



What Influences Medical Students and Residents to Choose a Career in Primary Care?

HCAI Health Workforce Education and Training (HWET) Council
Discussion Brief

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Definition

- / Primary care physicians are generalists who typically provide the first point of contact with the health care system. Primary care physicians take a whole-person approach (rather than specializing in a single body system or disease) and deliver comprehensive care to patients with whom they build a continuous, trusting, relationship over time.
- / Medical specialties typically considered primary care include family medicine, general pediatrics, general internal medicine, and geriatrics.

Why This is Important

- / The United States faces a growing shortage of primary care physicians. Due to population growth, population aging, and the retirement of practicing physicians, the Association of American Medical Colleges estimates a shortage of up to 48,000 primary care physicians by 2034.^{i ii}
- / California also faces a large and growing primary care physician shortage. In January 2020, 38.3% of California's population lived in a Primary Care Shortage Area.
- / In 2017, a study by the Healthforce Center at UCSF predicted that the supply of primary care physicians practicing in California would decrease by 8%-25% by 2030. The primary reason given for this decrease was that there are not enough new primary care physicians completing residency to replace the primary care physicians retiring.ⁱⁱⁱ
- / Small studies and widespread anecdotal evidence suggest that trainees often lose interest in primary care over the long course of medical school and residency training.
- / Current data on proportion of graduates of California medical students initially choose to pursue residency training in primary care are not available – although we know this proportion varies widely among medical schools. Many graduates who choose internal medicine or pediatrics residencies ultimately decide against primary care careers and instead go on to specialize in a single organ system or disease. Better tracking and public reporting of these data are needed.

What We Know

- / **Student demographics and background may be strong influencers of primary care choice.** Studies have shown that demographic factors including gender, race and ethnicity, socioeconomic status, background, and values influence students' choices to pursue primary care residencies and careers. For example, a comprehensive study from 2004 suggested that women and those with rural births are more likely to pursue careers in primary care.^{iv} Other more recent studies maintained that students with a

cited interest in working in rural settings and providing a broad scope of care are also more likely to pursue a career in primary care.^{vi}

/ **Access to strong mentors and role models in primary care positively influence student's specialty choice.** One recent study found that students with positive primary care role models during medical school were more likely to choose primary care specialties and students who completed a formal mentoring program in primary care were more likely to match to primary care specialties.^{vii} In another, alumni students also reported interpersonal relationships such as positive mentoring experiences as an important factor in their decision to pursue a career in primary care.^{viii}

/ **The medical school environment influences specialty choice.**

– The prevailing attitudes towards primary care amongst peers and medical school faculty have an important influence on student specialty choices. A large 2023 study found that students who attend schools with a higher prevalence of negative comments about primary care from staff and other students are less likely to become primary care physicians. Research also shows that students are more likely to choose a specialty in primary care if they attend institutions that make financial investments in their primary care departments and research.^{ix}

– Students are more likely to choose primary care if it has been integrated into the curriculum. Rotations in primary care tend to positively impact students' perceptions of primary care and their likelihood of choosing to specialize in primary care.^x Students were also more likely to hold primary care in high regard if primary care materials were integrated into the preclinical curriculum.^{xi}

/ **The role of medical school debt on specialty choice has been examined but remains unclear.**

When surveyed medical students did not list debt as a main consideration for selecting a specialty^{xii} and anticipated average debt does not vary significantly between primary care and non-primary care residents.^{xiv} However, studies have found that as debt increased, internal medical residents were more likely to pursue an additional fellowship or pursue a career as a hospitalist.^{xv} Students with higher debt were also more likely to list future income as an important factor in their specialty choice and students who reported a higher value for the importance of income were more likely to switch from pursuing a primary career to a non-primary care career.^{xvi}

/ **Income and lifestyle are increasingly important factors in student specialty choices.**^{xvii} Research has found that physician income disparities are associated with student specialty choices and that specialties with lower incomes, such as primary care, have consistently lower residency fill rates^{xviii} Lifestyle has also been cited by several studies as one of the most important factors in making specialty decisions with students drawn to subspecialty fields that offer a more controllable lifestyle with greater work-life balance.^{xxxxix}

For Discussion

/ What can HCAI do to increase the proportion of students graduating from California medical schools that ultimately choose primary care as their career?

/ How can HCAI better track and report proportions of California medical students that ultimately choose primary care as their career?

Endnotes

- ⁱ Alavi, M., Ho, T., Stisher, C., Richardson, E., Kelly, C., McCrory, K., ... & Boltz, M. (2019). Factors that influence student choice in family medicine a national focus group. *Family medicine*, 51(2), 143–148.
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