

The Value of a Dedicated Saturday Orthopaedic Trauma OR

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Background/Purpose: Hospital administrations constantly face cost-benefit decisions when balancing financial and patient care interests. These pressures are magnified at a large academic Level I trauma center with recurring financial hardships. Providing quality care for patients in an efficient delivery model is imperative. One way to increase efficiency within the orthopaedic department is to clear cases by operating more often, which could potentially reduce costs by reducing patient length of stay (LOS). Beginning November 1, 2010, the orthopaedics and anesthesia departments implemented a new policy to have a dedicated Saturday orthopaedic operating room (OR) to provide more continuous care for patients and efficiently work through a large caseload. The aim of this study is to assess the efficacy of this additional operative day by analyzing the primary outcomes of LOS and surgical waiting time. Trauma patients admitted with femur or tibia fractures 1 year prior to the implementation of this dedicated orthopaedic trauma OR were compared to patients admitted in the year after this policy change.

Methods: In this retrospective chart review of the trauma registry for patients admitted with operative femur or tibia fractures from November 1, 2009-October 31, 2011, 455 patients were identified and analyzed. 167 were direct orthopaedic admissions; 308 were admitted to general surgery with orthopaedic consultation. Our outcome measures were the LOS based on weekday of admission, the distribution of caseload between weekdays, and the wait time to surgery

Results: After the addition of a dedicated Saturday orthopaedic operating room, the overall LOS for all trauma patients admitted with femur or tibia fractures was significantly reduced by 2.7 days from a mean of 14.0 days to 11.3 days ($P = 0.018$). Additionally, there was a trend toward shorter waiting time to surgery (average reduction of 25.1 hours) for patients admitted on a Friday (48.6 hours vs. 23.5 hours, $P = 0.06$). Furthermore, there was an increase in the number of cases performed on Saturdays by 59% (6.2% of the total caseload) while the originally disproportionately high number of cases on Mondays was appropriately reduced by 33% (6.7% of the total caseload).

Conclusion: Overall, these findings support the continuation of a dedicated Saturday orthopaedic trauma OR and can provide the foundation for other departments with similar circumstances to negotiate for more operative time on weekends to improve efficiency.