

## Results of the 2007 National Resident Matching Program: Family Medicine

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*The results of the 2007 National Resident Matching Program (NRMP) reflect a currently stable level of student interest in family medicine residency training in the United States. Compared with the 2006 Match, five fewer positions (with 25 fewer US seniors) were filled in family medicine residency programs through the NRMP in 2007, at the same time as 20 fewer (two more US seniors) in primary care internal medicine, the same number of pediatrics-primary care (four fewer US seniors), and one more (19 fewer US seniors) in internal medicine-pediatrics programs. Multiple forces, including student perspectives of the demands, rewards, and prestige of the specialty; the turbulence and uncertainty of the health care environment; lifestyle issues; and the impact of faculty role models continue to influence medical student career choices. Eighty-four more positions (12 more US seniors) were filled in categorical internal medicine. Fifty-four more positions (22 more US seniors) were filled in categorical pediatrics programs. The 2007 NRMP results suggest that interest in family medicine and primary care careers continues to decline. With the needs of the nation calling for the roles and services of family physicians, family medicine matched too few graduates through the 2007 NRMP to meet the nation's needs for primary care physicians.*

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Family physicians are uniquely prepared to meet the medical needs of the American people. According to the recent Future of Family Medicine study, the care that family physicians are prepared to deliver is just what Americans want.<sup>1</sup> Family physicians are the only medical specialists who distribute themselves throughout America's communities in the same proportion as the population. 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. The AAFP is committed to assuring high-quality, innovative education for residents and medical students that embodies the values and competencies of family medicine.<sup>2</sup>

Through its comprehensive Student Interest Initiative, the AAFP has developed and implemented numerous projects since 1988 to increase student awareness of and interest in family medicine. Student activity on campuses, in family medicine interest groups, and as student members of the AAFP continues each year. In 2007, student AAFP membership was 16,300, approximately one quarter of all US medical students. The presence of departments of family medicine in all but 11 US medical schools, the establishment of 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.<sup>3,4</sup>

Despite those efforts, from the results of the 2007 National Resident Matching Program (NRMP), however, it is clear that US student interest in primary care, particularly in family medicine, remains of concern. Student perceptions of the demands, rewards, and prestige of the specialty; market changes; lifestyle priorities; and the influence of faculty role models appear to be drawing medical students away from family medicine as a career choice.

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### 2007 NRMP Results: Family Medicine

Family medicine residency programs offered 2,621 first-year positions through the 2007 NRMP, a decrease of 106 from 2006. On Match Day 2007, 2,313 of these positions were filled through the Match, a decrease of five from 2006 for a fill rate of 88.2%, compared with 85.0% in 2006, 82.4% in 2005, 78.8% in 2004, 76.2% in 2003, 79.0% in 2002, and 76.3% in 2001 (Figure 1). Twenty-five fewer US seniors matched into family medicine residencies in 2007 as in 2006 (1,107 versus 1,132)<sup>5,6</sup> (Figure 2).

Of those US seniors who successfully matched in 2007, 7.8% matched in family medicine, compared with 8.1% in 2006, 8.2% in 2005, 8.8% in 2004, 9.2% in 2003, 10.5% in 2002, and 11.2% in 2001. Of all participating US seniors in the 2007 NRMP, 7.3% matched in family medicine, compared with 7.5% in 2006, 7.7% in 2005, 8.2% in 2004, 8.6% in 2003, 9.9% in 2002, and 10.5% in 2001.<sup>5,6</sup> In 2007, the Pacific and Middle Atlantic regions had the highest fill rate in family medicine (95.3%), while the West North Central region had the lowest fill rate in family medicine (79.9%)<sup>5</sup> (Figure 3).

In addition to US MD seniors in 2007 who filled 47.9% of matched positions in family medicine, 1,206 other graduates matched in family medicine in 2007, compared with 1,186 in 2006, 1,160 in 2005, 1,075 in 2004, 1,005 in 2003, 944 in 2002, and 847 in 2001. These include 539 (577 in 2006) non-US citizens educated internationally (23.3%), 228 (223 in 2006) graduates of colleges of osteopathic medicine (9.9%), 336 (311 in 2006) US citizens educated internationally (14.5%), 87 (68 in 2006) physicians who graduated from US medical schools prior to 2007 (3.8%), nine (six in 2006) “fifth pathway” students (0.4%), and seven (one in 2006) Canadian medical school graduates (0.3%).<sup>5,6</sup>

Figure 1

Family Medicine Positions Offered and Filled in March, 1994–2007

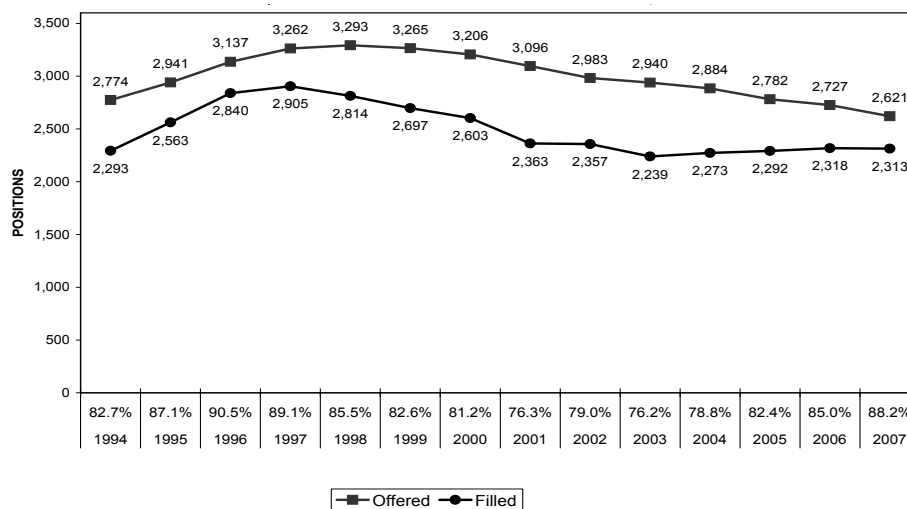
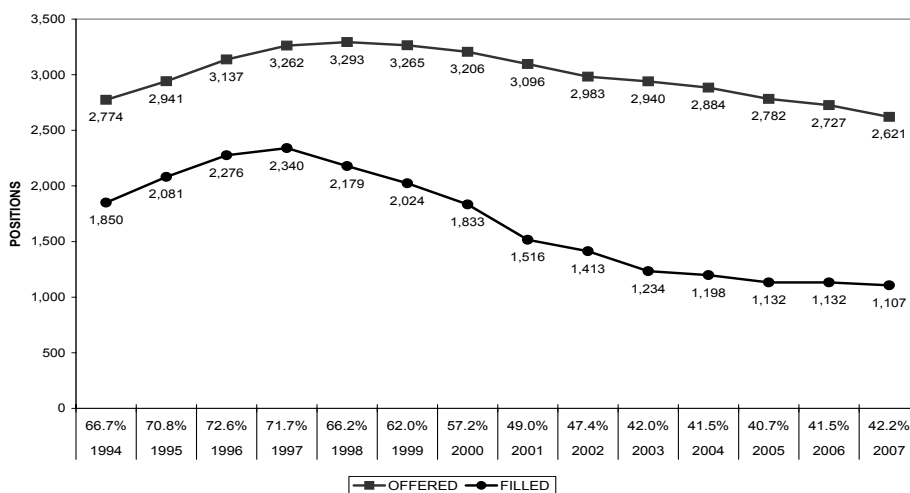


Figure 2

Family Medicine Positions Offered and Filled With US Seniors in March, 1994–2007

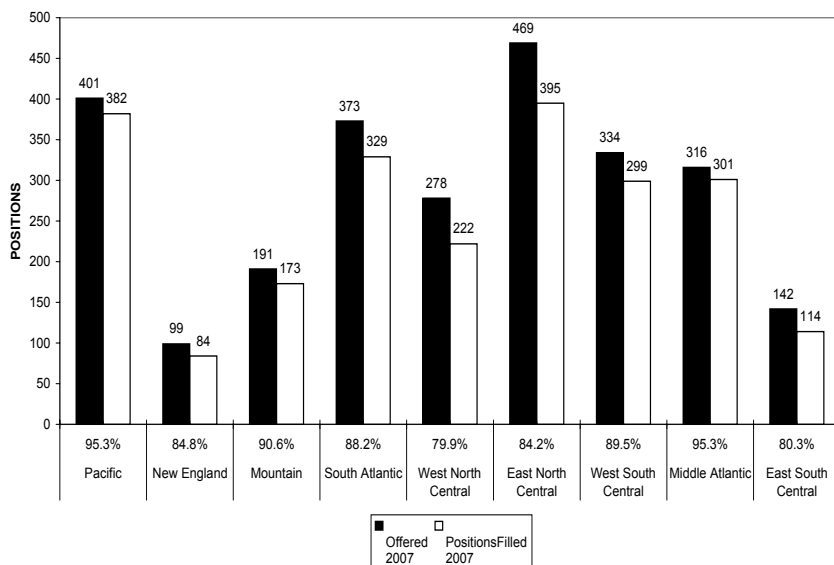


### Comparison With Other Disciplines

More US seniors matched in categorical internal medicine residencies, increasing by 12 from 2,668 in 2006 to 2,680 in 2007. Also, 22 more US seniors chose preliminary internal medicine positions (students who choose to complete 1 year of internal medicine before continuing in another specialty): 1,491 in 2007, compared with 1,469 in 2006, 1,526 in 2005, 1,471 in 2004, and 1,468 in 2003.<sup>5,6</sup> (Figure 4).

Figure 3

## 2007 NRMP Family Medicine Results by Regions



Two more US seniors chose careers in primary care internal medicine through the 2007 Match (167), compared with 2006 (165). Nineteen fewer US seniors chose combined internal medicine-pediatric training in 2007 (275) compared with 2006 (294)<sup>5,6</sup> (Figure 5). Sixty more positions were filled in 2007 (2,383) in pediatrics (all types) compared with 2006 (2,323), and the number of US seniors increased by 25 from 1,750 in 2006 to 1,775 in 2007. Categorical pediatrics programs matched 1,694 US seniors in 2007, 26 more than the 1,668 matched in 2006 (Figure 4). In 2007, 88 positions were offered in pediatric-primary care programs, up from 86 in 2006, of which 53 were filled with US seniors, compared with 57 in 2006.<sup>5,6</sup>

More international medical graduates (IMGs) continue to match in internal medicine (1,985 into categorical, preliminary, primary care, and internal medicine-pediatrics), compared with pediatrics (430) and family medicine (875). Similarly, among the matched IMGs, the percentage of non-US citizens is higher in internal medicine (75.8%) compared with pediatrics (71.4%) and family medicine (61.6%).<sup>5</sup> Among the 24 major specialties of medicine, family medicine ranks third in the percentage of IMG residents (Figure 6). Compared with the 15 subspecialties of internal medicine, family medicine would rank eighth in the percentage of IMG residents (Figure 7).

### July Fill Rate

Since 1987, more positions have been offered in family medicine residencies in July than are offered

through the NRMP in March. This July increase was due to program expansion between 1990 and 1998 and to the net addition of newly accredited programs that became ready to accept first-year residents (Figure 8). Since 1998, this difference may be partially due to the number of positions filled outside of the NRMP process. The highest July fill rate (98.7%) was in 1984, after which July fill rates decreased to 88.3% in 1991.<sup>6</sup> The 2007 July fill rate in family medicine residencies was 93.4% (3,204 of 3,431), a decrease of 96 positions offered and a decrease of 225 positions filled compared with 2006, when the July fill rate was 97.2%.<sup>7</sup>

On July 1, 2007, 10,085 residents were training in 458 programs, an average of 22.0 per program compared with 9,997 (21.7 per program) in 2006, 9,780 (21.3 per program) in 2005, 9,825 (21.2 per program) in 2004, 9,995 (21.1 per program) in 2003, 10,130 (21.7 per program) in 2002, 10,262 (21.9 per program) in 2001, 10,503 (22.3 per program) in 2000, 10,632 (22.4 per program) in 1999, 10,687 (23.0 per program) in 1998, 8,513 (20.8) in 1994, and a nadir of 7,279 (19.1) in 1988. There are currently 3,204 first-year residents, an average of 7.0 per program compared with 3,429 (7.5 per program) in 2006, 3,282 (7.2 per program) in 2005, 3,275 (7.1 per program) in 2004, 3,329 (7.0 per program) in 2003, 3,360 (7.2 per program) in 2002, 3,399 (7.2 per program) in 2001, and 3,475 (7.4 per program) in 2000.<sup>7</sup>

Graduates of US allopathic medical schools filled 1,387 first-year positions (43.3%) in July 2007, compared with 1,535 (44.8%) in 2006, 1,463 (44.6%) in 2005, 1,520 (46.4%) in 2004, 1,607 (48.3%) in 2003, 1,812 (54.1%) in 2002, 1,926 (56.8%) in 2001, 2,293 (66.3%) in 2000, 2,520 (71.3%) in 1999, 2,686 (75.2%) in 1998, 2,762 (77.5%) in 1997, and 2,765 (79.4%) in 1996.

Graduates of colleges of osteopathic medicine filled 503 first-year positions (15.7%) in July 2007, compared with 445 (13.0%) in 2006, 520 (15.8%) in 2005, 498 (15.2%) in 2004, 481 (14.4%) in 2003, 452 (13.5%) in 2002, 461 (13.6%) in 2001, 378 (10.9%) in 2000, 355 (10.0%) in 1999, 362 (10.1%) in 1998, and 232 (7.6%) in 1994.<sup>7</sup> In 1981, the DO fill rate was 2%.<sup>5,6</sup> This increase in osteopathic graduates selecting allopathic family medicine programs is expected given the recent increase in dually accredited residency programs from 26 in 2003 to 81 in 2007.<sup>8</sup>

In July 2007, 1,296 (40.4%) of the 3,204 first-year family medicine residents were IMGs, compared with

1,443 (42.1%) in 2006, 1,299 (39.6%) in 2005, 1,257 (38.4%) in 2004, 1,241 (37.3%) in 2003, 1,087 (32.4%) in 2002, 1,001 (29.4%) in 2001, 789 (22.7%) in 2000, 659 (18.6%) in 1999, and 523 (14.7%) in 1998. A total of 630 (19.7%) first-year residents were non-US citizen IMGs, compared with 720 (21.0%) in 2006, 698 (21.3%) in 2005, 618 (18.9%) in 2004, 579 (17.4%) in 2003, 466

(13.9%) in 2002, 430 (12.6%) in 2001, and 351 (10.1%) in 2000. A total of 666 (20.8%) were US citizen IMGs, compared with 723 (21.1%) in 2006, 601 (18.3%) in 2005, 639 (19.5%) in 2004, 662 (19.9%) in 2003, 621 (18.5%) in 2002, 571 (16.8%) in 2001, and 438 (12.6%) in 2000.<sup>6,7</sup> Interestingly, of the 421 IMGs (compared to 555 in 2006 and 461 in 2005) who entered PGY-1

positions in family medicine residencies after the 2007 Match, 78.4% (compared with 74.2% in 2006 and 69.6% in 2005) were US citizens. Factors affecting this year's differences are likely to be the continued challenges associated with non-citizens obtaining visas to train in the United States (Figure 9).

**Discussion**

After 6 consecutive years of increases (1992–1997) and four consecutive years (1994–1997) of all-time records set in positions filled in family medicine residency programs, then followed by 6 consecutive years of decline, 2007 represents the fourth increase in the percentage of positions filled in family medicine through the NRMP since 1997. Reviewing the Match performance of other specialties for the same time period suggests varying trends. For example, anesthesiology decreased from 163 US seniors in 1994 to 43 in 1996. That trend reversed by increasing from 118 in 1998 to 448 US seniors in 2007. Diagnostic radiology matched 243 US seniors in 1996, dropped to 79 in 1997, increased to 124 in 2001, decreased to 107 in 2005, and again increased to 125 in 2007.<sup>5,6</sup>

By comparison, family medicine had increased steadily for 6 years from 1991 through 1997. Family medicine gained 966 US seniors in the Match over that period. However, although the overall Match percentages increased again in 2007, over the past 10 years, family medicine has lost 1,233 US seniors in the Match or 52.6% of the record number of US seniors matching in 1997.<sup>5,6</sup>

Figure 4

Comparison of Potentially Non-Primary Care Positions Filled With US Seniors in March, 1998–2007

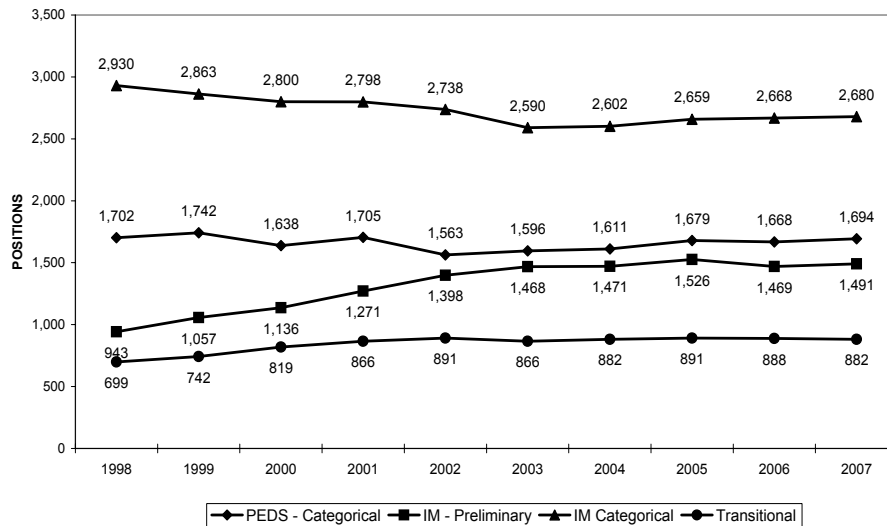


Figure 5

Comparison of Primary Care Positions Filled With US Seniors in March, 1998–2007

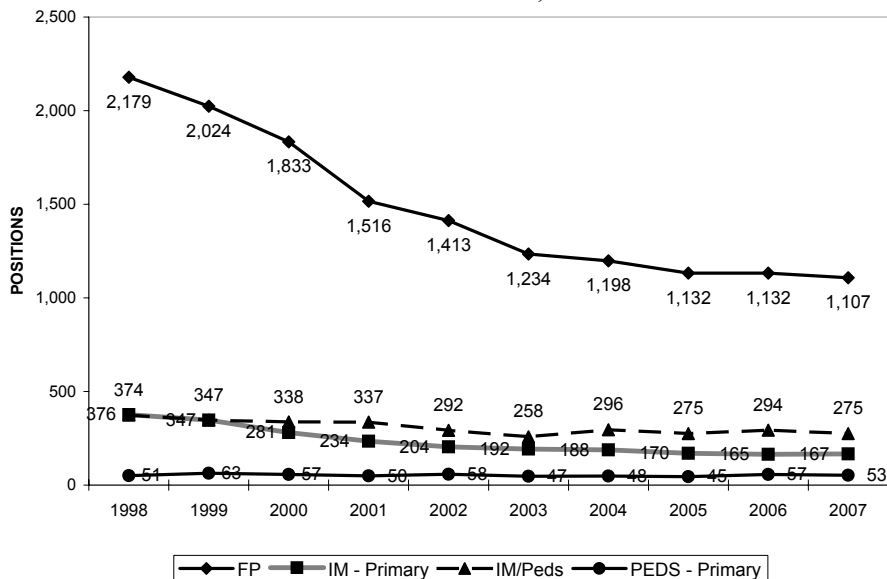
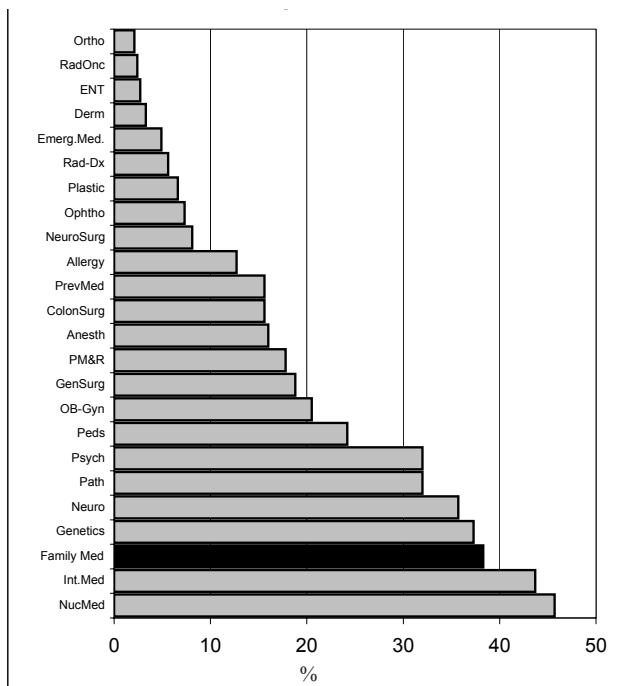


Figure 6

% IMGs in ACGME Residencies, August 1, 2005



IMG—international medical graduate  
ACGME—Accreditation Council for Graduate Medical Education

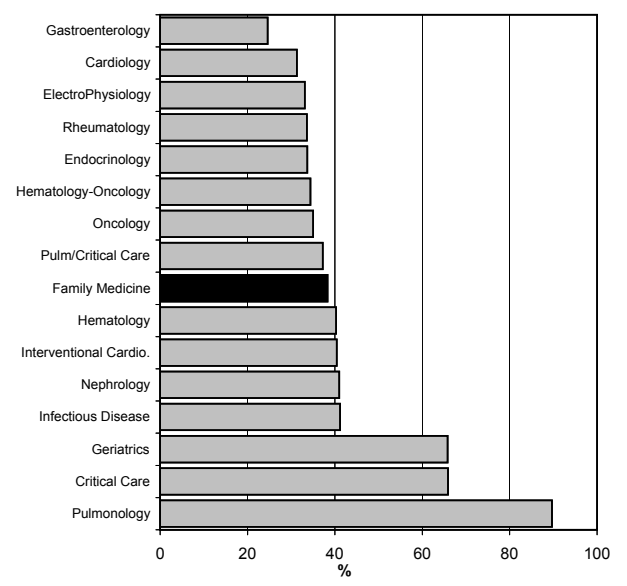
Source: The percentage of IMGs training in ACGME-accredited residency programs on August 1, 2005. JAMA 2006;296(9):1147-69.

Family medicine's primary care colleagues continued to experience varied trends in the 2007 Match. Internal medicine-primary care offered 21 fewer positions this year and, in nine of the past 10 years, declined in positions filled (528 in 1998, 505 in 1999, 445 in 2000, 369 in 2001, 321 in 2002, 298 in 2003, 284 in 2004, 280 in 2005, 284 in 2006, and 264 in 2007) and in positions filled by US seniors (376 in 1998, 347 in 1999, 281 in 2000, 234 in 2001, 204 in 2002, 192 in 2003, 188 in 2004, 170 in 2005, 165 in 2006, and 167 in 2007). Combined internal medicine-pediatric residencies filled one more position (345 in 2007 versus 344 in 2006) but with 19 fewer US seniors (275 in 2007 versus 294 in 2006). In internal medicine categorical 62 more positions were offered in 2007 compared with 2006 (4,797 versus 4,735), with a higher fill rate than in 2006 for total positions (98.4% versus 97.9%) but a lower rate for positions filled with US seniors (55.9% versus 56.4%).<sup>5,6</sup>

In the 2007 Match, pediatrics similarly had variable results in both positions filled and those filled with US seniors. Pediatrics-primary care decreased its positions filled with US seniors from 57 in 2006 to 53 in 2007. Pediatrics-categorical increased both its overall positions filled in 2007 from the prior year (2,265 versus

Figure 7

% IMGs in ACGME Residencies, August 1, 2005



IMG—international medical graduate  
ACGME—Accreditation Council for Graduate Medical Education

Source: The percentage of IMGs training in ACGME-accredited residency programs on August 1, 2005. JAMA 2006;296(9):1147-69.

2,209) and in those positions filled with US seniors (1,694 versus 1,668).<sup>5,6</sup>

Internal medicine-preliminary decreased its number of positions offered (1,885 versus 1,943) but maintained the positions filled (1,749) and increased those filled with US seniors (1,491 versus 1,469). Consequently, for internal medicine-preliminary, the overall fill percentage increased in 2007 (92.8% versus 90.0%), and the percentage filled with US seniors increased (79.1% versus 75.6%). It is noteworthy that for transitional residency programs, the same number of positions was offered this year as last (1,017), with fewer positions filled overall (966 versus 972) and fewer filled with US seniors (882 versus 888). The percentage of transitional-year residencies filled with US seniors decreased from 87.3% in 2006 to 86.7% in 2007.<sup>5,6</sup>

In 2007, there is a continued movement of US seniors away from family medicine and pediatrics-primary care. From categorical internal medicine, where nearly eight of nine students choose a subspecialty, the number of US seniors increased. US students are also choosing preliminary internal medicine, positions where they are more likely to be headed for subspecialty careers. Students entering pediatrics residencies appear to be responding to the published need for more pediatric subspecialists.<sup>9</sup>

Controversy persists within the OB-GYN community between those who view the specialty as primary care and those who perceive a more-surgical orientation. After 4 years of decreases from 1998 to 2001, and a slight increase in 2002, OB-GYN residencies in 2003 and 2004 experienced a decrease in positions filled with U.S. seniors (743 in 2004 and 786 in 2003 vs. 848 in 2002), but in 2005, 2006 and 2007 increased in both

total positions filled (1,083 in 2005, 1,130 in 2006, and 1,149 in 2007), and positions filled with U. S. seniors (772 in 2005, 835 in 2006, and 837 in 2007).<sup>5</sup>

**Contributors to Recent Trends**

*Evidence-based Student Interest*

A study of the factors influencing medical students in their choice of family medicine was commissioned by the AAFP and conducted in 2002 by faculty of the University of Arizona Department of Family and Community Medicine. The “Arizona Study” provided a new evidence-based foundation from which to plan responses to declining student interest. Numerous studies continue to attempt to identify and understand drivers of student interest in family medicine.<sup>10, 11</sup>

*Perceptions of Medical Students*

Multiple factors appear to contribute to the current trend of decreased interest by US seniors in family medicine. Increasingly apparent is the perception by students that family medicine lacks the prestige of other specialties within academic health centers.<sup>1,12</sup> Disparaging remarks made to medical students about an interest in family medicine by faculty and residents is a commonly cited experience.<sup>13,14</sup> This is unfortunately aggravated by the experiences of some students who indicate that their third-year clerkships in family medicine lack some of the intellectual rigor and direct clinical experience of other core clerkships.<sup>3</sup> This supports the misconception that being a family physician is “too easy” for the typically motivated medical student.<sup>3</sup>

At the other end of the spectrum, some medical students report concerns associated with family medicine because it is “too hard,” questioning

Figure 8

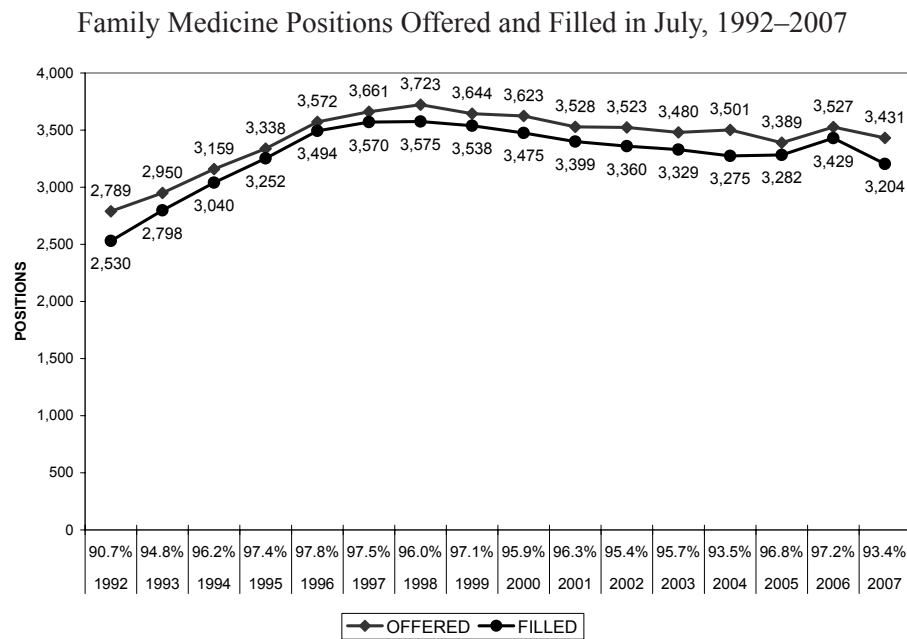
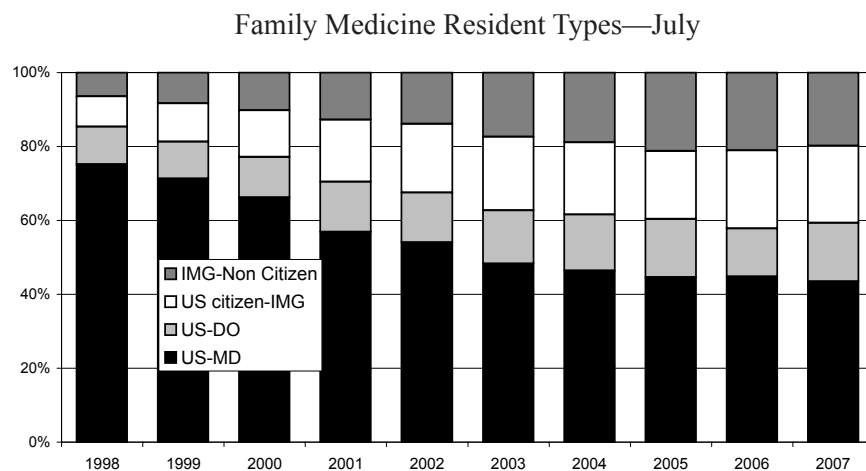


Figure 9



IMG—international medical graduate

physicians' capacity to master the content needed to practice comprehensive, evidence-based medicine.<sup>1,12</sup> This perspective has been exacerbated by the challenges of primary care practice in an environment of increased penetration of over-managed care and burdensome regulatory oversight. The extent to which physicians voice dissatisfaction can dissuade medical school graduates from choosing careers in primary care.<sup>25</sup>

In the past 10 years, medical students have demonstrated an increasing interest in international activities, as shown by the increase in students participating in international health electives.<sup>13</sup> Family medicine's broad scope of training and focus on public health uniquely prepares physicians to practice global health in austere and underserved communities. Early evidence demonstrates that offering an international health elective may also have a positive impact on residency program recruitment.<sup>14</sup>

#### *Medical Student Debt*

As medical school indebtedness continues to escalate to an average of more than \$105,000 at graduation, consideration must be given to the motivation of the applicant pool toward primary care careers.<sup>27</sup> This may be especially true from the perspective of older, nontraditional students, minorities, or students from disadvantaged backgrounds, all of whom have been more likely to choose careers in family medicine. As a result of the perception of nearly insurmountable debt, these potential applicants may be unwilling to even consider a career in medicine, thereby decreasing diversity in the workforce and exacerbating disparities in health care.<sup>27</sup> Except for a few model programs that preferentially select students likely to enter rural or medically underserved areas of practice, medical school admission committees may therefore be less often prioritizing among applicants whose characteristics are associated with the selection of primary care careers, particularly family medicine. The effect of this pipeline drain may minimize the apparent impact of educational debt on medical student specialty choice.<sup>28-33</sup>

The infrastructure of US medical education continues to play a powerful role in determining how many graduates enter family medicine residencies. The presence of a well-funded department of family medicine and the number of faculty are correlated with the higher percentage of medical students entering family medicine residencies<sup>28-30,34-38</sup> as well as internal medicine and pediatric residencies.<sup>34</sup> One of the most important variables for predicting the proportion of students at a medical school who choose family medicine is the proportion of faculty who are family physicians.<sup>35</sup> In 2007, 11 US medical schools remain without a department of family medicine. Similarly, the presence in the curriculum and the duration of a required clinical clerkship

in family medicine are correlated with more students choosing family medicine residencies.<sup>28-29, 34-38</sup>

#### *Infrastructure of Medical Schools*

Medical school characteristics such as family medicine clerkships, communications skills courses, and curricula in medical ethics, humanities, and social sciences in medicine play a central role in the development of physicians committed to the well-being of others.<sup>39</sup> In February 1993, the Liaison Committee on Medical Education (LCME), which accredits US medical schools, created parity by recommending clinical curricula in family medicine along with the other five core disciplines (internal medicine, OB-GYN, pediatrics, psychiatry, and surgery).<sup>41</sup> More than a decade later, at least 13 LCME-accredited US medical schools still do not have required clinical clerkships in family medicine.<sup>32,42</sup>

#### *Match Positions*

The year 2007 is now the eighth in a row in which fewer positions were offered in family medicine through the Match than the year before (2,621 versus 2,727). For 2007, there was a decrease in the number of positions offered in July (3,431 in 2007 versus 3,527 in 2006), although the decline in the number of functioning family medicine programs seems to be stabilized (458 in 2007 compared with 451 in 2006 and 459 in 2005). Threats to family medicine residency programs are the result of a complex interplay of transitional forces in the marketplace. Among those changes are the continued reductions in federal support for GME through the Medicare program. Such financial pressures have been identified as pivotal in the closure of many family medicine residencies over the past several years.<sup>43</sup> AAFP workforce policy, adopted in 2006, demonstrates that this trend must be reversed if we are to produce an adequate family physician workforce to meet the nation's projected needs based on population growth, demographic factors, and health care utilization.<sup>44</sup>

#### *Income*

The turbulence of the US health care environment<sup>45-50</sup> and increasing student debt<sup>51</sup> support the appearance of medical students selecting careers that provide them both economic and practice security. High Match percentages in diagnostic radiology, anesthesiology, and emergency medicine support trends toward physician practice with a high income coupled with predictable work hours and lifestyle.<sup>51</sup> For many students, the level of compensation within a discipline may serve as a proxy for the prestige and market demand for that specialty. While greater than \$140,000 per year on average, the current reported net income for family physicians remains significantly lower than for most other specialists.<sup>52</sup>

A growing body of evidence indicates that the widening income gap between primary care and specialty care negatively impacts student choice in primary care careers and that this imbalance threatens the development and maintenance of a healthy primary care base. Four specific factors: patient volume, the Relative Value Scale Update process, the Medicare Sustainable Growth Rate (SGR) formula, and inequities in specialty care payment by private insurers are identified as specifically contributing to the continued disparity.<sup>53</sup>

### *Workforce*

The AAFP continues to focus efforts on analyzing the current generation of premedical and medical students, reflecting their interests and addressing their concerns.<sup>54</sup> The current number of family medicine residencies has somewhat stabilized in 2007, since there are 458 programs in 2007 compared with 451 in 2006, and 459 in 2005. There are about 3,300 residents in each of the 3 years of training. This is still below the number of annual graduates needed to achieve the projected family physician workforce needed for the nation.<sup>44,55</sup> Evidence is mounting that a health system built on a foundation of primary care is not only ideal in terms of patient care outcome,<sup>56</sup> but it is also what patients want.<sup>57</sup> In a recent national study, 30% of medical school deans and 54% of medical societies agree there is a national shortage of family physicians and general internists.<sup>58</sup> The 2004 reports from the federal Council on Graduate Medical Education,<sup>59</sup> the 2004 Workforce Report from the Robert Graham Center,<sup>60</sup> and the 2006 Workforce Statement from the Association of American Medical Colleges<sup>61</sup> all suggest an impending national physician shortage. The United States continues to cope with persistent pockets of underserved populations in rural areas, those populated by ethnic minority groups, and in areas of relatively low socioeconomic status. Generalists make up fewer than 40% of total physicians, while family physicians represent 40% of generalist physicians in the United States.<sup>55</sup> However, family physicians are most likely to practice as generalists, as well as to serve rural and underserved populations.<sup>62-64</sup> If all family physicians were withdrawn, 58% of all US counties would become Primary Care Health Professions Shortage Areas (PCHPSAs). By contrast, if all general internists, pediatricians, and obstetricians-gynecologists combined were similarly withdrawn, fewer than 8% of counties would become PCHPSAs.<sup>64</sup>

Subspecialists providing care to Medicare patients are less likely than generalists to provide comprehensive primary care services and focus on the management of a narrower range of diagnoses.<sup>65</sup> In addition, patients value the role of primary care physicians in providing first contact and continuous management of their care in complex integrated delivery systems.<sup>66-67</sup>

The June 2006 report of the American Medical Association's Council on Medical Education addresses the increase of specialization and the decline of primary care careers in medicine. Specific recommendations for interventions to address the decline of "generalist physicians" outlined in the report include a recommendation to foster the concept of the Medical Home (as described by the American Academy of Pediatrics, the AAFP, and the American College of Physicians) as well as a recommendation that the "AMA encourage physician reimbursement changes which would make generalist physician practice more attractive."<sup>68</sup>

### **Value Proposition**

Notable among the findings of the national market research conducted in the Future of Family Medicine project are that people in America value what family physicians offer, namely a patient-centered medical home wherein they experience a continuous relationship with a primary care physician.<sup>1</sup> Within that primary medical relationship, people want, expect, and value a set of services, including acute care, chronic care, disease prevention, care in the hospital setting, and primary mental health care. The Commonwealth Fund 2006 Health Care Quality Survey finds that when adults have health insurance coverage and a medical home—defined as a health care setting that provides patients with timely, well-organized care and enhanced access to providers—racial and ethnic disparities in access and quality are reduced or even eliminated.<sup>69</sup> Family physicians are both prepared to deliver what people want, expect, and value and are satisfied with their abilities to deliver it. The discipline faces clearly identified challenges as it prepares for the next generation of care: clearly communicating the specialty of family medicine to the public, organizing individual practices into a recognized brand, challenging the disrespectful climate of academia, enhancing reimbursement, and communicating the attractiveness of a career in family medicine.

### **Conclusions**

In 2007, fewer US seniors chose family medicine through the NRMP compared with the previous year, while more US seniors chose internal medicine-categorical and primary care-pediatric residencies. High Match rates in transitional residencies and preliminary internal medicine programs provide trainees with the opportunity to further observe the health care environment and to take advantage of the career path options those preliminary training programs provide.

As the specialty most identified with and attracting the largest number of students interested in primary care, it's not surprising that family medicine has experienced the largest share of the shift in interest among US medical students. The magnitude of this shift represents

the 1,208 fewer US seniors choosing family medicine residencies in 2006 compared with 1997 or an average of 9.6 students per medical school.

Evidence demonstrates that we must reform the current health care system and strengthen the family physicians workforce if we are to develop and provide the type of care that patients state that they want and need.<sup>1</sup> Strategies to effectively develop the family medicine workforce fall into three priority categories: recruitment, training, and retention. Efforts must be made to recruit more students to the specialty through communications and educational programming demonstrating that family medicine can be a rewarding practice where physicians have a positive impact on patients' lives in a unique and lasting way. State and federal policies must support our family medicine training programs currently under tremendous fiscal and environmental pressure. And finally, health system interventions must enhance the practices of family physicians. Financial pressures, encroachment of scope of practice, ensuring quality in medicine, and volumes of paperwork are all factors frequently cited by family physicians as threats to their practice. These issues must be addressed to enhance student interest in the specialty and to avoid excessive attrition in practicing family doctors.

Over the past 9 years, 12,589 US seniors did match to family medicine residencies in spite of the often-negative influences from within and outside of the medical education environment. Thus, the 1,107 US seniors who chose family medicine in the 2007 Match appear to be resistant to conflicting environmental messages and clear in their commitment to serving the nation as family physicians, perhaps because of both personal characteristics and medical school features that support their choice.

The family of family medicine organizations continues to carry out the recommendations of the AAFP's Commission on Resident and Student Issues, based on findings of the Arizona Study, the Student Interest Summit, and the Future of Family Medicine project, to enhance student interest and initiate new programs to renew the specialty. Those strategies can be grouped into four areas of focus: (1) premedical students and medical school admissions, (2) communications and the public image of family medicine, (3) mentoring and role modeling initiatives, and (4) the medical school curriculum.

The results of the 2007 Match and the subsequent filling of residency positions in family medicine give cause for optimism that the decline in US seniors' interest in family medicine careers has stabilized and that with the student interest efforts of the family of family medicine, and the increasing demands for family physicians in the workforce, student interest in family medicine careers will begin to increase again—to the ultimate benefit of the nation.

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