



Results of the 2011 National Resident Matching Program: Family Medicine

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BACKGROUND AND OBJECTIVES: The results of the 2011 National Resident Matching Program (NRMP) reflect another small but promising increased level of student interest in family medicine residency training in the United States. Compared with the 2010 Match, family medicine residency programs filled 172 more positions (with 133 more US seniors) through the NRMP in 2011. In other primary care fields, 26 more primary care internal medicine positions filled (10 more US seniors), one more position in pediatrics-primary care (two fewer US seniors), and seven more positions in internal medicine-pediatrics programs (10 more US seniors). The 2011 NRMP results suggest a small increase in choosing primary care careers for the second year in a row; however, students continue to show an overall preference for subspecialty careers. Multiple forces continue to influence medical student career choices. Despite matching the highest number of US seniors into family medicine residencies since 2002, the production of family physicians remains insufficient to meet the current and anticipated need to support the nation's primary care infrastructure.

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Family physicians are uniquely prepared to meet the health care needs of the American people.¹ Family physicians are the only medical specialists who distribute themselves throughout America's communities. The American Academy of Family Physicians (AAFP) is dedicated to assuring that there is a well-trained family physician available for everyone in America who wants and needs one.¹

The AAFP is committed to assuring high-quality, innovative education for medical students and residents that embodies the values and competencies of family medicine.² Departments of family medicine in all but 10 US medical schools

required clinical clerkships in family medicine in more than 80% of medical schools, and increased opportunities for family medicine elective experiences have improved the environment of medical education toward family medicine.³ The AAFP continues its Comprehensive Student Interest Initiative, which includes numerous projects to increase student awareness of and interest in family medicine. Student activity on campuses, in Family Medicine Interest Groups (FMIGs), and as student members of the AAFP continues to grow each year. In 2011, student AAFP membership increased to 16,700 from 14,100, approximately one fifth of all US medical students.

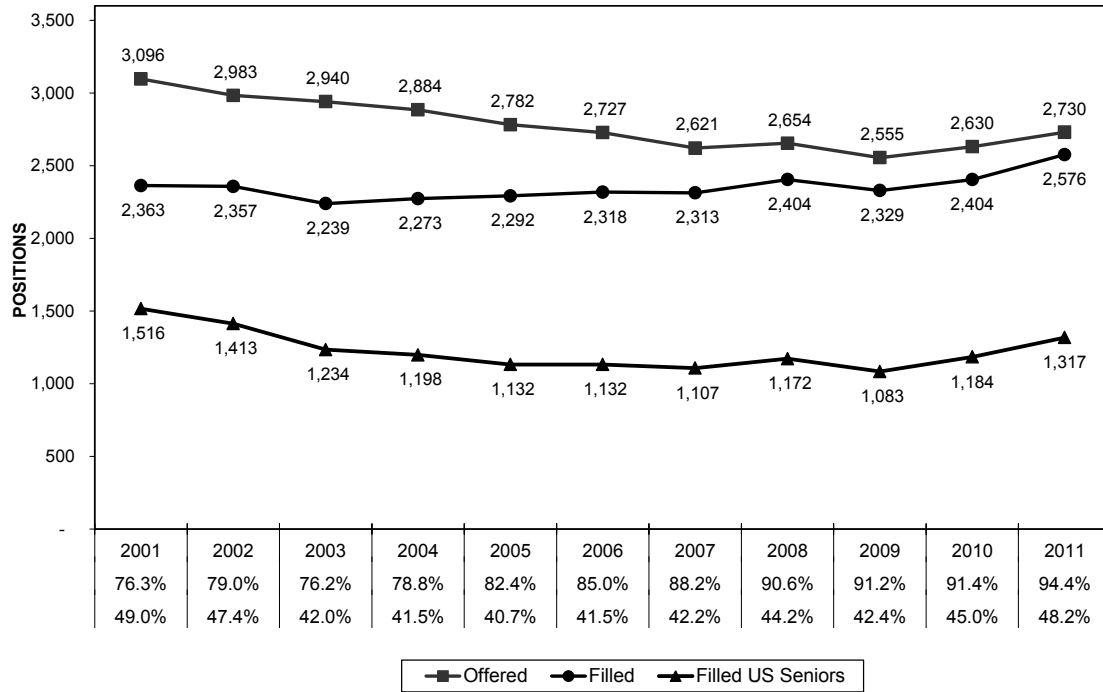
Despite these student interest initiatives, sustained and long-term improvement in interest by US seniors remains elusive. Whereas the 2010 and 2011 increases in the number of US seniors choosing family medicine was the highest since 2002, the preceding decade-long decline of US student interest in family medicine careers remains a concern. Student perceptions of the demands, rewards, and prestige of primary care specialties; market changes; lifestyle priorities; and the influence of medical school faculty continue to influence career choice.

Methods

The AAFP Division of Medical Education annually acquires and tabulates the National Resident Matching Program (NRMP) data. The March 2011 data were analyzed for the number and percentages of US medical students and international graduates entering family medicine residencies and other specialties. The AAFP Division of Medical Education Residency Census queried family medicine residency program directors through an online survey for composition of residents entering July 2011. Repeated reminders and telephone calls resulted in 100% participation of program directors.

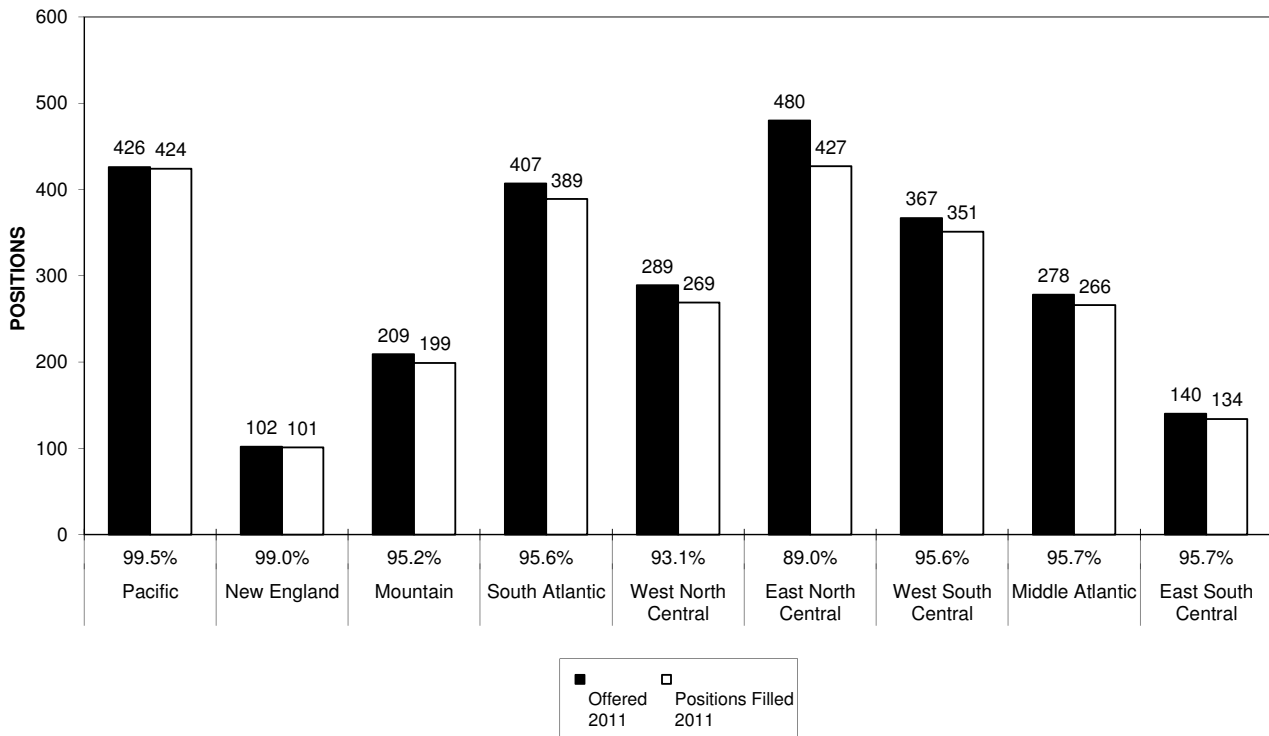
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Figure 1: Family Medicine Positions Offered and Filled in March, 2001–2011



Prepared by AAFP
Division of Medical Education

Figure 2: 2011 NRMP Family Medicine Results, by Regions



Prepared by AAFP Division of Medical Education

Results

According to the 2011 NRMP, family medicine residency programs offered 2,730 first-year positions through the 2011 NRMP, an increase of 100 from 2010. On Match Day 2011, 2,576 of these positions were filled through the Match, an increase of 172 from 2010 for a fill rate of 94.4%, compared to 91.4% in 2010 (Figure 1). After a nadir of 78.8% in 2004, the fill percentage has slowly increased annually. A total of 133 more US seniors matched into family medicine residencies in 2011 than in 2010 (1,317 versus 1,184) (Figure 1).^{4,5}

Of US seniors who successfully matched in 2011, 8.4% matched in family medicine, compared with 7.9% in 2010. Of all US seniors participating in the 2011 NRMP, 8.0% matched in family medicine, compared with 7.4% in 2010.^{4,5} In 2011, the Pacific region had the highest fill rate in family medicine (99.5%), whereas the East North Central region had the lowest fill rate in family medicine (89.0%) (Figure 2).

In addition to US MD seniors in 2011 (48.2% of matched positions in family medicine), 1,259 other graduates matched in family medicine in 2011 (1,220 in 2010): 363 (400 in 2010) non-US citizens educated internationally (28.8%); 294 (274 in 2010), graduates of colleges of osteopathic medicine (23.4%); 504 (440 in 2010) US citizens educated internationally (40.0%); 90 (85 in 2010) physicians who graduated from US medical schools prior to 2010 (7.1%); eight (20 in 2010) “fifth pathway” students (0.08%); and zero (one in 2010) Canadian medical school graduate (0.00%).^{4,5}

Comparison With Primary Care Disciplines

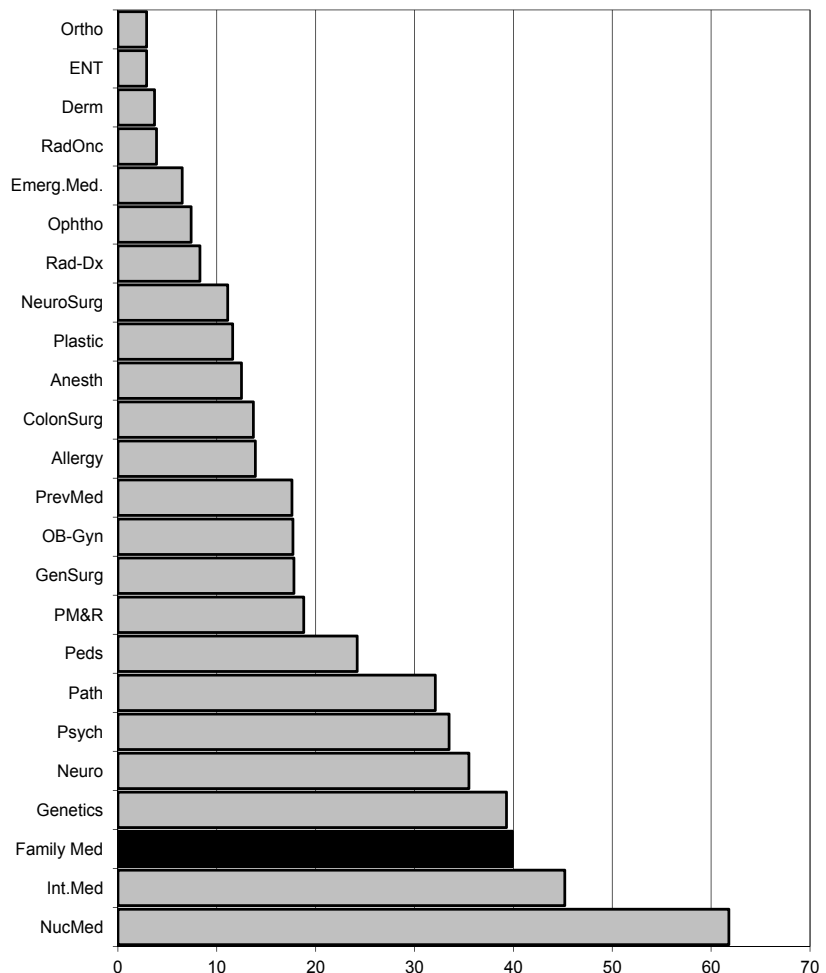
Most of family medicine’s primary care colleagues offered more positions in 2011 and experienced a slight increase in positions filled in the 2011 Match. Internal medicine-primary care offered 27 more positions this year and increased in the number of positions filled (243 in 2010 to 269 in 2011) and positions

filled by US seniors (156 in 2010 to 166 in 2011). A total of 122 more internal medicine categorical positions were offered in 2011 compared to 2010 (5,121 versus 4,999), with a similar fill rate to 2010 for total positions (98.9% versus 99.0%) but an increased rate of positions filled with US seniors (57.4% versus 54.5%). Internal medicine-preliminary increased its number of positions offered (1,900 versus 1,863) and increased the positions filled (1,771 versus 1,758), with an increase in the number of positions filled with US seniors (1,503 versus 1,493). In contrast, transitional residency programs offered 28 fewer positions this

year compared with 2010 (952 versus 980) with fewer positions filled overall (919 versus 945) and fewer filled with US seniors (811 versus 832).^{4,5}

In the 2011 Match, pediatrics showed varying trends in positions filled and those filled with US seniors. Pediatrics-categorical increased in its overall positions filled in 2011 from the prior year (2,437 versus 2,383) and in the number of those positions filled with US seniors (1,768 versus 1,711). Pediatrics-primary care decreased its positions filled with US seniors from 30 in 2010 to 29 in 2011. Combined internal medicine-pediatric residencies

Figure 3: % International Medical Graduates in ACGME Residencies, December 31, 2009



ACGME—Accreditation Council for Graduate Medical Education

filled seven more positions (362 in 2011 versus 355 in 2010), with 10 more US seniors (309 in 2011 versus 299 in 2010).^{4,5}

Most recent data available (2009–2010) shows the percentage of international medical graduates (IMGs) entering internal medicine residencies remains higher than that entering family medicine and pediatrics (Figure 3).⁶

Family Medicine July Fill Rate

Since 1987, family medicine residencies have more positions filled in July than offered through the NRMP in March. Program expansion and newly accredited programs accounted for this July increase between 1990 and 1998. Since 1998, this difference is primarily due to the number of positions filled outside of the NRMP process. The “all-in” Match projected for 2013 will undoubtedly impact this dynamic.⁷ By July 2011, 99.6% of family medicine residency positions were filled (3,443 of 3,458). On July 1, 2011, 10,022 residents began training in 452 programs, an average of 22.2 per program compared to 9,790 (21.7 per program) in 2010. The 3,443 first-year residents average to 7.6 per program compared

with 7.3 per program (3,306) in 2010.⁸

Graduates of US allopathic medical schools filled 1,582 (45.9%) first-year positions in July 2011, compared to 1,437 (43.4%) in 2010 and 2,765 (79.4%) positions in 1996. Graduates of colleges of osteopathic medicine filled 633 first-year positions (18.3%) in July 2011, compared to 599 (18.1%) in 2010, and 232 (7.6%) in 1994⁸ (Figure 4). Osteopathic graduates selecting allopathic family medicine programs is expected to increase due to more dually accredited family medicine residency programs (26 in 2003 to 111 in 2011).^{8,9}

In July 2011, 1,228 (35.7%) of the 3,443 first-year family medicine residents were IMGs, compared to 1,270 (38.4%) of the 3,306 residents in 2010. A total of 470 (13.7%) first-year residents were non-US citizen IMGs, compared to 499 (15.1%) in 2010. A total of 758 (22.0%) were US citizen IMGs, compared to 771 (23.3%) in 2010^{4,5} (Figure 4). The majority of family medicine residents who entered PGY-1 positions in family medicine residencies after the 2011 Match were US citizens (70.3% in 2011 and 77% in 2010). Concern

regarding difficulties for non-citizens to obtain visas in time to begin residency in July may be one of the factors contributing to this.

Discussion

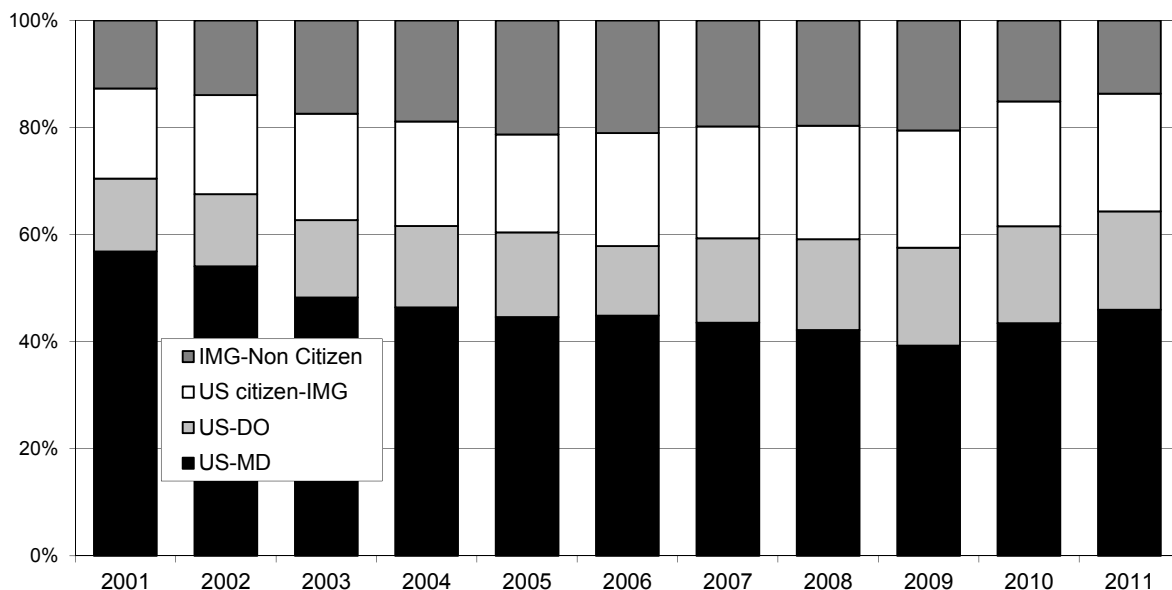
Match Positions

While the decline in the number of functioning family medicine programs seems to have stabilized (452 in 2010 compared to 451 in 2009, 455 in 2008, 458 in 2007, and 460 in 2006), threats to family medicine residency programs continue. Financial challenges have been identified as pivotal in the closure of many family medicine residencies over the past several years.¹⁰ Drastic reductions in federal support for graduate medical education (GME) through the Medicare program could have substantial impact on family medicine residencies and potentially escalate closures.

IMGs

IMGs continue to represent a significant proportion of residents in family medicine as well as in many other specialties (Figures 3 and 4). Presently in family medicine, those who are US citizens trained abroad outnumber non-citizens. The

Figure 4: Family Medicine Resident Types—July



performance of IMGs on standardized tests for certification and licensure is undergoing scrutiny.^{11,12} As medical schools expand enrollment and more Liaison Committee on Medical Education (LCME) accredited medical schools open in the United States, but GME positions remain “capped” by the Centers for Medicare and Medicaid Services (CMS) and IMGs may face increasing competition for limited residency positions. Two important changes in the NRMP will occur in the next 2 years; the Supplemental Offer and Acceptance Program (SOAP), consisting of multiple rounds of computer matching, begins in 2012, and the “all-in” policy in 2013.⁷ Potentially, for IMGs, these changes could further limit residency position availability.

Workforce

The current number of family medicine residencies in 2011 (452), with approximately 3,250 residents in each of the 3 years of training, produce well below the number of annual graduates required to achieve the projected family physician workforce needed for the nation.¹³ Family physicians are the most likely specialty to practice as generalists, as well as to serve rural and underserved populations.^{14,15} The 2011 AAFP Workforce Policy includes summary recommendations for strengthening the nation’s primary care infrastructure, such as establishing a national health care workforce entity, shoring up support for programs like the National Health Service Corps, Area Health Education Centers (AHECs) as training facilities, and Title VII funding for primary care education.¹⁶ The AAFP continues to focus efforts on analyzing and engaging the current generation of premedical and medical students, since decreased student interest in family medicine has a tremendous impact on the future workforce of the United States.

Variables Affecting Match Rates

The presence of a well-funded department of family medicine and the duration of a required clinical

clerkship in family medicine are both correlated with more students choosing family medicine residencies.^{17,18} In 2011, however, 10 US medical schools remain without a department of family medicine, and up to 5% of LCME-accredited US medical schools still do not have required clinical clerkships in family medicine.¹⁹

As medical school indebtedness continues to escalate to an average of close to \$150,000 at graduation,²⁰ potential applicants more likely to go into primary care, such as underrepresented minorities, may be unwilling to even consider a career in medicine, thereby decreasing diversity in the workforce and exacerbating disparities in health care.²¹

Further analysis continues to support the link between specialty choice and salary, including a study highlighting the linear association between specialty income and high Match rates.^{22,23,27} The income gap between primary care and specialty care must be addressed not only to attract more students to primary care careers but also to ensure the financial stability of the current primary care infrastructure of the nation. The most recent report by the Council on Graduate Medical Education (COGME) specifically recommends reimbursement changes to narrow this disparity.¹³

To increase medical student interest in family medicine, opportunities for collaboration should be actively pursued among medical student education faculty, FMIG faculty advisors, residency directors, department chairs, and family medicine organizations. The AAFP is in the process of sponsoring four regional Student Interest Stakeholders meetings that explore state- and region-based collaboration among the various primary care stakeholders. Learnings from these meetings will help direct future AAFP and local student interest initiatives.

Conclusions

In 2011, more US seniors chose family medicine through the NRMP than

at any time since 2002. Despite this promising positive trend in family medicine, the percentage of US seniors choosing primary care careers still remains well below the nation’s needs. Presently, the overwhelming majority of those physicians ultimately choose subspecialty careers. Projections anticipate that the shortfall of primary care physicians for the aging adult population will be worse than originally projected because fewer internists are pursuing generalist careers,²⁵ thus family physicians will be increasingly important in the provision of this care.²⁶ Leaders in both business and health care recognize the importance of developing a strong primary care base and implementing the Patient-centered Medical Home (PCMH) model²⁷ as the basis for improving health care delivery and access.²⁸

The 3,443 medical graduates entering family medicine residencies in July 2011 are clear in their commitment to serve the nation as family physicians. They are the physicians that America needs as the foundation of health care now and in the future.

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