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Coming to America No More

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By 2015 the number of graduates from US medical schools is anticipated to surpass the number of positions in residency programs.¹ Because the vast majority of US medical school graduates will choose to remain in the United States, and most residency programs will continue to give preference to US graduates, the number of international medical graduates (IMGs) who train in the US is expected to decrease (**FIGURE**). Although many may see this as a positive development (US programs have been accused of exacerbating the “brain drain” from developing countries), this decrease may have additional unanticipated consequences for the diversity and activities of physicians practicing in the United States – a shift that could begin to affect patient care.

Approximately one quarter of all physicians currently practicing in the US, and 10-15% of trainees in residency programs, are IMGs.^{2,3} A forecasted physician shortage has led to expansion of enrollment in existing US medical schools and establishment of new ones (both allopathic and osteopathic) with 19,230 first year students enrolled in 2011; the number of students graduating from US medical schools is therefore increasing quickly (projected to reach 26,709 enrolled per year by 2016-2017, a 37% increase relative to 2002-2003). However, the number of training positions in US residency programs has not similarly expanded, and indeed may contract as a consequence of decreases in graduate medical education funding.⁴ In 2011 there were 26,386 PGY-1 positions in ACGME-accredited programs (growth rate from 2001-2010, 0.9%/yr). This unbalanced increase in graduating US MDs compared with postgraduate training positions is manifesting in an increase in the number of unmatched US MD seniors.⁵ An increase in the number of US medical school positions may result in the admission of less qualified students, which may ultimately have a negative effect on the quality of care offered by US graduates.

IMGs currently play an important role in primary care and care for vulnerable populations. IMGs are disproportionately represented in US counties with a high infant mortality rate,

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lower socioeconomic status, and a higher proportion of non-white population, and in counties designated as rural.⁴ IMGs tend to work more frequently in the public sector and work longer hours.² IMGs are nearly twice as likely to practice in health professional shortage and medically underserved areas compared with US medical graduates. They represent more than one third of the needed physicians in primary care shortage areas, and approximately 10% of hospitals are considered to be IMG-dependent.²

IMGs pursue training in the US for a variety of reasons, including the opportunity for high quality training and for remuneration that may be more generous than could be earned in their country of origin. For some, primary care work in underserved areas can create a path to citizenship. Existing visa waiver programs allow some IMGs who complete residency training to stay and work in the US only if they do so in medically underserved areas.² How IMG-dependent hospitals and healthcare systems will adapt to the decreased availability of IMGs in the US, and whether US graduates will be willing to fill these important and challenging roles, remains to be seen; failure to do so may worsen geographic disparities in access to care. Furthermore, if insurance coverage expands as anticipated under the Affordable Care Act, a primary care physician shortage may become increasingly severe if the availability of IMGs is limited.

IMGs help to provide significant diversity in the workforce. For example, they are substantially more likely to be of Asian or Pacific Islander descent than US graduates (31.6% of IMGs vs. 4.9% US graduates) as well as more likely to be of Hispanic or Latino descent (6.7% of IMGs vs. 1.5% of US graduates).^{2, 5} Care provided by clinicians of concordant ethnicity appears to improve care quality and partnership in the patient-physician relationship, so any reduction in physician diversity could further exacerbate existing disparities in health care.⁷ Although this may be partially offset through active minority recruitment of US medical schools, IMGs inherently offer a broader cultural, linguistic and ethnic diversity.

The expected changes in the number of available training positions in the US may be of particular concern to the burgeoning number of US citizens who attend medical school abroad (increased from 769 in 1992 to 2772 in 2006, more than 50% of whom are in Caribbean medical schools).⁸ These students may now find reentry into the United States to be especially difficult, particularly since they will be competing with a markedly increasing number of graduating medical students not only in the US but also worldwide; there are currently more than 2300 medical schools in the world, and nearly 800 of them opened since the mid 1990's.⁹

The reduction in training positions for IMGs will also be of concern to countries that have benefitted from returning clinicians who have been trained in the US. Many IMGs who immigrate for medical training intend their stay in the US to be temporary and return to practice in their home countries.² Since access to medical training in Europe and Australia is increasingly being limited to local citizens, a reduction in US training positions could meaningfully reduce the access of medical graduates from underserved nations to the high-quality and efficient training that is generally available in the US, and hence their capacity to provide high quality care in their home countries.

The risks implied by the workforce changes described, particularly in the context of expected modifications to the US healthcare system in the near future, could be mitigated by concerted action. Additional funding to facilitate growth in residency programs to more closely reflect the increasing number of US medical school graduates may abate the risks. Since funding sources for training are already strained and anticipated to tighten further, creative solutions have to be considered. Other strategies could include efforts to make primary care in rural settings more attractive to US graduates, additional recruitment and retention strategies to augment the representation of minorities in US medical schools, expansion of non-physician clinicians,⁴ or the self-financing of postgraduate training. Additionally, IMGs could be recruited to meet the primary care shortfall if funding or other incentives were made available, such as retention of the programs that create a path to citizenship for clinicians who dedicate several years to provide primary care to underserved populations.

The rapidly increasing number of medical school graduates coupled with a constrained graduate medical education system is likely to have a substantial effect on the number of IMG recruits to US programs. These trends threaten to reduce the diversity of the physician community, and could meaningfully affect primary care delivery in the US and even healthcare quality abroad.¹⁰ Despite the proven value of IMGs to the US healthcare system, coming to America is likely to prove increasingly challenging for future IMGs.

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Figure 1.

Trends in Applicants Participating in the NRMP and Number of PGY-1 Positions

1991-2011. The number of US-IMGs has increased from 601 in 1991 to 3769 in 2011 (>6-fold) as compared Non-US-IMGs which noted an increase from 2259 in 1991 to 6659 in 2011 (<3 fold). PGY-1 positions have increased from 20192 in 1991 to 23421 in 2011.

(Data source: <http://www.nrmp.org/data/>)