LPNs), and certified nursing assistants (CNAs) are estimated to be as high as 56%, 51%, and 75%, respectively (Gutsan, Patton, Willis, & Coustasse-Hencke, 2018). "A high nurse-patient ratio has had risky consequences, including high-stress levels and mental exhaustion among nurses and has led to an increase in mistakes and accidents, and resulted in a surge in malpractice suits" (Gutsan, Patton, Willis, & Coustasse-Hencke, 2018). To decrease the incidence of nurse burnout and turnover rates among healthcare staff members, the involvement of staff in the development of an acuity assessment tool would create a valuable, efficient instrument for the healthcare teams' utilization (Kidd, Grove, Kaiser, Swoboda, & Taylor, 2014). As a result, nurse satisfaction and job retention would increase. However, for each facility to experience the positive effects of creating this tool, in direct relation to job and patient satisfaction scores rising, personalized acuity tools may be required to be designed and implemented.

As a result of a heavy workload, there is an ever-growing problem for the American healthcare system. An increased workload is a direct result of an increased demand for nurses, inadequate supply of nurses, reduced staffing with increased overtime, and the reduction in inpatient length of stay (Carayon & Gurses, n.d.). As a result, the unionization of nurses has become common within the healthcare field. There are a variety of approaches that can be taken to achieve the goal of safe patient care with an acceptable nurse workload. Unionized nurses make it known that, within today's healthcare environment, collective bargaining strategies may be the only effective means for the nurse to gain control over their practice (Budd, Warion, & Patton, 2014). Within the last year of two-thousand-nineteen, there have been reports of varying strikes concerning unsafe, inadequate staffing. The most recent strike event was at the University of Chicago Medical Center, where more than 2,200 U of C nurses participated in the strike to improve staffing within the workplace. National Nurses United stated that, since 2017, 1,700 filed reports regarding staffing concerns at this establishment (Odigwe, 2019). These nurses are fighting for safe patient care and control over their practice. When there is organizational autonomy presented to staff in the clinical setting, nurses feel respected and empowered in their ability to provide safe, high-quality patient care (Budd, Warion, & Patton, 2014).

An adequately informed facility regarding employee concerns about workload and overall staffing of nurses, then addressing actions can begin to form. The best steps towards implementation start with understanding the circumstances in which the healthcare team concerns lye. Then the process of a change may occur. This implementation can execution is completed through a variety of change theories brought into a hospital's standard of care during clinical practice. This change will address the Lewin Change Theory for implementation.

Application of Lewin's Change Theory into clinical practice

The students have selected Lewin's Change Theory as the change theory to apply to this change paper. Lewin's Change Theory consists of the idea that there are driving and restraining forces when attempting to make alterations to any system. Driving forces are any contributing factors that push people towards making changes in the current system that is in place. Restraining effects are any influencing aspects that suggest change is not needed, or components that may cause changes severely.

There is a variety of driving forces for implementing policy changes in the healthcare setting concerning nurse-to-patient ratios. One driving force is that, within this decade, nurse burnout has increased along with turnover rates for registered nurses (RNs), licensed practical nurses (LPNs), and unlicensed assistive personnel (UAPs) (Gutsan, Patton, Willis, & Coustasse-Hencke, 2018). Other driving forces are that studies have found that nurse understaffing of the ICU results in higher patient mortality rates (Kiekkas et al., 2008). Also, understaffed nurses result in increased over time, resulting in a shorter length of stay for patients (Carayon & Gurses, n.d.). When nurses have an increased amount of overtime, this results in avoidable complications.

There are notable restraining forces concerning the implementation of changes regarding nurse-to-patient ratios. One prevalent factor is that some hospitals may not be able to find enough nurses to hire for staffing of their facility to meet requirements. The nursing shortage in America is no longer a health crisis but a national security concern. The issue is most noticeable when the focus brought forwards addresses the potential to reach a 20% nursing deficit by 2020 (Nelson, 2002). Another restraining factor is that hospitals may not want to hire more nurses. Staffing costs the hospital money; some hospitals may view the benefits of lower staffing despite a decrease in quality of care as a necessary sacrifice when it comes to the budget.

Nurse-to-patient ratio data collection and analysis

Assessing influential factors on the unsafe nurse to patient ratios is essential for change to be made in the future. A significant portion of the internal data presented supported the adverse outcomes that patients and hospitals suffer due to inadequate staffing. The external data gives us a better understanding of how unsafe nurse to patient ratios affect the nurse tending to the patients and the overall care they provide. There is a plethora of statistics and references exposing how negative these ratios are in the healthcare setting, but little has been done to support it.

Internal factors include staffing burnout, low retention rates, and compromised patient care. Patients become a higher risk for infection, medication errors, falls, and even death when staffing is inefficient (Blitchok, 2018). Additionally, "It should come as no surprise that nursing shortages and mandatory overtime are also negatively affecting individual nurses and the profession as a whole. Unsafe and stressful working conditions have caused 1 out of 5 new nurses to leave the profession completely within just 12 months of earning their licensure." (Blitchok, 2018, para. 7).

External components were mainly observed by the students throughout their rotations through the CCU at Sarah Bush Lincoln Health Center (SBLHC). One observation made was that nurses would pull all their patients' medications at one time in hopes of reducing time and trips to the Pyxis. Cutting corners opens up a large window for error and medication mistakes between all patients receiving care from a nurse under this stress. Another remark noted on the CCU floor was that when busy, hand hygiene, if forgotten or skipped exposing the patient to a worse outcome or possibility for extending their stay. When asked how the nurses feel on this topic, there was a trend in their response. Frequent feedback included nurses that felt they were

unable to provide the best care they possibly could due to the restraints these ratios forced upon them. It also mentioned that nurses pondered their day and what they could have done differently, even after leaving a shift. As a whole, data regarding risky nurse to patient ratios ultimately does not benefit the patient, the staff, or the institution.

Planning and designing, the change strategy

To begin the process of change, the formation of a bi-weekly meeting of the unit performance improvement committee, floor administrators, unit charge nurse, and floor nurses, RNs, LPNs, and UAPs included. This meeting is to discuss potential solutions to the addressed concerns of the staff concerning nurse-to-patient ratios. Having bi-weekly meetings allows for better communication among the healthcare staff and administrators. Therefore, administrators have a better understanding of the issues that are being experienced by floor nurses and how actions by the administrative staff can positively influence the morale and working conditions on the unit.

After the implementation of the bi-weekly meetings, known topics of importance are established before the meeting, the acknowledgment that the meeting will be addressing concerns regarding proper staffing to patient acuity. A discussion of these topics of interest can ultimately lead to the establishment of a solution. The issue of importance is poor nurse-to-patient ratios result in substantial and rapid feelings of burnout for all members of the healthcare team, RNs, LPNs, and UAPs (Gutsan, Patton, Willis, & Coustasse-Hencke, 2018). Minimization of burnout may be introduced by a patient-acuity system that would help to promote a reasonably assigned workload (Kidd, Grove, Kaiser, Swoboda, & Taylor, 2014). Implementing an acuity system would work by rating each patient with points through how much care the patient requires from their assigned nurse. Many factors will be taken into consideration

when designing the system. These include how many medications the patient needs, medication frequency, the potential of skin breakdown, the chance for falls, and required procedures. More factors will arise throughout stabilization and be adequately addressed and included throughout the process. The flexibility of the acuity system is a significant factor to include when assessing unit needs. Acuity system flexibility is one of, if not the most, important factors to consider during implementation.

Unlicensed assistive personnel and licensed practical nurses are often on hospital floors where they can take some of the burdens off of the nurse's workload. Taking UAPs and LPNs into consideration for the acuity system is an essential portion of this assessment tool. Depending on the patient's risk factors and the skillset obtained by each UAP or LPN, the ability of the R.N. to delegate a set limit of acuity points from their workload onto these staff members would lower stress placed on the R.N. The UAPs and LPNs, like the nurse, will only be able to have so many patients they can help with based on the number of points that the patients they are caring for have. Setting the ceiling number of acuity points per UAP or LPN can be determined along the same lines that will determine the R.N. acuity ceiling. The maximum workload for registered nurses works best when determined facility-by-facility for optimal utilization of the acuity tool.

Implementation of the change strategy within a critical care unit

Implementation, or the movement phase, begins with the widespread acknowledgment that of the addressed concern, ratios between nurses and patients being unethical and unsafe. Hospitals or institutions, instead of the government, should make the call or decision on what a safe ratio would be for their staff, depending on numerous details and factors. These factors include patient acuity and nurse experience. Institutions are specific and vary throughout the town, state, and even country, making government policies immoral. Working on getting nurses

and their higher-ups, such as charge nurses or managers involved, is a crucial component for change. Monthly meetings to express and continue thoughts on how to better their patient care and staffing should occur. Working through a process that will complement a specific unit to determine the acuity level in patients should be ongoing and meticulous. One way to help prevent burnout, nurses should be hired to reduce on-call time, overtime, and merely short staffing.

When the students began the change theory, they had a difficult time narrowing down a topic concerning unsafe nurse to patient ratios. They found that various components play a role beyond their knowledge. Students chose the contributing factors they found most pertinent. Overall, the students worked well together and found common ground on this dangerous healthcare subject. Students found time to meet on two separate occasions, along with conversations exchanged via electronic devices. To implement the change, the students narrowed in on; the next step was stabilizing the change within the work field.

Stabilization of the change within the work field

In order to promote the stabilization of the recommended changes within the work field, the change should be handed over to risk management as the safe staffing ratios decrease many different risks. Monthly meetings should be scheduled to adjust the suggested system. By allowing the floor nurses to meet and voice concerns about the staffing ratios regularly, the acuity system will continuously achieve better results. If administrators and floor supervisors continually work with the nurses and listen to their concerns, the stabilization for these changes should be smooth. As time goes on, the longer the system is in place, and adjustments occur, the nurse-to-patient ratios will become more refined and allow better conditions for both nurses and patients.

Evaluation of the change experience

The change paper, in general, allowed students to take a step back and assess determining factors about a situation they may encounter in healthcare shortly, and that is a prevalent issue throughout the healthcare system. The experience was arduous to an extent due to only having six weeks to prepare, analyze, and form a change theory for unsafe nurse workload. Another restraining element of this paper includes the broad topic the students chose. As mentioned previously, they had a hard time narrowing down precisely what to include, as there are countless aspects. Positive experience flourished from the ability to work together and think critically. As the students realized, the change process will not happen overnight.

The process will need time, resources, the willingness to change, along with trial and error. The importance of this change paper is to overall assist nurses with the resources they need and for them to feel safe in their profession. Additionally, the healthcare system wants positive patient outcomes and reliable, competent nurses caring for them.

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Appendices

On the evening of October twenty-second, two-thousand-nineteen, the students within the group met with the grading professor to discuss assignment requirements and content inclusion. Another meeting was organized to occur on October twenty-eight, two-thousand-nineteen. This meeting was utilized to discuss further any misunderstanding or miscommunication that may have occurred throughout the process of the working period. The conversation continued via instant messaging during non-meeting times. Meetings consisted of strictly assignment content. With the addition of this meeting among the students, the ability to increase productivity was tenfold.