

# **Nearly Half of All 90-day Post-operative Arthroplasty Complications Are Missed by Voluntary Morbidity and Mortality Conference Reporting**

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## **INTRODUCTION:**

Morbidity and Mortality Conference (MMC) is a critical aspect of resident and faculty education that facilitates continued systems improvement, accountability, and higher-quality patient care. At our institution, these conferences rely on voluntary reporting of complications. Currently we suspect that a large proportion of adverse events go unreported, representing a missed educational opportunity for the MMC. We aimed to evaluate the completeness of voluntary complication reporting by comparing against data captured in our state-wide registry.

## **METHODS:**

We retrospectively identified all 90-day post-operative complications occurring in adult patients who underwent primary or revision total joint arthroplasty between 1/1/20 and 12/31/21. Institutional complications data abstracted from our state-wide registry was compared against our departmental voluntary self-reported MMC database. Complications that did not meet mutual capture criteria were excluded from analysis.

## **RESULTS:**

We identified 416 total complications in arthroplasty patients during the study period via registry data abstraction. After excluding duplicates and complications that did not also meet criteria for MMC reporting, we were left with 247 complications occurring in 229 patients. 261 total complications were voluntarily reported during the study period. After excluding duplicates and complications that did not also meet criteria for registry capture, we were left with 128 complications occurring in 120 patients. 128 out of 247 (51.8%) complications captured in the registry were also voluntarily reported. 128 out of 128 (100%) complications voluntarily reported were also captured by the registry.

## **DISCUSSION AND CONCLUSION:**

Our data demonstrate that approximately half of all complications occurring in total joint arthroplasty patients and meeting criteria for our institutional MMC database are not reported. We hope that drawing attention to this lapse in complication capture will improve the accuracy of voluntary complication reporting and allow for more complete and clinically relevant MMC case selection.