

**International Medical Graduates  
in the U. S. Workforce**

**A discussion paper**

**December 2008**





December 2008

Dear Doctor,

Your 2007-2008 AMA IMG Governing Council is pleased to provide you with a revised copy of *International Medical Graduates in the U.S. Physician Workforce: A Discussion Paper* for your use and information. The background of this document begins with Dr. Rajam Ramamurthy, 2004-2005 AMA IMG Governing Council Chair. Her governing council wanted to address the issues related to the IMGs role in the U.S. physician workforce by creating a document based on relevant statistics and original editorial contributions. Your 2007-2008 AMA IMG Governing Council decided to build upon that governing council's work and transform the document into a discussion paper that would be updated annually by that year's IMG Governing Council.

The purpose of this document is to spark constructive and frank dialogue among IMGs and between IMGs and non-IMGs. Since this document will be updated annually, we welcome your feedback and suggestions for next year's edition. If you have an idea for an additional section or some additional articles that should be included, please forward that information to our AMA IMG Staff at [img@ama-assn.org](mailto:img@ama-assn.org) or call 312-464-5678. We would like to thank the 2008 Workforce Paper Editorial Committee: Drs. Hugo Alvarez, Nyapati Rao and Jayesh Shah for their contributions to this Workforce paper.

I hope you find this discussion paper useful. Feel free to forward this document to physician colleagues, medical students, and residents. Please get involved in your AMA IMG Section because together we are stronger. Visit our Web site <http://www.ama-assn.org/go/imgs> to learn how to contribute to our work.

Respectfully,

A handwritten signature in cursive script that reads "Gamini Soori, MD".

Gamini Soori, MD, Chair  
2007-2008 AMA IMG Governing Council

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## **Introduction**

Predicting the physician workforce in the United States has been a contentious issue dating as far back as 1910. In 1992, the massive oversupply of physicians predicted for the nation by year 2000 not only did not materialize but the opposite occurred; an undersupply of physicians, particularly in certain specialties and states. The potential consequences for miscalculations are serious and could impact the delivery of health care in the country. Today, one in four physicians in the country is an international medical graduate (IMG). A disproportionate share of healthcare in the areas is provided by these physicians. Nevertheless, at any given time there are 5,000 – 7,000 IMG physicians who are unemployed in the U.S. In this report, the Governing Council of the AMA IMG Section has attempted to document the vital role that the IMG physicians have played in health care delivery to the people of this country. We have also made an attempt to critically evaluate the deterrents to non-utilization of a massive pool of qualified physicians in the face of physician shortage and to offer possible solutions to the constant struggle of IMG physicians to practice their profession.

## **The history of physician workforce and the role of IMGs**

The Flexner Report published in 1910 was a sweeping indictment of the quality of medical education in the U.S. that resulted in the closure of many inferior medical schools. In the 1930s, the physician to population ratio decreased from 173 per 100,000 to 125 per 100,000. Following World War II, with improved living conditions, there was a demand for better health care increased. That was not addressed, until 1959, when the U.S. Surgeon General's consultant group on Medical Education released the Bane Report, which predicted that the U.S. would suffer a 40,000 physician deficit by the mid 1970s. As a result of the Bane Report, from 1965 to today, the number of allopathic and osteopathic medical schools increased from 93 to 140, an increase of 52%. The number of graduates increased from 7,000 to 16,950 (+142%) by 1981.

Just as the U.S. began to increase the numbers of "home grown" physicians, so too did it begin to look to other countries to help meet its health care workforce needs, developing a legislative and regulatory infrastructure to evaluate and process IMGs.

The Exchange Visitor Program has its origins in the United States Information and Educational Exchange Act of 1948, also known as the Smith-Mundt Act, and the Immigration and Nationality Act of 1952. Before the Smith-Mundt Act, exchange programs were conducted infrequently with only a few countries. With the goal of promoting better understanding of the United States among the peoples of the world and strengthening cooperative international relations, this legislation broadened the scope of exchange considerably to include a wider array of countries.

In 1961, the Mutual and Cultural Exchange Act, commonly known as the Fulbright-Hays Act, expanded, strengthened, and better defined exchange programs authorized in earlier legislation. The Fulbright-Hays Act authorized wide range of cultural, technical, and educational interchange activities. The Exchange Visitor Program derives its authority from this legislation. The Fulbright-Hays Act also established the J visa, the non-immigrant visa held by Exchange Visitors, which enables foreign visitors to visit the United States to participate in educational and cultural exchanges.

During the 1950's, the need for a formal program of evaluation of "Foreign Medical Graduates" intensified due to the explosive growth in the demand for health care services, and a greater dependence on physicians in training to provide medical care. In 1954, the Cooperating Committee on Graduates of Foreign Medical Schools (CCGFMS) was formed by the Association of American Medical Colleges (AAMC), American Hospital Association (AHA) the American Medical Association, (AMA), and Federation of State Medical Boards (FSMB) as a first step toward filling this need. In exploring methodologies that would uniformly evaluate the qualifications of foreign medical graduates, CCGFMS recommended validating medical education credentials, and creating examinations to evaluate skills in the medical sciences and English language proficiency.

In 1956, a private, non-profit organization, the Evaluation Service for Foreign Medical Graduates (ESFMG) was formed; it later changed its name to the Educational Council for Foreign Medical Graduates (ECFMG). With the help of National Board of Medical Examiners (NBME) a medical science examination was developed. In March 1958, ECFMG administered its first medical science examination and test of written English knowledge in 17 centers to 298 international medical graduates. It was the function of another body, the Commission on Foreign Medical Graduates to monitor the visa sponsorship of medical exchange visitors in the U.S. and to conduct research on international medical graduates. In 1965, the Immigration and Nationality Act (PL 89-236) abolished national quotas and gave preference to individuals with occupations designated "in short supply" by the Department of Labor. Physicians were included on this list. Through the ECFMG, examinations administered in many countries allowed U.S. residency training programs to recruit physicians from all over the world. International graduates chose the specialty in which they wanted to obtain advanced training. Many programs paid for travel and accommodations. In 1974 the ECFMG and the Commission on Foreign Medical Graduates, which monitored issuance of visas, merged to become the Educational Commission for Foreign Medical Graduates (ECFMG).

The welcoming climate for IMGs began changing in the mid-1970s. The Health Professions Education Assistance Act (HPEA) of 1976 (PL 94-484) declared an end to the physician shortage. IMGs were no longer given preferential visas that were meant for professions with shortages. Among other requirements, the HPEA mandated specific examination requirements for foreign national physicians. In response, an examination that met the new requirements, the Visa Qualifying Exam (VQE), was introduced. The VQE was essentially a shorter version of the then current National Board of Medical Examiners (NBME) Part I & Part II examinations being given to U.S. medical school students and graduates. The VQE was replaced by the Foreign Medical Graduate Examination in the Medical Sciences (FMGEMS) in 1984.

Beginning in 1989, IMGs were eligible to take the NBME Part I & Part II Examinations. In 1994, the United States Medical Licensing Examination (USMLE Steps 1, 2 and 3) became the exam for all physicians, IMGs and USMGs, for licensure in the U.S. USMLE Step 1, Step 2 Clinical Knowledge (CK) and Step 2 Clinical Skills (CS) are the current exams required for ECFMG Certification, a requirement for IMGs to enter graduate medical training. Residency programs have different requirements regarding completion of USMLE exams for USMGs. In 1999, the computer-based testing for all Steps of the USMLE was introduced. ECFMG serves as the registration entity for IMGs for Steps 1, 2 CK and 2 CS.

Steps 1, 2 CK and 3 are delivered by a private company, Thomson Prometric, through its worldwide network. Steps 1 and 2 CK are administered in more than 50 countries, including the United States and Canada. Step 3 is administered in the United States and its territories only. Step 2 CS is administered at five centers in the United States.

In the more recently instituted Step 2 CS, examinees are graded on three separate components: Integrated Clinical Encounter (ICE), which involves taking a medical history, conducting a physical exam, and taking patient notes; Communication and Interpersonal Skills (CIS), which involves gathering and sharing information, manner and rapport; and Spoken English Proficiency (SEP), which involves clarity of spoken English communication within the context of the doctor-patient encounter.

In the second half of 2006, both IMGs and USMGs failed ICE more than they failed CIS and SEP. The ICE fail rates for this time period were 16.5% for IMGs and 2.8% for USMGs. The CIS fail rates were 13.3% for IMGs and 0.4% for USMGs. The SEP fail rate for IMGs has decreased over time. The SEP fail rate of 1.5% for IMGs taking the exam in the second half of 2006 (down from about 4%) indicates that they tended to be more proficient in SEP than in the past.

Enabling IMGs to practice in the U.S. has always provided a beacon of hope for physicians worldwide who want to receive advanced training and excel beyond what their country provides. This opportunity allows for more education, a greater ability to provide for themselves and their families and greater hope to live fuller lives in a safe and peaceful environment.

### **The growth of the IMG workforce**

In 1983, generous support for graduate medical education positions led to an influx of IMGs, while residency slots grew to 40 percent over the annual number of U.S. graduates. In 1991, the Council on Graduate Medical Examination (COGME) predicted a surplus of 80,000 physicians by 2000 and an increase of 24% by 2010. COGME also recommended capping the numbers of residency positions at 10% over the annual number of U.S. graduates. This appeared to be a direct attempt to control the influx of IMGs. During the period 2007-2008, there were 106,012 residents in ACGME accredited residency training programs; 27.2% were from non-U.S. schools.

## U.S. and IMG physician population overview

**Table 1**

|                                 |                              |
|---------------------------------|------------------------------|
| Number of Physicians in U.S     | 921,904                      |
| Number of IMG Physicians        | 236,669 (from 127 countries) |
| % of IMG Physicians in U.S.     | 26%                          |
| % of IMGs in Residency Programs | 12%                          |
| % of IMGs in primary care       | 37%                          |
| % of USMGs in primary care      | 33%                          |
| % of IMGs in patient care       | 78%                          |
| % of IMGs in academics          | 16.2%                        |

Source: Physician Characteristics and Distribution in the U.S., 2008 edition; AMA, Chicago, Ill.

**Table 2**

From 1970 to 1994, physician population increased by 104.9%, to more than 350,000 physicians. IMGs accounted for 27.8% of that growth comprising 97,359 physicians. In that 24-year period USMGs increased by 91.4%, while IMGs grew by 170.2%. In 1980, studies suggesting IMG limits were published. In 1985, federal legislation to cut GME funding for IMGs failed.

## Top 20 countries of medical education for IMG physicians % of total IMG population (number of physicians)

**Table 3**

| Country                   | Total  | Percentage |
|---------------------------|--------|------------|
| INDIA                     | 41,247 | 21%        |
| PHILIPPINES               | 21,082 | 9%         |
| MEXICO                    | 13,980 | 6%         |
| PAKISTAN                  | 11,901 | 5%         |
| DOMINICAN<br>REPUBLIC     | 8,618  | 3.7%       |
| U. S. S. R.               | 6,293  | 2.7%       |
| GRENADA                   | 6,299  | 2.7%       |
| EGYPT                     | 5,301  | 2.2%       |
| SOUTH KOREA               | 5,031  | 2.1%       |
| CHINA                     | 5,087  | 2.1%       |
| ITALY                     | 4,950  | 2.1%       |
| IRAN                      | 4,892  | 2.1%       |
| SPAIN                     | 4,548  | 1.9%       |
| DOMINICA (WEST<br>INDIES) | 5,249  | 2.2%       |
| GERMANY                   | 4,460  | 1.9%       |

|                |       |       |
|----------------|-------|-------|
| SYRIA          | 3,794 | 1.6%  |
| COLOMBIA       | 3,478 | 1.5%  |
| ISRAEL         | 3,397 | 1.4%  |
| UNITED KINGDOM | 3,879 | 1.6%  |
| MONTSERRAT     | 3,111 | 1.3 % |

Source: 2008 AMA Masterfile

**Top 20 U.S. states IMGs practice - number of practicing IMG practicing in state (% of state physician workforce)**

**Table 4**

|                    |        |       |
|--------------------|--------|-------|
| 1. New York        | 35,180 | (42%) |
| 2. California      | 25,408 | (23%) |
| 3. Florida         | 19,536 | (36%) |
| 4. New Jersey      | 13,617 | (45%) |
| 5. Illinois        | 13,439 | (34%) |
| 6. Texas           | 13,250 | (24%) |
| 7. Pennsylvania    | 10,920 | (26%) |
| 8. Ohio            | 9,911  | (29%) |
| 9. Michigan        | 9,459  | (34%) |
| 10. Maryland       | 7,106  | (27%) |
| 11. Massachusetts  | 7,106  | (22%) |
| 12. Virginia       | 4,981  | (21%) |
| 13. Georgia        | 4,438  | (19%) |
| 14. Connecticut    | 4,192  | (29%) |
| 15. Indiana        | 3,157  | (22%) |
| 16. North Carolina | 3,221  | (13%) |
| 17. Missouri       | 3,431  | (22%) |
| 18. Wisconsin      | 2,948  | (18%) |



|               |             |
|---------------|-------------|
| 19. Arizona   | 3,215 (21%) |
| 20. Tennessee | 2,930 (16%) |

Source: Physician Characteristics and Distribution in the U.S., 2008 edition; AMA, Chicago, Ill

**Primary specialty of IMGs – percentage in specialty (number of IMG physicians)**

|                       |     |          |
|-----------------------|-----|----------|
| Internal Medicine     | 37% | (57,029) |
| Anesthesiology        | 28% | (11,712) |
| Psychiatry            | 31% | (12,999) |
| Pediatrics            | 28% | (20,318) |
| Family Medicine       | 21% | (12,999) |
| Obstetrics/Gynecology | 18% | (7,446)  |
| Radiology             | 19% | (1,670)  |
| General Surgery       | 20% | (7,419)  |

Source: Physician Characteristics and Distribution in the U.S., 2008 edition; AMA, Chicago, Ill

**Citizenship/Visa status of all resident physicians and international medical graduates (IMGs) on duty in ACGME-accredited and in combined specialty programs, December 1, 2008**

| Citizenship/Visa Status                   | Resident Physicians |              |               |              |
|---|---------------------|--------------|---------------|--------------|
|   | Total               |              | IMGs          |              |
|   | No.                 | %            | No.           | %            |
| Native U. S. citizen                      | 67,984              | 64.1         | 4,155         | 14.4         |
| Naturalized U. S. citizen                 | 8,970               | 8.5          | 2,827         | 9.8          |
| Permanent resident                        | 8,836               | 8.3          | 6,246         | 21.7         |
| B-1, B-2 temporary visitor                | 118                 | 0.1          | 112           | 0.4          |
| F-1 student                               | 175                 | 0.2          | 0             | 0.0          |
| H-1, H-1B, H-2, H-3 temporary worker      | 4,810               | 4.5          | 4,602         | 16.0         |
| J-1, J-2 exchange visitor                 | 4,109               | 3.9          | 3,963         | 13.7         |
| Refugee/asylee/displaced person           | 101                 | 0.1          | 99            | 0.3          |
| Other                                     | 574                 | 0.5          | 472           | 1.6          |
| Unknown citizenship/foreign born          | 8,053               | 7.6          | 5,401         | 18.7         |
| Unknown citizenship/unknown birth country | 2,282               | 2.2          | 947           | 3.3          |
| <b>TOTAL</b>                              | <b>106,012</b>      | <b>100.0</b> | <b>28,824</b> | <b>100.0</b> |

Source: JAMA, September 10, 2008 – Vol. 300, No. 10

## **IMG contributions to the delivery of health care in the U.S.**

IMGs have made, and continue to make, significant contributions to the delivery of health care in the United States. A 2003 State Report by Hagopian et.al. suggested a possible “Safety-Net” function of IMGs in the U. S. health care system and the physician workforce. They have been welcomed by many communities and hospitals that are hard pressed to find U.S. trained physicians willing to practice there. Another paper by Hagopian concluded that IMG physicians play a significant and possible growing role in staffing rural Critical Access Hospitals. The report suggested that IMGs have integrated themselves into U. S. medicine, steadily increasing their political weight as evidenced by the formation within AMA of a section dedicated to their specific concerns. Their expertise covers a wide range of specialty areas. In most specialties, such contributions are multifaceted, and extend beyond mere numbers. There is growing recognition that IMGs are a valuable resource for their unique skills and experience and the cultural sensitivity they bring to the practice of medicine.

It is difficult to establish the total number of IMGs involved in delivering health care to the U.S. population. Several medical organizations indicate that they either do not tally the number of IMGs in their membership (e.g. the American Board of Anesthesiology), or do not record that information (e.g. the American Board of Allergy and Immunology). However, data collected by certain medical specialties validate the claim that IMGs represent a significant portion of physicians providing care in various sub-specialties. Research by Salsberg et.al. published in the April 5, 2000 issue of JAMA, suggested that IMGs particularly those with temporary visas, were more likely to train in primary care specialties, internal medicine subspecialties and psychiatry than USMGs. IMGs tend to further their skills by choosing specialization. According to this same paper, IMGs with temporary visas were more likely to subspecialize than were USMGs and 84% were planning to practice in designated health professional shortage areas.

The Bureau of Health Professions, Health Resources and Services Administration submitted a report to Congress entitled “The Critical Care Workforce” which indicated that the shortage of intensivists is getting worse due to the inability of qualified IMG intensivists to remain in the United States because of visa restrictions. This report further indicates that a large proportion of critical care fellows are IMGs.

The American Board of Physical Medicine and Rehabilitation identified 2,181 IMGs certified as Diplomates since 1947. This compares to 5,509 USMGs. Reportedly, there are 8,659 IMG Diplomates certified by the American Board of Family Medicine, which represents 12.6% of the total membership. The American Board of Abdominal Surgery lists 3,170 IMGs as active members, for a total of 15.4%. The American Board of Colon and Rectal Surgery reports that 5.4% of its active diplomates are IMGs. IMGs are especially well represented in the field of psychiatry; 10,121 or 28% of the membership of the American Psychiatric Association are IMGs. Of these, 7,151 were born outside the United States. In fact, according to a paper published in the American Journal of Psychiatry, March 1999, policies that substantially decrease the number of IMG psychiatrists may adversely affect the availability of psychiatrists to treat minorities and other underserved populations. A 2004 manuscript by Kostis & Ahmad published in the Journal of Cardiology indicated that among 156 active programs participating in cardiovascular disease

match, 22% of positions were taken by IMGs. According to the authors, the percentage of clinical faculty who are IMGs has been stable and IMGs account for approximately 25% of the U.S. physician workforce and the “IMGs adapt to and overcome challenges in many ways, including accepting inferior or lower paying positions early in their career.”

Currently, there is growing concern among pediatric and internal medicine subspecialties because of an inability to recruit U.S. medical school graduates into their programs (Salsberg).

Although the numbers of IMGs are impressive, there are two unique areas where IMGs contributions to the delivery of health care are unsurpassed:

- IMGs are more willing than U.S. IMGs or U.S. medical school graduates to practice in remote, rural areas through J-1 visa waiver requirements.
- IMGs are more likely to possess innate skills to better understand cross-cultural issues among their patients.

These two assertions are described in greater detail below:

**Willingness to practice in underserved areas** - IMGs with temporary visas practice in medically underserved areas at a greater rate than USMGs. IMGs with a different status are less likely to go into underserved areas (Salsberg). However, many IMGs are more amenable than their U.S. counterparts to establish a practice in remote areas, inner cities and small rural towns. As a result, IMGs provide health care for underserved populations of these towns and rural areas. For instance, in a small town in eastern Ohio, IMGs are the main providers for pediatric and obstetric needs. They are well respected in the community, integrate with the local social and political life and enrich the community with their cultural and family values. There are also a high number of “physician couples” among IMGs which often provides two physicians to the community. (Source: National Resident Matching Program)

**Sensitivity to cross-cultural issues** - The diverse backgrounds of IMGs are especially valuable in caring for a multiethnic and increasingly diverse U.S. population. Not only do IMGs have diverse language capabilities and heightened sensitivity in caring for members of different ethnic groups, but they also are able to assist in developing sensitivity and understanding of cross-cultural issues among their non-IMG colleagues.

For some time, the openness, understanding and sensitivity of IMGs to other ethnic groups has been recognized in the delivery of psychiatric services. More recently, the recognition for understanding and sensitivity to ethnic and cultural issues has spread to other specialties, such as obstetrics and gynecology. One example is a program developed in Dearborn, Michigan by ACCESS, a cooperative venture between an Arab community center and the University of Michigan Health System, which serves the area’s large Middle Eastern population. As reported in the January 21, 2005 issue of Psychiatric News, these programs were established in order to provide “culturally competent, patient-centered services, and programs to Middle-Eastern women.” IMGs are well placed not only to staff such programs, but also to interact with U.S. colleagues in delivering care to an ever-increasingly diverse U.S. population.

## IMGs in primary care

Compared to other industrialized nations, the United States has a poor track record regarding the delivery of primary health care services. More than 40 million people lack health insurance and almost 20% of the population lack a consistent provider of health care. The public health infrastructure remains weak and mental health care struggles for recognition and parity. Furthermore, the health care delivery system is highly fragmented when it needs to be seamlessly integrated.

As a nation, the U.S. continues to struggle with disparities in health and health care. Health care spending is at an all-time high with estimates as high as \$1.7 trillion spent annually, accelerating with a return to double-digit price escalation in health insurance premiums during a period of economic slump. The U.S. is in desperate need of a better functioning primary health care system, but [http://www.annfammed.org/cgi/content/full/2/suppl\\_1/s3 - R30](http://www.annfammed.org/cgi/content/full/2/suppl_1/s3 - R30) our nation's understanding of "primary care" is so rudimentary that in 1996 the Institute of Medicine (IOM) found it necessary to redefine its meaning. The IOM defined primary care as "not a discipline or specialty but a function as the essential foundation of a successful, sustainable health care system."

Unfortunately, the rate of growth in the subspecialty physician pool has continued to far exceed the growth rate in family medicine and other primary care specialties. This disparity is reflected in the minimal growth of primary care physicians per 1,000 population compared with the growth experienced by non-primary-care specialists. The 2007 Survey of Hospital Physician Recruitment Trends showed family medicine as the first most heavily recruited specialty. The physician recruiting company reported a 18 percent increase in family practice recruitment contracts, with 43 percent of all hospitals actively recruiting family doctors. During the 12-month period 4/1/06 – 3/31/07, family practice and general internal medicine were the most requested physician assignments. That demand is likely to increase, particularly if Congress agrees with the Bush administration's plan to expand the nation's community health centers by 40 new sites for a total of 1,200 serving 6.1 million patients by 2008. Those additional centers will depend largely on family physicians for their medical staff. Meanwhile, the interest expressed by medical students in family medicine has declined to near crisis proportions, as reflected in the declining resident match rates into family medicine programs.

The results of the 2007 resident match showed a decrease for the eighth consecutive year in the number of U.S. seniors from allopathic medical schools selecting family medicine. In internal medicine, the number of U.S. seniors held steady, compared with last year, as did obstetrics-gynecology, while pediatrics saw a small upswing. According to Perry Pugno, M.D., M.P.H., director of the AAFP's Medical Education Division, "it is of concern that since 1988 family medicine has reduced the positions offered by 511, while during that same period, U.S. seniors selecting family medicine declined by 1,047. Currently, three out of five first year residents in family medicine are IMGs."

## Residency positions in primary care 1994-2008

|                     | 2008  | 2007  | 2006  | 2005  | 2004  | 2003  | 2002  | 2001  | 2000  | 1999  | 1998  | 1997  | 1996  | 1995  | 1994  |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Positions Offered   | 2,654 | 2,621 | 2,727 | 2,782 | 2,884 | 2,940 | 2,983 | 3,096 | 3,206 | 3,265 | 3,293 | 3,262 | 3,137 | 2,941 | 2,774 |
| Positions Filled    | 2,404 | 2,313 | 2,318 | 2,292 | 2,273 | 2,239 | 2,357 | 2,363 | 2,603 | 2,697 | 2,814 | 2,905 | 2,840 | 2,563 | 2,293 |
| % Filled            | 90.6% | 88.2% | 85.0  | 82.4% | 78.8% | 76.2% | 79.0% | 76.3% | 81.2% | 82.6% | 85.5% | 89.1% | 90.5% | 87.1% | 82.7% |
| Filled US Seniors   | 1,172 | 1,107 | 1,132 | 1,132 | 1,198 | 1,234 | 1,413 | 1,516 | 1,833 | 2,024 | 2,179 | 2,340 | 2,276 | 2,081 | 1,850 |
| % Filled US Seniors | 44.2% | 42.2% | 41.5% | 40.7% | 41.5% | 42.0% | 47.4% | 49.0% | 57.2% | 62.0% | 66.2% | 71.7% | 72.6% | 70.8% | 66.7% |

Source: 2008 NRMP

The result of this disturbing trend is a health care delivery system that is severely compromised in its ability to meet the growing primary care needs of our nation and is increasingly dependent on qualified IMGs to meet the accelerating demand for certified and skilled family physicians.

Many communities rely heavily on IMGs for their primary care needs. Civic leaders and workforce analysts are concerned that visa restrictions and limited J-1 visa waivers may jeopardize the fragile health care delivery system. The shortage may lead to economic ripple effects because companies will not relocate in areas with limited access to medical care for their employees and existing business entities may lose qualified employees because they seek a better quality of life and improved medical care elsewhere.

IMGs are an indispensable part of a functional primary health care delivery system. The U.S. needs to make every effort to attract and retain qualified and skilled candidates for this challenging field of medicine.

### History of the AMA-IMG Section: IMG physicians in organized medicine

#### 1989 - 1996: The Advisory Committee on International Medical Graduates

This Advisory Committee, consisting of nine AMA members appointed by the AMA Board of Trustees and one IMG resident physician recommended by the Resident Physicians Section, was first chartered in 1989 and rechartered thereafter until June 1996. Its responsibilities included assuring communication about IMG issues with state licensing boards, national ethnic medical organizations, the ECFMG, COGME, and other related groups; advising the AMA staff and Board of Trustees on IMG issues; providing regular progress reports to the Board of Trustees and the AMA House of Delegates; promoting AMA membership among IMGs; and advocating for equal opportunities and requirements for all international medical graduates either in residency training and practice in the United States. The IMG advocacy function of this committee was transferred to the IMG Caucus Steering Committee in June 1996.

### **1996 - 1997: The International Medical Graduates Caucus**

The IMG Caucus had been in formation for two years, as a result of a direct charge to the IMG Advisory Committee, from the AMA Board of Trustees, to create a mechanism by which the issues and concerns of IMGs would be more adequately addressed within the structure of the AMA. At an IMG Caucus meeting in June 1995, an IMG Caucus Steering Committee, composed of seven members, was elected from the Caucus membership. The Steering Committee spent considerable time defining a structure that would be broadly representative and effective in an IMG advocacy role. It needed to also be in a position to assume the duties and responsibilities of the IMG Advisory Committee when its charter expired in June 1996. The transfer of duties from the IMG Advisory Committee to the IMG Caucus Steering Committee occurred on schedule in June 1996. The IMG Caucus held a plenary session in June, with over 80 IMGs attending and participating.

### **1997 - Present: The International Medical Graduates Section**

At the IMG Caucus meeting in June 1996, a firm decision was made to petition the AMA House of Delegates for the creation of an IMG Section within the framework of the AMA. It also directed the IMG Caucus Steering Committee to appoint an IMG Section Strategy Team to implement this recommendation and to refine a set of rules of procedure that was proposed by the IMG Advisory Committee. An IMG Section provides IMGs with a seat in the AMA House of Delegates and a specific role in the governance and policy-making process of the AMA.

### **2005 - AMA-IMG Section Bylaws Change**

The AMA Board of Trustees supported the IMG Section Governing Council's recommendation to amend the AMA bylaws so that all IMG members of the AMA automatically become members of the IMG Section, increasing the Section's membership to over 37,000 physicians.

The following eleven physicians have served as Chair of the AMA-IMG Section Governing Council:

Busharat Ahmad, MD  
AppaRao Mukkamala, MD  
George Thomas, MD  
Clarita Herrera, MD  
Miguel Machado, MD

Geetha Jayaram, MD  
Subramanyan Jayasankar, MD  
Rajam Ramamurthy, MD  
Bernd Wollschlaeger, MD  
Venkat Rao, MD  
Gamini Soori, MD, MBA

After their tenure, these physicians continue to serve in leadership positions in organized medicine. Busharat Ahmad, MD, has served on the Board of Trustees of the ECFMG; Subramanyan Jayasankar, MD was recently appointed to the AMA House of Delegates by the American Association of Orthopedic Surgeons; Apparao Mukkamala, MD serves on the AMA Council on Legislation, and Rajam Ramamurthy, MD was recently appointed to the ECFMG Board. These are just a few examples of AMA-IMG leaders whose skills and dedication has strengthened organized medicine at the specialty, regional, state, and national levels.

Look at the roster of any county, state, national, or specialty medical society and there are countless IMG physicians serving as presidents, vice-presidents and officers at every level. Their contributions are a proud testament to the IMG physician community.

### **IMG contributions in academic medicine and research**

The outlook for the U.S. academic physician workforce is affected by uncertainties in three major areas: the effects of policy adjustments arising from the September 11, 2001 attacks; the current weak worldwide economy; and developments affecting the U.S. physician workforce. The eventual resolution of these issues and the related effects on U.S. academic medicine remain unclear, particularly because only a few of the relevant data series are available at this time.

Unless current retirement rates change dramatically, the Science and Engineering (S& E) workforce, including academic physicians in the United States, will experience rapid growth in total retirements over the next two decades. More than half of those with S&E degrees are age 40 or older, and the 40–44 age group is nearly four times as large as the 60–64 age group. Without changes in degree output, retirement behavior, or immigration, these figures imply that the U.S. S & E workforce will continue to grow, but at a slower rate, and that the average age of the workforce will increase over the next two decades.

Even though a greater proportion of U.S. citizens enter higher education, our nation has lost the advantage it held for several decades as the country offering the most widespread access to higher education. Beginning in the late 1970s and accelerating in the 1990s, other countries have built stronger post-secondary education systems. Many countries outside the U.S. now provide a college degree equivalent to the U.S. bachelor's degree to at least one-third of their college-age cohort. There is evidence that many countries are trying to increase production of degrees in Natural Science & Engineering (NS & E). They appear to be succeeding in that goal well beyond what the United States has been able to achieve over the past 25 years.

Many in the scientific community have expressed concern, yet few have discussed the larger question: Just what is—or should be—the role of foreign scholars in U.S. science programs?

In April 2005, the National Academy of Sciences released the study, "Policy Implications of International Graduate Students and Postdoctoral Scholars in the United States." The key findings of this study are listed below:

- International students and scholars have advanced U.S. science and engineering (S&E), as evidenced by numbers of patents, publications, Nobel prizes, and other quantitative data.
- International graduate students and postdoctoral scholars are integral to the U.S. S&E enterprise. If the flow of these students and scholars were sharply reduced, research and academic work would suffer until an alternative source of talent could be found. There would be a fairly immediate effect in university graduate departments and laboratories and a later cumulative effect on hiring in universities, industry, and government. There is

no evidence that modest, gradual changes in the flow would have an adverse effect.

- Innovation is crucial to the success of the U.S. economy. To maintain excellence in S&E research, which fuels technological innovation, the United States must be able to recruit talented people. A substantial proportion of those people—students, postdoctoral scholars, and researchers—come from other countries.

As former Secretary of State Colin Powell stated in 2004, during International Education Week, “The professional partnerships and lifelong friendships that result from international education and exchange help build a foundation of understanding and lasting partnerships. These partnerships are important for a secure, prosperous future, not only for the United States, but also for the world as a whole.”

### **Trends among IMG faculty at U.S. medical schools: 1981-2000**

From 1981 to 2000, the number of full-time U.S. medical school faculty reported to the AAMC Faculty Roster increased by 86%. Similarly, the number of IMG faculty at U.S. medical schools doubled from 8,100 to 16,200 over the same period. Overall, IMG faculty as a proportion of U.S. medical school faculty has remained fairly constant: 17% in 1981 and 18% in 2000. The representation of IMGs among clinical faculty has been stable (16% - 17% over the past two decades). Meanwhile, IMG faculty as a proportion of basic science faculty gradually increased from 16% in 1981 to 21% in 2000. It is important to emphasize that faculty with M.D. credentials as a percentage of the overall IMG faculty have declined from 74% in 1981 to 65% in 2000, while the proportion of such faculty with PhDs increased from 15% to 22% over the same period.

As were the physicists who fled Nazi Germany in the 1930s and became crucial to the Manhattan Project, and conductors Sir George Solti or Seiji Ozawa, both giants in American music, foreign-born scientists and artists are vital components of the U.S. scientific, cultural and humanitarian workforce. “The sum total of their intellectual contributions is enormous,” says David Ward, president of the American Council on Education. Federal bodies such as the National Science Board (NSB) also value the top-notch talent of foreign scientists, because this “brain gain” has helped ensure the United States’ postwar dominance in science and it is crucial in order to maintaining it.

The above data and sentiments indicate the need for academic physicians who are born and educated abroad. These physicians bring greater diversity in research priorities to U.S. as well as Ph.D. credentials where they often hold leadership positions as chairs of academic departments, such as Abul Abbas. Other examples include world leaders in their field such as David Elder and Nobel Prize Laureates, Eric Kandel and Gunter Blobel. IMG physicians also turn their attention to problems relevant to their home countries-- problems that might otherwise go unknown in the United States.

Finally, it should be noted that in addition to IMGs’ contribution to health care in the U.S., a significant number of IMGs have turned their efforts and skills towards their home country and have initiated or become involved in medical missions serving their homeland.



## **Barriers: addressing the U.S. physician workforce shortage and maldistribution**

In 2003, the Council on Graduate Medical Education (COGME), commissioned Ed Salsberg, Executive Director of the Center for Health Workforce Studies at the State University of New York, to study health workforce. His findings anticipate a shortage of 85,000 physicians by 2020.

Currently, Medicare spends about \$7 billion a year training medical residents. The earlier predictions of physician surplus were based on quantifying tasks (physician visits and procedures) and associated times (expressed as full-time equivalent physician) which was conceptually inaccurate. The same analysts are now using a trend model which takes into account economic expansion, population growth, work effort of physicians, and services provided by non-physician clinicians. In the past, analysis of unmodified population forecasts from the Census Bureau, which have proved to be low, were used. This resulted in predictions of per capita physicians that were excessive. This error accounted for predictions of a 25% physician surplus. A total output of 10 to 12 medical schools would be required to service the population that was omitted in the previous prediction.

It is estimated that the U.S. population will grow from 285 million in 2000 to 325 million in 2010 and 345 million in 2020. By merely taking a head count, the data based on the past 70 years indicated that physician supply increased five fold, from 144,000 in 1929 to 772,000 in 2000. This is an increase from 119 physicians per 100,000 population in 1929 to 270 per 100,000 in 2000. This model looks at trends differently, holding that the first time first-year residents are fixed at 23,000 a year (126% of U.S. medical graduates) and that 20% of IMG graduates will return to their countries of origin, as has been the case for the past 10 years. It projects that physicians will increase from 772,000 (270/100K) to 887,300 (283/100K) in 2010. The number of physicians will reach 964,700 in 2020, but the population will grow faster and the physicians per capita will fall to 280/100K. Add to this the decreased physician effort and the increasing role of non-physician clinicians (15% of physician workforce) by 2020 the projected deficit will be 200,000 physicians, a shortage of 20%.

In a recent report on physician workforce, Cooper et. al. state that the last debate about physician shortage continued well into the 1960s and led to the doubling of medical school slots. It was another 15 years before physicians were available to the public. They further state that while the recruitment of IMGs could reduce the response time, the wisdom of even our current dependency on IMGs has been questioned. To alleviate the problem more than 25 new medical schools would be required over the next decade. If nothing is done other professions will fill the gap and physicians will provide services in even narrower confines of health care.

In a 2001 presentation to the AMA Section on Medical Schools Annual Meeting, Cooper concluded that “the nation needs to do a better job at assessing current and future supply and demand by specialty.” His observation was that IMGs with temporary visas go into underserved areas at a greater rate than USMGs; other IMGs are less likely than USMGs to go into underserved areas. The “other” IMGs are by far the U.S. citizens who attended medical schools outside of the U.S. or Canada. He also studied the trends in specialization and concluded that “the demand for non-primary care physicians is greater than for primary care physicians, even in

New York where 68% of the practicing physicians are specialists. This disparity in demand between primary care and non primary care is growing. More IMG physicians even within the primary care areas like internal medicine and pediatrics sub-specialize, thus providing a vitally needed service.”

A 2008 Report by the United States Government Accountability Office indicates concern over the future supply of primary care professionals. Health policy experts cite a growing income gap between primary care physicians and specialists and a declining number of U.S. medical students entering medicine as a primary care specialist. This report also notes that physician extenders may also be choosing procedure-driven specialties, such as surgery, cardiology, and oncology in increasing numbers

### **Opposition to utilizing the IMG workforce**

Fitzhugh Mullan, MD, contributing editor for Health Affairs and former director of the Health Resources and Services Administration’s Bureau of Health Professions, argues that “rather than relying on foreign medical school graduates to complete residency classes, the United States should increase its output to fill the gap.” He continues by stating “the position of medical education ought to be that the product that they train a physician is the standard for health care delivery, and they should without apology produce physicians to meet that need.” He also states that by accepting more U. S. students into medical schools, a workforce is produced that resembles the population. “Foreign doctors from nations with staggering health care needs will be less likely to leave their native countries and practice in the U.S.” Dr. Mullan acknowledges that a disproportionate number of IMGs work in underserved rural and urban areas during training and afterwards. In an AAMC publication, Carl Getto, MD, Chair of COGME, states that “physician workforce is determined by the number of residents trained in the country rather than the number of students who graduate from U.S. medical schools.”

During the period 2006-2007, a total of 28,176 IMGs were in residency training or clinical fellowships. According to the National Residency Matching Program, there were a total of 24,685 positions from which 23,253 positions were filled: 2,097 were American citizens, 4,856 were immigrants and permanent U.S. residents, 38 were on an exchange visitor visa and planned to return to their country unless the INS granted them a waiver because of a need to provide care to the American public. Approximately 55% of IMG physicians were American citizens or lawful immigrants. The immigrants are in the country for a multitude of reasons. Most join their spouse or parents who reside in the U.S. Relatively few immigrants are here because of the political situation in their country.

### **International medical schools**

The International Medical Education Directory (IMED) is a Web-based database on medical schools worldwide developed by the Foundation for Advancement of International Medical Education and Research (FAIMER). As of February 2007, IMED contains information on 2,074 medical schools worldwide. FAIMER was established in 2000 by the ECFMG. FAIMER’s mission is to advance international medical education. Its activities include creating educational opportunities for health professions educators that support the exchange of educational expertise,

acquisition of new methodologies in teaching and assessment, and pursuit of advanced degrees in health professions education. FAIMER's goals include the creation and enhancement of educational resources for those who teach physicians committed to improving and maintaining the health of the communities they serve. It also is committed to investigating and understanding the educational experiences and migration patterns of physicians and to determine their impact in population health.

The medical schools listed in IMED are recognized by the appropriate government agencies, usually the Ministry of Health, in the countries where the schools are located. FAIMER is not an accrediting agency. In many countries there are governmental or independent agencies that set standards and accredit medical schools.

Since April 2002, candidates for ECFMG certification must have graduated from a medical school listed in IMED and the candidate's year of graduation must be included in the medical school's IMED listing. ECFMG certification also requires that the IMG must have had at least four credit years in attendance at medical school. Prior to 2002, the ECFMG required that a medical school be listed in the World Directory of Medical Schools published by the World Health Organization (WHO). WHO does not accredit medical schools.

IMED provides the following information on international medical schools:

- Name of medical school
- University affiliations, if applicable
- Medical school address and contact information, including Web site address
- Former official names, if applicable
- Medical degree awarded
- Graduation years (calendar years school has been recognized )
- Year instruction commenced
- Language of instruction
- Duration of curriculum
- Entrance examination requirement
- Eligibility of foreign national students
- Total enrollment

FAIMER's Directory of Organizations that Recognize/Accredit Medical Schools is a developing resource of international organizations that recognize, authorize, or certify medical schools and/or medical education programs. These organizations are often responsible for the establishment of national standards for medical education and the recognition of medical schools in their countries.

As of February 2007, there were 2,074 medical schools listed in the FAIMER database, of which 1,940 (94%) are currently in operation in 167 countries. The remaining 134 (6%) are no longer in operation due to closure or merger with another school. For example, the famous Guy's Hospital Medical School in London is listed as a medical school that is no longer in operation because it merged with another medical school and the newly created medical school subsequently merged with another medical school. IMED provides a full explanation.

International medical schools fall into two categories. (1) schools run by the government or (2) schools that are privately funded that admit only citizens. Admission is often through national competitive exams and it is extremely difficult to get admission because there are few openings available. For example, in India, with a population of 1.1 billion there are 224 medical schools which provide 0.23 seats for 10,000 population, whereas the U.S. we has 79 seats per 10,000 population.

In many countries, medical schools are patterned after the British system of education and testing and instruction is in English. Many countries have a long tradition of extremely well developed medical education that predated the allopathic medical schools and are still educating physicians in their own discipline. An example would be the Ayurvedic system, the Unani system and the Homeopathic system. It is not an exaggeration to say that the populace uses the various systems freely and interchangeably.

The second category of schools, the more recently conceived, caters to students from foreign countries and also admits a certain percentage of local students. Many of the schools in the Caribbean countries have patterned their curriculum after the system in the U.S. The faculty are predominately from the U.S., and tend to be former faculty of U.S. medical schools. Clinical training is often in U.S. hospitals which are affiliated with the school. The students take the same board examinations as U.S. medical graduates.

### **Obtaining a residency in the U.S.**

International medical graduates must surmount many hurdles before becoming eligible to apply for residency training in the U.S. ECFMG Certification requires passing the USMLE Step 1, Step 2 CK and Step 2 CS. Additionally, the ECFMG must primary source verify the graduate's final medical diploma and medical school transcript with the medical school that issued these documents. The ECFMG verifies IMG medical school diplomas and transcripts with more than 1,500 medical schools worldwide and has developed unparalleled expertise in the area of credentialing IMGs.

Foreign national IMGs must obtain an appropriate visa (or immigration status or work authorization) in order to participate in U.S. residency training. There are various visa options available for physicians who seek entry into U.S. GME programs. Each visa classification carries unique regulatory requirements and guidelines. Currently the most common visas for residency training are the J-1 and H-1 B. In most cases the foreign national IMGs will be required to coordinate their visa application with the training institution. There are fees and timelines associated with the visa application process.

Once an IMG becomes ECFMG certified, he or she then applies to enter a residency program in the U.S. However, it is strongly recommended that IMGs participate in observership rotations in a clinical setting before applying to residency programs. Observerships provide IMGs with invaluable knowledge of U.S. medical clinical practice settings and with U.S. physicians who can serve as references.

The Graduate Medical Education Directory, known as the "Green Book," provides information on over 8,600 ACGME accredited residency programs in the U.S. and is available for purchase from the AMA Bookstore. More detailed information on residency programs is available in the AMA Fellowship and Residency Electronic Interactive Database Access System (FREIDA) Online. FREIDA is an Internet database with information on all U.S. residency programs. Both the Green Book and FREIDA are good starting points for IMGs beginning the application process to residency programs.

### **The match**

Applicants must register by the deadline with the National Resident Matching Program (NRMP), <http://www.nrmp.org>, in order to be matched with a hospital residency programs according to the applicant's and the program's rank order lists. It is very important for IMGs to adhere to all the Match deadlines if they wish to participate.

Certain residency programs require applicants to apply through the Electronic Residency Application Service (ERAS). ECFMG serves as the "Dean's Office" for IMGs. Each year approximately 31,000 applicants compete for about 24,000 available residency slots. The NRMP Web site has an "Applicant User Guide" which contains specific information for IMGs. IMGs must have passed all exams required for certification by the ECFMG, and the results must be available by the rank order list deadline. You may, however, apply for residency positions outside of the Match.

Generally, application materials consist of a curriculum vitae, a copy of the universal residency application form, a cover letter addressed to each residency program director, evidence of graduation from medical school, ECFMG certification and letters of recommendation from U.S. physicians, along with a one-page personal statement detailing the unique qualifications of the applicant.

While U.S. medical graduates apply to 5-10 programs, IMGs should submit applications to a minimum of 25 programs to have the best chance of being matched to a residency program. The more applications you send out, the better your chances of receiving an interview and being accepted to a program. Applications should be sent in as early as possible, preferably September or mid-October at the latest. Upon review of the applications, residency program directors invite those applicants in whom they are interested to interview. Approximately 14% of applicants are granted an interview and only 8% of the entire applicant pool will be hired by any given hospital. Therefore, it is imperative that applicants make themselves stand out in their applications. Once invited to interview, an applicant needs to prepare in order to make the best possible impression. The interview is a critical part of the residency application process.

## **An Overview for International Medical Graduates**

The following is an overview of relevant issues that IMGs, intending to seek graduate medical education in the U.S., must be aware of. Much of the information is from the official Web site of the Educational Commission for Foreign Medical Graduates (<http://www.ecfm.org>) which contains other useful information. The comments are made with a view toward helping IMGs navigate the often-confusing initial few years of professional life in the USA.

To enter programs of graduate medical education in the United States that are accredited by the Accreditation Council for Graduate Medical Education (ACGME), international medical graduates must hold a Standard ECFMG Certificate without expired examination dates, if applicable. However, for international medical graduates, obtaining ECFMG Certification is just one of the steps required to enter such programs. In many foreign countries, postgraduate medical education is offered mainly in medical schools and universities and entrance to these courses is based on the candidate's performance as an undergraduate and in any qualifying exams for the postgraduate course. The selection process is under government control. However, in the U.S., the Federal or state governments have very little direct control over GME. Autonomous professional bodies supported by professional organizations, hospital associations and specialty societies monitor medical education.

The Accreditation Council for Graduate Medical Education (ACGME) is the body that accredits U.S. graduate medical education programs. The ACGME has established general requirements for all residencies/fellowships as well as special requirements for each medical specialty/subspecialty. The ACGME accredits individual programs, not institutions. Institutions such as universities, Veterans Administration, local and state governments, the military, medical schools and religious organizations may sponsor graduate medical education. One institution may sponsor several GME programs in various specialties, each program with its own unique record with ACGME. Refer to the current edition of the Graduate Medical Education Directory published by the American Medical Association for an official list of ACGME-accredited residency programs. Each program is approved for a certain number of residency positions by the ACGME based on the program's funding sources, and its workforce needs.

### **Selecting Residency Programs**

Before you can begin the application process, you must select one or more medical specialties. Selecting a medical specialty is best done with the help of advisors. It may be helpful to consult with physicians practicing in the specialties you are considering. You should also consider the degree to which a given specialty would be professionally satisfying. For each specialty, it may be useful to research the overall number of positions available, the degree of competition typically experienced in obtaining a position, and the experience of prior international medical graduates, particularly graduates of **your** medical school, in obtaining residency positions. Detailed information on the number of positions, by specialty, offered and filled by the NRMP is available on the NRMP Web site (<http://www.nrmp.org>).

After you have selected a specialty or specialties, you must decide which programs within those specialties you will apply. There is no limit on the number of programs to which you can apply. Factors that you may wish to consider in selecting programs include the location of individual programs, their hospital affiliations, accreditation, and the performance of their graduates.

### **ECFMG Certification**

You must hold a Standard ECFMG Certificate without expired examination dates, if applicable, **before** entering an ACGME-accredited residency program. Although you must be ECFMG-certified before entering the program, you can apply to residency programs before you are certified by ECFMG. If you apply to residency programs using ERAS, ECFMG will automatically transmit an ECFMG Status Report to the programs to which you apply. You can also participate in the NRMP prior to becoming ECFMG-certified, provided you have passed the exams required by the NRMP and the results of these exams are reported to the NRMP in time to participate.

Prior to entering a program, you should provide the hospital with a copy of your Standard ECFMG Certificate. Additionally, the hospital should contact ECFMG to confirm your ECFMG certification status.

### **Applying to Graduate Medical Education Programs**

#### **Electronic Residency Application Service (ERAS)**

The Electronic Residency Application Service (ERAS) was developed by the Association of American Medical Colleges (AAMC) to transmit residency applications and supporting documents, such as transcripts, letters of recommendation, and medical student performance evaluations, to residency program directors over the Internet.

As the designated Dean's office for all international medical students and graduates, ECFMG supports the ERAS application process for these applicants. ECFMG provides each applicant with a unique identification number, known as a Token, which allows the applicant to access the AAMC's ERAS Web site to complete the ERAS application. The applicant also sends supporting documents to ECFMG for scanning and transmission. ECFMG transmits an ECFMG Status Report to all of the programs to which an international medical student/graduate applies and sends an updated status report to programs automatically when there is a change in the applicant's ECFMG certification status. Finally, ECFMG transmits the applicant's USMLE transcript, as requested by the applicant. All documents are transmitted to the ERAS Post Office, where they are accessible to the residency programs.

Most medical specialties participate in ERAS. For the list of specialties participating in ERAS 2009 (for residency positions beginning in July 2009), visit the AAMC ERAS Web site (<http://www.aamc.org/students/eras/start.htm>). Additional specialties may participate in ERAS for residency positions beginning in July 2010. Information on participating specialties for ERAS 2010 will be posted on the AAMC ERAS Web site, as it becomes available.

If you apply to programs in participating specialties, you must submit your residency applications using ERAS. If you apply to programs that do **not** participate in ERAS, you must contact the program directors for paper application materials and instructions.

To participate in ERAS, you **must** have access to the Internet. For information on ERAS, visit the AAMC ERAS Web site. Additional information for international medical students/graduates using ERAS is available on the ERAS Support Services section of this Web site or from ECFMG, upon request.

All applicants for residency positions, regardless of the method of application, should contact residency program directors for specific requirements and deadlines. Applicants should also register with the NRMP (see below).

### **National Resident Matching Program (NRMP)**

The National Resident Matching Program (NRMP), also known as “the Match,” matches applicants with available positions in programs of graduate medical education. Applicants submit to the NRMP a list of residency programs in order of preference. The programs listed are those programs to which they have applied (via ERAS or traditional paper applications). Program directors also submit to the NRMP ranked lists of the applicants they prefer for positions in their programs. These lists are referred to as rank order lists. Once the NRMP has collected all of this information, applicants and available positions are matched by computer using a mathematical algorithm. The Match results are announced in March for programs that begin in July. Both applicants and program directors agree to accept the results of the Match.

Most program directors consider the interview to be a critical part of the selection process. When compiling their rank order lists, program directors usually rank only the applicants they have interviewed. There is no guarantee that the programs to which you have applied will interview you or include you on their rank order lists. If you are ranked by programs, there is no guarantee that you will be matched to any of these programs.

You cannot match to a program if you are not ranked by that program.

You can include any or all of the programs to which you applied (via ERAS or traditional paper applications) on your rank order list, regardless of whether you have interviewed with the programs; however, it is very unlikely that a program will rank you if you have not been given an interview. When compiling your rank order list, you should consider which programs offer residencies that meet your expectations. Data from the NRMP for 1996-2008 indicate that your chances of being matched may increase with the number of programs that you rank. However, since it is possible to match with any program you rank, even if the program ranks low on your list, you should **not** include programs that you definitely are not willing to attend.

**Important Note:** The NRMP and ERAS are distinct, complementary programs. ERAS is a method of applying to residency programs. The NRMP is a method of matching applicants with positions in these programs. Registering for the NRMP is a different process from applying to residency programs through ERAS. If you wish to participate in both the NRMP and ERAS, you



must register separately with each service. Applying to residency programs through ERAS does not enroll you in the Match.

Three days prior to release of the general Match results in March, applicants find out whether or not they have matched to a program, although they do not learn the specific program to which they have matched. The following day, program directors are notified whether all of their positions were filled in the Match. Also, on this day, the list of unfilled programs becomes available to unmatched NRMP registrants on the NRMP Web site. You must be registered for the Match by the February late registration deadline in order to have access to unfilled program information.

To participate in the Match, you will need access to the Internet and an e-mail address. Participants in the Match use the Internet to register, pay fees, and submit their rank order lists to the NRMP. They also use the Internet to access information resulting from the Match, such as whether they have matched, where they have matched, and information on unfilled programs.

You must register for the Match on the NRMP Web site (<http://www.nrmp.org>). You must provide your USMLE/ECFMG Identification Number at the time of registration. You can register for the Match and submit your rank order list to the NRMP prior to meeting the NRMP exam requirements described below.

Students/graduates of international medical schools must have passed all exams necessary for ECFMG Certification (see Examination Requirements), and the results must be reported to the NRMP in time to participate in the Match. Students/graduates of international medical schools are not required to have satisfied the medical education credential requirements for ECFMG Certification in order to participate in the Match. Beginning in September, the NRMP will contact ECFMG directly to confirm that you have passed the necessary exams. After the rank order list certification deadline, the NRMP will automatically withdraw applicants who have not passed the necessary examinations; however, applicants who are withdrawn still will have access to the list of unfilled programs that is made available during Match Week.

**Important Note:** If you have passed exam(s) through other organizations, such as the National Board of Medical Examiners or the Federation of State Medical Boards, that may be used for ECFMG Certification, you should provide this information to ECFMG well in advance of the NRMP rank order list certification deadline in February. ECFMG will not report such exam information to the NRMP for the purpose of confirming your eligibility to participate in the Match until such exam information has been verified by ECFMG with the appropriate organization and accepted by ECFMG.

## **Obtaining a Visa**

International medical graduates who are neither U.S. citizens nor U.S. lawful permanent residents must obtain an appropriate visa for themselves and their dependents, if any, to participate in programs of graduate medical education or training in the United States. The Exchange Visitor (J-1) and H-1B visas are the most common types used.

## **Exchange Visitor Sponsorship Program (J-1 Visa)**

ECFMG is authorized by the U.S. Department of State to sponsor foreign national physicians as J-1 Exchange Visitors in programs of graduate medical education and training. The objectives of this program are to enhance international exchange in the field of medicine and to promote mutual understanding between the people of the United States and other countries through the interchange of persons, knowledge, and skills.

The duration of stay for a J-1 Exchange Visitor physician is limited to the time typically required to complete the advanced medical education program. This refers to the specialty and subspecialty certification requirements published by the American Board of Medical Specialties. Participation is further limited to seven years and is reserved for those progressing in training programs.

Foreign national physicians seeking ECFMG sponsorship as J-1 Exchange Visitors must meet, among other requirements, a number of general requirements, which are detailed in ECFMG's application materials for J-1 visa sponsorship. At a minimum, applicants must:

- Have passed USMLE Step 1 and Step 2 CK; or the former VQE, NBME Part I and Part II, or FMGEMS; or an acceptable combination thereof.
- Hold a Standard ECFMG Certificate without expired examination dates, if applicable..
- Hold a contract or an official letter of offer for a position in an approved graduate medical education or training program.
- Provide a statement of need from the Ministry of Health of the country of most recent legal permanent residence. This statement must provide written assurance that the country needs specialists in the area in which the Exchange Visitor will receive training. It also serves to confirm the physician's commitment to return to that country upon completion of training in the United States (as required by §212(e) of the Immigration and Nationality Act as amended). (Note: If permanent residence is in a country other than that of citizenship, the Ministry of Health letter must come from the country of most recent legal permanent residence.)
- An IMG seeking further professional work in the U.S. beyond the legally permitted duration of stay must seek a waiver for the requirement to exit for 2 years. Such waivers are granted in the following cases; (1) a finding by the INS of exceptional hardship for a spouse or child who is a U.S. permanent resident or citizen; (2) a finding by the INS that the alien would face persecution on returning home; (3) support of a waiver from a U.S. government agency based on the alien accepting a position that could not be filled by a U.S. citizen.

H-1 B Visas, originally intended for research activities, have now been allowed for clinical training. In order to obtain a H-1B visa, the IMG must be ECFMG certified and licensed in at least one state and must go through a labor certification process.

## **J-1 Visas and Waivers**

The J-1 is one of the most common visas used by foreign national physicians who pursue U.S. GME. The J-1 is a temporary nonimmigrant educational visa reserved for participants in the Exchange Visitor Program. As a public diplomacy initiative of the U.S. Department of State, the Exchange Visitor Program was established to promote mutual understanding between the people of the United States and other nations through educational and cultural exchange. Over the past two years, the AMA-IMG Section has passed several resolutions addressing the expeditious processing of J-1 visas for physicians entering GME.

In keeping with the Exchange Visitor Program's goal of fostering international education, J-1 physicians are required to return home for at least two years following their training before being eligible for certain U.S. visas. Various legal options have evolved to allow J-1 physicians to waive this return home obligation, the most common being employment in a U.S. medically underserved area (MUA) or Health Professions Shortage Area (HPSA).

The AMA supports the on-going involvement of the Department of Health and Human Services in the J-1 waiver application process. It is the official policy of the AMA that the AMA lobby relevant federal agencies to seek legislation to assist IMGs in both the education and practice of medicine in the U.S.

## **Significant dates in U.S. immigration policy affecting IMGs**

- 1933-1948 - European IMGs immigrate as refugees in relatively small numbers.
- 1948 - Exchange visitor program lets IMGs train in the United States. Many stay.
- 1956 - AMA and others create IMG certification system; the ECFMG.
- 1965 - Easily obtainable visas in some specialties attract Third World IMGs.
- 1971 - IMGs get quicker job clearances for permanent residency status.
- 1976 - Congress raises immigration barriers against IMGs.
- 1980 - Federal study recommends IMG limits.
- 1985 - Federal legislation proposed to cut off GME funding for IMGs. Fails.
- 1990s - Steep rise in incoming IMGs attributed to breakup of Soviet Union, changes in licensing exam and new immigration laws.
- 2001 – Attacks on the World Trade Center in New York City
- 2002 – President of the U. S. signs Border Security & Visa Entry Reform Act
- 2003 – Department of Homeland Security established – imposing stricter immigration policies, particularly in certain areas of the world.
- 2006 – Senate and House bills on reforming immigration policies spark national controversy and debate.
- 2006 – J-1 Visa waiver legislation is reauthorized.
- 2007 – President Bush announces modifications to visa waiver program with an accelerated process for admissions to include central and eastern Europe and Republic of China.

- 2008 – Visa waiver program expanded to include Czech Republic, Estonia, Latvia, Lithuania, Hungary, Republic of Korea and Slovak Republic.
- 2008 – President Bush signs Conrad 30 reauthorization.

## **Recommendations**

Historically, IMG physicians have served people of this country in the highest professional manner as one-quarter (25.3) of the physician workforce in the country and over one-quarter (28.2%) of the residents in training.

The AMA-IMG Section argues strongly that:

- IMGs are more likely to serve in medically underserved areas.
- IMGs comprise over 30% of the workforce in primary care specialties.
- IMGs comprise close to 40% of the physician workforce in inner city areas in large metropolitan cities.
- IMGs comprise a significant portion of critical care physicians in this country.
- IMGs have participated in the mainstream medical organizations and have increasingly been appointed/elected to leadership positions.
- IMGs are undoubtedly an integral part of health care delivery in the country.

The AMA-IMG Section believes that the unemployment of qualified IMG physicians in the face of a shortage of services is unconscionable. It is a terrible waste of an individual's education and their potential to care for patients who need them. Therefore, we believe it is prudent to consider different ways to integrate this existing cohort of trained physicians with proven entry level competencies into the U.S. physician workforce.

The AMA-IMG Section proposes the following thirteen recommendations:

1. Create more observerships or job shadowing opportunities for IMG physicians to work in clinical settings under supervision of a licensed physician with privileges; this will enable IMGs to familiarize themselves with the American system of health care delivery and provide them with the experience they need to enter into a residency program. This will also keep the physician in constant touch with clinical medicine and assist in sharpening communication skills.
2. Create observership positions in hospitals and use the unemployed qualified IMGs who are awaiting residency to help hospitals with data collection on performance improvement and safety projects that can improve the overall quality of hospital care.
3. Advocate for evidence based change in passing scores of various USMLE exams rather than arbitrary change in passing scores which could increase failure rates of IMGs (i.e. an arbitrary increase in clinical skills exam score increased IMG failure rate, but did not affect USMGs).

4. Advocate for IMG and USMG Residency Parity – residency programs must consider IMG applications equivalent to the USMG applications using the same evaluation criteria. Residency programs should also publicize the number of applications received from IMGs for evaluation.
5. Increase the number of GME slots so that ECFMG/CSA-qualified IMGs waiting for residency positions can enter the workforce immediately.
6. Lobby relevant governmental agencies to streamline the visa issuance process to avoid unnecessary delays affecting the timely entry of IMGs in graduate medical education programs.
7. Collaborate with the Federation of State Medical Boards (FSMB) to develop guidelines for uniform licensure requirements for USMGs and IMGs alike to be applied by individual state medical boards.
8. Encourage all state licensing agencies to consider ECFMG certification as a standard primary source verification of IMGs medical education.
9. Encourage all U.S. medical licensing bodies to utilize the IMED database to verify medical school credentials and to avoid the creation of arbitrary lists of approved and unapproved medical schools.
10. Increase the number of positions of the J-1 waiver slots, (currently 80) especially in states with the greatest projected shortages.
11. Establish state medical license portability across the U.S. as a top priority. The global medical community has “doctors without borders.” The U.S. prohibits its own doctors from practicing across state borders. We argue that if medical licenses were portable, the physician workforce could redistribute itself more efficiently, especially in times of disasters (e.g. Hurricane Katrina).
12. Increase IMG representation on national and regional medical boards responsible for regulation and policy-making. For IMG concerns to be heard, they must be openly voiced and been provided a response. Boards such as ECFMG, and most recently NRMP which have included IMG representation have benefited greatly.
13. Your recommendation(s) go here. Please e-mail your suggestions to us at [img@ama-assn.org](mailto:img@ama-assn.org)

## **2007- 2008 AMA-IMG Governing Council**

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### **State Medical Societies with IMG Sections**

The following state and specialty IMG Sections elect leadership and hold regular membership meetings. For more information on these sections and other state medical societies, visit the IMG Web site at <http://www.ama-assn.org/go/pub/category/1568.html>

Florida Medical Association  
Illinois State Medical Society  
Medical and Chirurgical Faculty of Maryland  
Medical Association of Georgia  
Massachusetts Medical Society  
Michigan State Medical Society  
Missouri State Medical Association  
Medical Society of the State of New York  
Nebraska Medical Association  
Oklahoma State Medical Society  
Pennsylvania Medical Society  
Texas Medical Association

**IMG Committees:**

American Psychiatric Association (Arlington, Virginia)

American Academy of Family Physicians (Leawood, Kansas)

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