

## **Physician Age and Malpractice Events: A Study of the National Practitioner Data Bank (1986-2022)**

Aidan Papalia<sup>1</sup>, Matthew Alben<sup>2</sup>, Paul Romeo<sup>3</sup>, Tasfiqul Chowdhury<sup>4</sup>, Andrew Joseph Cecora<sup>4</sup>, Nicholas T Andriani<sup>4</sup>, Joseph D Zuckerman<sup>4</sup>, Joseph A Bosco<sup>4</sup>, Mandeep Virk<sup>4</sup>

<sup>1</sup>Geisinger, Department of Orthopaedic Surgery, Wilkes-Barre, PA, NYU Hospital For Joint Diseases, Department of Orthopaedic Surgery, New York, NY, <sup>2</sup>University at Buffalo, Department of Orthopaedic Surgery and Sports Medicine, Buffalo, NY, NYU Hospital For Joint Diseases, Department of Orthopaedic Surgery, New York, NY, <sup>3</sup>Rutgers Robert Wood Johnson University Hospital, Department of Orthopaedic Surgery, New Brunswick, NJ, NYU Hospital For Joint Diseases, Department of Orthopaedic Surgery, New York, NY, <sup>4</sup>NYU Hospital For Joint Diseases, Department of Orthopaedic Surgery, New York, NY

**INTRODUCTION:** Medical malpractice events are an integral facet to understanding the medicolegal implications of medicine, especially in high-risk medical specialties. The purpose of this study was to investigate the effect different factors have on the severity of malpractice events, specifically physician age, as well as allegation type, trends, and number of events by state.

**METHODS:** This is a retrospective review of malpractice events reported in the National Practitioner Database (NPDB) from its conception in 1986 to 2022, from which a total of 1,662,804 events were queried and filtered to be physician specific. Descriptive statistics for malpractice events were performed and stratified by physician age. Trends in total malpractice events over time, the frequency of malpractice events by state, and average total malpractice payments were determined. Multiple logistic regression analyses were performed to determine the effect of physician age on likelihood of malpractice severity.

**RESULTS:** A total of 147,356 malpractice events met the inclusion criteria for this study, with the majority of events occurring in physicians aged 40-49 (31%) and 50-59 (29%). Similarly, younger physicians aged 40-49 had a higher average payout (\$350,256) with a continued decrease in each subsequent decade of practice relative to age. The majority of malpractice events occurred in the inpatient setting (58%), the most common allegation types were treatment (19%) and surgery related (30%). Regarding malpractice severity, death (33%) and significant permanent injury (16%) were reported most frequently. Younger physicians are more likely to be involved in malpractice events resulting in severe implications like death ( $p<0.001$ ), quadriplegia ( $p<0.001$ ), brain damage ( $p<0.001$ ), or lifelong care ( $p<0.001$ ) while major temporary injuries were associated with older physician age ( $p<0.001$ ).

### **DISCUSSION AND CONCLUSION:**

Medical malpractice litigation is an omnipresent concern to practicing physicians. Higher average payouts and more severe malpractice events are associated with a younger physician age.