

Staffing and scheduling



The debate on safe and adequate nurse staffing has remained a growing and controversial issue in healthcare. The most important issue is determining a safe number of nurses that should ideally work on a unit. In an article by The Journal of Nursing Administration it is stated that, “ over the course of the last decade, hospital restructuring, spurred in part by a move to managed care payment structures and development of market competition among health care delivery organizations, led to aggressive cost cutting. Human resources, historically a major cost center for hospitals, and nurse staffing in particular, were often the focus of work redesign and workforce reduction efforts. Cuts in nursing staff led to heavier workloads, which heightened concern about the adequacy of staffing levels in “ hospitals” (JONA, 2000). Therefore the most important task is to calculate the number of nurses required for each unit. The following text describes the appropriate calculation necessary to determine the number of nurses on a hypothetical unit that has 50 beds and is a Medical-Surgical patient population with an average daily census of 45 patients.

There are 45 patients that require 4 nursing hours per nurse per day per year equaling 65, 700 care hours. Each full time employee’s (FTE) has 2080 paid hours at 80% productivity or 1, 664 productive hours per FTE. Therefore the number of FTEs equals 65, 700 care hours divided by 1664 equaling 39. 5 FTEs. This gives the unit 65700 hours per year or 180 hours per day. Because there are 8 hours shifts, 180 hours divided by 8 hours equals 22. 5 person shifts.

A second, different calculation figures FTEs by knowing that the average daily census is 45, nursing hours per patient is 4, and when understanding

that an FTE works 5 of 7 days a week, with an average productivity factor of 1.14, with a potential productive hours in 1 workday of 7.5 hours, yields the calculation: $45 \times 4 \times 1.14 \times 7.5$, which equals 38.3 FTEs. Given that the first calculation had a higher number, and that it is an imperfect world, I would suggest giving the first, larger number to the Chief Nurse.

This of course does not include the charge nurse; so therefore, a better number might be a 40 or 41 nurse total (Huber, 2010). Although I have made the calculations, it is worthwhile to discuss the definitions of the variables within the calculation. For example, the variable FTE calculation is the way in which one derives the full time equivalents or employees necessary to achieve a given workload. The census/nursing hours FTE calculation is the second value I determined and involves more understanding of actual FTE productivity. Using the variable FTE calculation, I determined that 39.5 FTEs are necessary per day excluding the charge nurse. The former calculation (39.5) was larger, and I believe the calculations are different because the variable FTE has less nonproductive time included in the calculation.

As I mentioned above, I would ask for the greater number of FTEs. I would arrange a meeting with the Chief Nurse by discussing the concerns of my staff regarding patient safety. I would also cite recent studies to rationalize the need for more FTEs. The first study out of the University of Pennsylvania looked at nurse “burn-out” and increased rate of patient infection. In the study, each nurse cared for an average of 5.7 patients. There were 8.6 catheter-related urinary tract infections for every 1,000 patients statewide. Adding one patient to a nurse's workload was associated with an increase of nearly one infection per 1,000 - a total of 1,351 additional infections

provided that the nurse-to-patient ratio is applied statewide. (Sapatkin, 2012).

A second study published in the Journal of Nursing Care Quality, found that much of necessary patient care was just not being done due to short staffing; the study looked at incidence of falls risk, having to use restraints more often, increase in prevalence of pressure ulcers, and reduced time for nurses to give patient education (Kalisch, 2006). Another problematic issue with insufficient staffing is that there will be an increase in voluntary turnover; unhappy employees will seek a place of employment where they feel they can do their job to the best of their ability and give safe, efficient care. As things stand currently in this Medical-Surgical Unit, they are not following Magnet Standards, which support strong nursing practice, an ability to attract and retain nurses and excellent patient care (Huber, 2010). Lastly, I would have a sample of my proposed staffing pattern to show the Chief Nurse. Page 5 of this paper contains my staffing table with proposed schedule with increased staffing.