

Introduction

- Our current understanding of disparities in hand surgery training is limited to survey research (1, 2). One critical component of hand surgery training is operative experience. We attempted to define the operative hand experience of surgical residents in the U.S.

Methods

- After obtaining IRB approval, ACGME case logs for orthopedic surgery, plastic surgery, and general surgery were analyzed for the years 2011-2014. Procedure codes were assessed for overlap between categories.
- Intra-specialty differences were determined by calculating the difference between the 10th and 90th percentiles for operative cases
- Inter-specialty differences were elucidated via ANOVA and student t tests

Objectives

- Determine the overlap of reported cases on the ACGME case logs
- Describe differences in the number and breadth of hand cases by specialty

Results

- Chief resident case logs for 4,355 general surgery (57.8%), 2,687 orthopedic (35.7%), and 488 plastic surgery (6.5%) residents were reviewed

Results (cont'd)

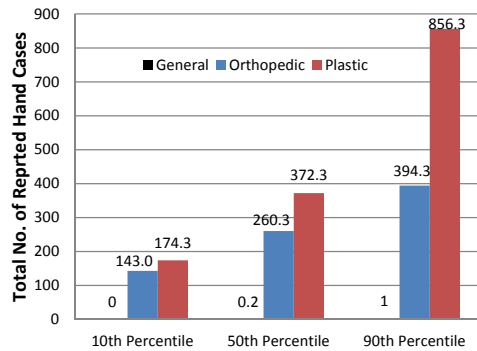


Figure 1. Percentile Benchmarks for Total Number of Reported Hand Cases by Specialty

- General surgery reported 0.2 ± 1.0 cases and were excluded from further analyses

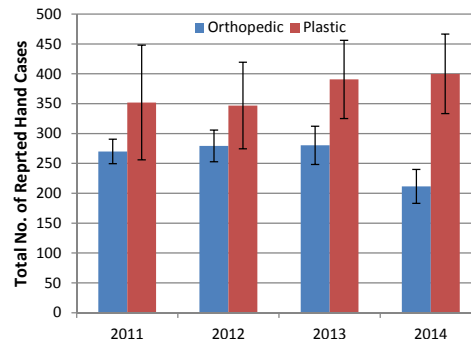


Figure 2. Total Number of Reported Hand Cases by Year and Specialty

- Plastic surgery hand cases increased by 13.6% while the number of orthopedic cases decreased by 21.7% over the study period ($p < 0.001$)

Results (cont'd)

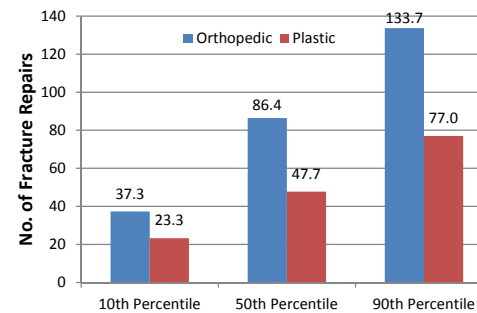


Figure 3. Percentile Benchmarks for Operative Fracture Repairs

- Orthopedic surgery reported 38.7 more fracture repairs than plastic surgery ($p < 0.001$)

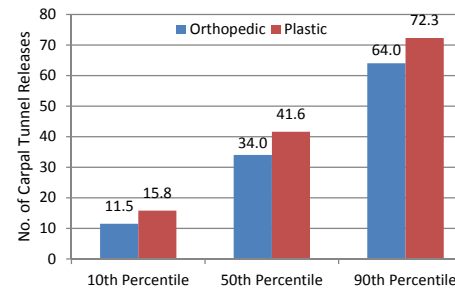


Figure 4. Percentile Benchmarks for Carpal Tunnel Releases

- Plastic surgery reported 7.6 more carpal tunnel releases than orthopedic surgery ($p < 0.001$)

Results (cont'd)

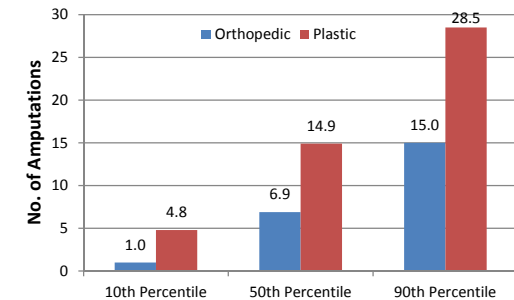


Figure 5. Percentile Benchmarks for Amputations

Conclusions

- Significant inter-specialty and intra-specialty differences in operative hand experience exist
- More granular ACGME reporting may facilitate future studies on the full breadth of hand surgery
- These data can be used to address relative deficiencies in operative experience during fellowship

References

- Sears, E. D., Larson, B. P., & Chung, K. C. (2012). A national survey of program director opinions of core competencies and structure of hand surgery fellowship training. *The Journal of hand surgery*, 37(10), 1971-1977.
- Sears, E. D., Larson, B. P., & Chung, K. C. (2013). Program director opinions of core competencies in hand surgery training: analysis of differences between plastic and orthopedic surgery accredited programs. *Plastic and reconstructive surgery*, 131(3), 582-590.

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