

Title: General Surgery Resident Clinical Exposure to Cardiothoracic Surgery: A Review of Graduating Case Logs Over the Last Decade

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Background: The traditional cardiothoracic training pathway, general surgery residency then cardiothoracic fellowship, is responsible for a significant portion of graduating cardiothoracic surgeons. Ensuring adequate cardiothoracic exposure during residency is imperative to recruit applicants and prepare future fellows. We explored general surgery residents' clinical exposure to cardiothoracic surgery during residency.

Methods: Case log data of general surgery residents for the academic years of 2014-2015 to 2023-2024 were collected from the Accreditation Council for Graduate Medical Education Case Logs Statistical Reports. Cases logged as 'Surgeon Chief' and 'Surgeon Junior' were included. Reported cases are classified into sub-categories and reported as such here.

Results: A total of 13,056 general surgery residents graduated during the study period. Residents participated in an average of 38.2 (SD 25.7) thoracic and 3.4 (SD 9.88) cardiac cases during their residency over the last decade. The maximum number of cases reported by a resident ranged from 236-307 for thoracic cases and ranged from 92-172 for cardiac cases.

Thoracic cases completed during residency were clinically comparable to other fellowship-tract surgical subspecialties such as endocrine (32.6 [SD 20.7]), pediatric (24.7 [SD 13.7]), and plastic (24.9 [SD 20.6]) surgery, though only a third of the average completed vascular case log (114.2 [SD 34.2]).

Conclusion: While exposure to thoracic surgery is comparable to other surgical subspecialties, exposure to cardiac surgery is limited. While this exposure may be sufficient for interest, it may not sufficiently prepare residents for fellowship. However, there seems to be variation in experience, suggesting interested applicants may seek to overcome this.