

The Cost Per Minute of OR Time Before and After the COVID-19 Pandemic in the Hospital and ASC

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INTRODUCTION: Understanding the costs associated with hip and knee arthroplasty in the operating room (OR) are becoming increasingly important as the Transforming Episode Accountability Model (TEAM) mandate starts in 2026. Prior to the COVID-19 pandemic, the reported cost-per-minute of OR time ranged from \$14-119 per-minute, which varied widely on several variables. In addition, limited data are available on OR time cost in the post-COVID era. This study evaluated the cost per OR minute before and after the pandemic in hospitals and ambulatory surgery centers (ASCs).

METHODS: Financial data for fiscal years 2002-2021 were compiled from a state-wide public database of 309 hospitals and 49 ASCs. The cost-per-minute of OR time was defined as the reported total operating expenses divided by the total operating minutes. *P*-values of 0.05 were considered significant.

RESULTS: There was a 3.4x increase in median total operating expenses from 2002 to 2021 (\$47M to \$161M, *P*<0.001). For both surgical settings, the median cost per OR minute (\$USD/minute) increased from 2002 to 2021 (hospital 40 to 122; ASC 53 to 313). The median cost-per-minute of OR time was significantly higher in the post-COVID era compared to years prior in the hospital (123 vs 72, *P*<0.001) and ASC (309 vs 118, *P*<0.001). Furthermore, the median cost-per-minute of OR time was significantly higher in the ASC compared to the hospital setting for both the post-COVID era (309 vs 123, *P*<0.001) and years prior (118 vs 72, *P*<0.001).

DISCUSSION AND CONCLUSION: Results demonstrate the increasing cost in the OR from a diverse group of medical specialties. Additionally, counterintuitive findings of higher costs in the ASC likely represent the lack of accurate cost accounting in larger health systems. This study highlights the need for awareness of OR cost and initiatives related to cost reduction if surgeries are to remain financially feasible.