

Editorial

REDUCTION IN OPERATING ROOM TURNOVER TIME IS A SUCCESSFUL STRATEGY TO IMPROVE THE EFFICACY OF THE HEALTH CARE SYSTEM

Fareha Iram Khosa¹, Anam Parvaiz²

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Operating room (OR) turnover time (TOT), is stated as the time between one patient leaving the operating room to the next patient entering the OR so that surgery can be commenced.¹ This time is utilized by the workers to do certain necessary duties such as; tidying the room, collecting equipment and making sure, availability of sterile equipment and ready that room for the subsequent surgery and finally, escorting the patient from the preoperative area to the operating room.² The efficient use of this turnover time will lead to the smooth running of the hospital while the inefficient use of this time can cause not only economical losses for the hospital but also a lack of provision of quality care to the patient.³

Turnover time, therefore is, one way to assess the healthcare system's efficiency, hence, it is pivotal for the health administration. Various factors are involved in the OR turnover time such as measuring this time, teamwork, procedures, personnel skills, workflow layout, etc. The common objection of surgeons regarding turnover time is the waiting time to perform surgery, the actual operating time is less than 50% for an average surgery day. This in turn can lead to increased staffing costs, loss of potential revenue generation, and patient dissatisfaction. A chief cause of prolonged turnover time is the misaligned objectives of the pertinent stakeholders.⁴

Various advances have demonstrated radical developments in operating room turnover time. The application of the Lean process led to the recognition of crucial areas that aided in the improvement of the operating room turnover time. The detection of such a process led the anesthesiologist to see the next patient at an earlier time and commence the patient's intravenous line and consent-taking. A workflow matter was discovered with the circulator and subsequently, redundant travel time to salvage supplies was eliminated, by arranging the case cart for that day with the mandatory supplies. By involving the stakeholders in the Lean process, the median operating turnover time was reduced from 37 to 14 min, leading to a reservation of 70 minutes of operating time and revenue generation of approximately \$19,500 daily.⁵ Additionally, an important element of operating room turnover time is the accessibility of the post-anesthesia care unit (PACU) to recuperate. If the PACU does not have sufficient staff or beds accessible to accept a patient, the patient may be kept in the operating room for an additional period. Planning and mitigating the time duration of the operations is significant for operating room productivity, moreover, forecasting the length of time required in the PACU for each surgical procedure is indispensable. In a research project, the use of a machine learning algorithm to forecast the PACU time for each kind of procedure was capable of decreasing the total PACU holding time by 76%, resulting in noteworthy economical benefits.⁶

¹Senior consultant anaesthesia and HOD, Indus Hospital Raiwind Campus Lahore.

²OT Supervisor, Indus Hospital Raiwind Campus Lahore.

To enhance the operating room turnover time, it is crucial to include all the pertinent stakeholders, alignment of the appropriate goals, and eradicate the tasks which lead to waste of resources i.e., both material and manpower resources.

An important factor that can adversely affect the turnover time is inadequate staffing i.e., surgeons, anesthesiologists, and nurses, thus causing disorder and postponements.⁷ The World Health Organization has developed a checklist that is intended to enhance operating room teamwork, yet, even with the checklist being applied there were all the same, letdowns in the teamwork.⁸ The recommendations for improving holdover time include, assigning an OR coordinator, sufficient OR staff, training of housekeeping staff to work efficiently, use of well-equipped cleaning carts, keeping sufficient stock of all relevant equipment and supplies, training sessions for PACU nurses to smooth management of patients flow from OR to PACU and subsequently, ward; implementation of all these steps can lead to a reduction of turnover time from 50-60 minutes to 20-25 minutes respectively.

AUTHOR'S CONTRIBUTION

FIK: Conception

AP: Literature survey

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