2023 Residency Match: Anesthesiology Is One of the Most Competitive Specialties

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ASA's Center for Anesthesia Workforce Studies (CAWS) reports trends in anesthesiology resident matches after the release of the National Resident Matching Program (NRMP) Results and Data report published in May or June each year (asamonitor.pub/3X3WYwS). This report summarizes data on candidates who filled residency positions between 2004 and 2023. Resident match data prior to 2004 are available in the August 2018 ASA Monitor (ASA Monitor 2018;82:42-6).

Since 2004, anesthesiology residency programs have filled more than 90% of positions each year. The highest anesthesiology position fill rate was 100% in the 2021 through 2023 match years; 2020 had the second-highest fill rate at 99%.

Match results signaled strong demand for anesthesiology residency programs. Key metrics include growth in the number of applicants and positions offered, increase in the percentages of positions filled, and applicants not matched. In 2023, for just PGY-1 anesthesiology programs, a total of 3,016 candidates applied to 1,622 positions and filled all but five available positions. The number of PGY-1 anesthesiology positions increased 20% between 2019 and 2023. Overall (PGY-1 and CA-1), 5,353 candidates applied for 2,060 anesthesiology positions and filled all but nine available positions. The number of PGY-1 and CA-1 anesthesiology positions offered increased 10% between 2019 and 2023.

Table 1 summarizes the number of PGY-1 and CA-1 applicants and the type of candidates who matched into anesthesiology between 2014 and 2023 (e.g., U.S. allopathic seniors, osteopathic students or graduates, and international. See Exhibit for definitions.). In 2023, 2,051 candidates matched, a 12% increase over 2019; it was the greatest number of matched candidates into the specialty to date. The percentage of matches by U.S. allopathic seniors and osteopathic students or graduates varied between 73% and 75% between 2019 and 2023.

From 2014 to 2017, the number of candidates from international medical schools matched into anesthesiology increased substantially. Compared to 2019, this match year marked a 22% decline in candidates who graduated from non-U.S. medical schools matching into anesthesiology. In 2023, 169 (8%) matched candidates graduated from non-U.S. medical schools, compared to 216 (12%) candidates in 2019.

Less than 40% of all candidates who applied to an anesthesiology program matched in 2023 (Figure 1). Neurology, 83% of anesthesiology matches in 2023. For all other specialties, in aggregate, the percentage of matches by U.S. allopathic seniors and osteopathic students or graduates varied between 73% and 75% between 2019 and 2023.

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diagnostic radiology, and physician medicine and rehabilitation residency programs had a similar percentage of applicants matching as anesthesiology programs, indicating a high demand for this specialty. When evaluating the percentage of non-matched candidates to only PGY-1 programs with more than 200 applicants in the 2023 match year, anesthesiology ranked tenth out of 25 total programs, with 46% nonmatched (ranked in descending order). Emergency medicine had the lowest percentage of nonmatched and dermatology had the highest, 11% versus 90%, respectively (data not shown).

Between 2004 and 2023, the number of anesthesiology residency positions increased 60%, from 1,289 to 2,060 (Figure 2). In 2023, the number of anesthesiology applicants increased by 10% compared to 2022 (Figure 3). This year, there were similar applicant increases in 2023 in diagnostic radiology, neurology, and psychiatry programs (data not shown). Emergency medicine had the sharpest decline, with 10% fewer applicants compared to 2022. The number of anesthesiology programs more than doubled in the last two decades, with a reported 74 programs in 2004 and 172 programs in 2023 (data not shown).

Since 2004, anesthesiology residency programs have filled more than 90% of positions each year. The highest anesthesiology position fill rate was 100% in the 2023 through 2025 match years; 2020 had the second-highest fill rate at 99% (Figure 4). The anesthesiology position fill rate in 2023 was comparable to several specialties, including orthopedic surgery, diagnostic radiology, general surgery, obstetrics-gynecology, dermatology, neurology, and physical medicine and rehabilitation (Figure 5). Emergency medicine had the lowest percentage of residency positions filled (82%).

Trends in anesthesiology resident match results are useful for indicating an increase in the supply pipeline and may represent a lagging indicator of demand for this specialty. This report shows that the overall total number of matched candidates continues to grow. However, the percentage of matched U.S. allopathic seniors and osteopathic students or graduates has remained steady in 2023 compared to 2019. Since 2004, anesthesiology programs have increased the number of positions offered every year, except for small decreases in 2005 and 2016. The position fill rate in the last decade was very high, ranging between 94% and 100% — reflecting a consistently strong preference for the specialty.

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