

Abstract

Background: Patient flow is one of the foundations of hospital function. As a factor of hospital revenues and service quality, inefficient flow is one of the most important issues to correct. At the institutional level, when timely discharges and transfers throughout the hospital do not take place, congestion develops and results in bottlenecks at various stages along the continuum. This congestion disproportionately effectives the perioperative areas, where high volume of hospital admissions take place. To compensate for congestion throughout the institution, patient's post-surgical recovery may occur within the operating room directly following their procedure. Operating room recoveries can result in trauma patients being referred to other hospitals and procedures being delayed. The issue then correlates to a lower number of patients being treated, increase workload for nursing staff, a decrease in moral, and ultimately a potential loss of revenues for the institution.

Local Problem: A 609 bed not-for-profit, acute care teaching and research hospital experienced operating room hold time of from 6 hours and 31 minutes up to 15 hours and 26 minutes for the months of September and October 2020. These operating room hold times are quite significant, being that the cost of surgical opportunity loss is around \$1,600 per hour. When reviewing the literature many different approaches were offered for adjusting nursing staff to reduce delays in PACU admissions. Staffing strategies intended to correct this problem have been proposed, and it has been suggested that adjusting perioperative nursing staff is the only consistent effective implementation in the reduction of operating room hold time..

Methods: A pretest posttest design will be used for the project. The hospital and JMU IRB approved the project. The retroactive data collected prior to the intervention will be compared to the operating hold room times during the intervention. Descriptive statistics will be used to analyze the data.

Interventions: Adjusting operating room staffing the day of surgery is the best intervention suitable for this hospital. For the first two weeks of February 2021, an on-call nurse will be utilized when certain surgical case criteria are met for that day. The on-call nurse can be utilized every weekday from 1000-1800. The on-call nurse will be paid \$10/hr when not called in, and base pay when called in if under 40 hours. If the nurse gets called in and has already completed 40 working hours, the nurse will be paid time and a half.

Results: Results pending. It is proposed that by having an on-call nurse available, staffing can be increased on the day of surgery during times of peak operating room time. Increasing the nursing staff available to be able to recover surgical cases will reduce operating room hold time by 40%.

Conclusions/Implications: Results pending.