

Ethical Integration of Internationally Educated Health Professionals:

Ethical and Regulatory Contexts

Report from the United States

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Introduction

The purpose of this report is to describe, for select health professions including physicians, nurses and pharmacists, the pathways for internationally educated persons to become qualified to practice in the United States. The regulatory requirements and contexts, challenges associated with entry, and summary data on the demographics and approximate numbers of internationally educated health professionals seeking entry and currently practicing in the United States are provided. In addition, this report describes programs designed to assist in the ethical integration of these individuals into the U.S. healthcare setting.

Physicians

ECFMG Certification

Physicians who graduated from medical schools outside of the United States or Canada (international medical graduates [IMGs]) who seek to enter residency or fellowship programs in the United States that are accredited by the Accreditation Council for Graduate Medical Education (ACGME) must first be certified by the Educational Commission for Foreign Medical Graduates (ECFMG). Participation in graduate medical education (GME) is a prerequisite for licensure and the unrestricted practice of medicine in the United States for all physicians. The ECFMG program ensures that IMGs, regardless of country of origin, current citizenship, medical school attended, years of practice, specialty choice, etc., are all subject to the same certification standards.

To be eligible for certification by ECFMG, IMGs must meet numerous requirements. The physician's medical school must be listed in the *International Medical Education Directory (IMED)* of the Foundation for Advancement of International Medical Education and Research (FAIMER) (<http://www.faimer.org/resources/imed.html>). IMGs must have been awarded credit for at least four credit years (academic years for which credit has been given toward completion of the medical curriculum) by a medical school that is listed in *IMED*. The information available through *IMED* is derived from current and historical data collected by ECFMG throughout its history of evaluating the medical education credentials of IMGs. A medical school is added to *IMED* after FAIMER receives confirmation from the Ministry of Health, Ministry of Education, or other appropriate agency that the Ministry or agency has recognized that school for award of the MD degree or equivalent, and that the graduates of the medical school are eligible to practice medicine in the country where the school is located.

ECFMG applicants must document the completion of all requirements for, and receipt of, the final medical diploma. ECFMG verifies every applicant's medical school diploma with the appropriate officials of the medical school that issued the diploma and requests that the medical school provide the final medical school transcript.

The examination requirements for ECFMG certification include passing Step 1, Step 2 clinical knowledge (CK), and Step 2 clinical skills (CS) of the United States Medical Licensing Examinations (USMLE) (<http://www.usmle.org/>). These are the same exams required of graduates of U.S. medical schools. Step 1 (basic science) is a multiple choice exam offered at test centers worldwide. Step 1 assesses an examinee's ability to understand and apply important concepts of the sciences basic to the practice of medicine, with special emphasis on principles

and mechanisms underlying health, disease, and modes of therapy. Step 2 CK is also a multiple choice exam offered at test centers worldwide. Step 2 CK assesses an examinee's ability to apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision. Step 2 CS is a performance-based examination administered at six test centers in the United States. In the CS standardized patients are used to test medical students and graduates on their ability to gather information from patients, perform physical examinations, and communicate their findings to patients and colleagues.

ECFMG issues the Standard ECFMG Certificate to applicants who meet all of the requirements for certification. As mentioned previously, obtaining a Standard ECFMG Certificate is a prerequisite for an IMG to enter an accredited program of GME in the United States.

Challenges Associated with Physician Migration to the United States

IMGs seeking to migrate to the United States for GME face numerous challenges throughout the process of obtaining ECFMG certification, acquiring a GME position and successfully completing training. In contrast to the situation in various other countries, the United States does not have special pathways for certain IMGs to circumvent or fast-track the certification process, or the requirement to participate in GME in the United States, in order to practice medicine in this country. IMGs must pass the same series of examinations required of domestic graduates. For some IMGs who graduated from medical school many years prior to attempting ECFMG certification and have been practicing medicine for some time in their home country, taking examinations that cover information learned during their basic science education may pose difficulties. In addition, the Step 2 CS exam with face-to-face interaction with standardized patients requires skills that may not necessarily have been learned as part of an IMG's training.

Finally, advanced reading skills in English are required for Step 1 and Step 2 CK, and proficient speaking and listening skills are needed for Step 2 CS, potentially deterring some applicants who are unsure of their language ability.

In addition, achieving ECFMG certification does not guarantee that an IMG will be successful in obtaining a GME position. In 2011, only 50% of all U.S. citizen IMGs and 41% of all non-U.S. citizen IMGs obtained a GME position through the National Residency Matching Program.

<http://www.nrmp.org/data/2011Adv%20Data%20Tbl.pdf> GME program directors may favor USIMGs over non-U.S. citizen IMGs because of their familiarity with the U.S. healthcare system and lack of visa requirements. While these match rates may appear low, it is important to note that some IMGs do secure GME positions outside of the official match.

Following successful completion of GME, an IMG seeking to practice medicine in the United States must also fulfill specific requirements imposed by the particular state or jurisdiction of the IMG's employer. For example, certain states place restrictions on IMGs seeking licensure based on characteristics of the individual's medical school, number of USMLE examination attempts, number of years of GME completed, etc. The Federation of State Medical Boards, Inc., (<http://www.fsmb.org/>) provides information regarding these various requirements for medical licensure.

The costs associated with ECFMG certification and obtaining a GME position are substantial. Currently, USMLE Steps 1 and 2 CK each cost \$780, with additional fees incurred if taking the exams at a test center located outside of the United States. The cost for USMLE Step 2 CS is \$1,355 and requires travel to one of the six U.S. testing centers. IMGs also incur fees related to the ECFMG certification process and application to GME. In addition, applying to GME

positions requires resources related to travel and interviewing for employment. These significant costs may deter many potential physicians who are considering options for emigration.

While ECFMG currently defers acceptability of an IMG's medical school to the Ministry of Education or Health or other appropriate agency in the country where the school is located, this quality requirement will become more rigorous in the future. ECFMG has announced that, effective in 2023, physicians applying for ECFMG certification will be required to graduate from a medical school that has been appropriately accredited. To satisfy this requirement, the physician's medical school must be accredited through a formal process that uses criteria comparable to those established for U.S. medical schools by the Liaison Committee on Medical Education (LCME) or that uses other globally accepted criteria, such as those put forth by the World Federation for Medical Education (WFME) www.wfme.org.

This additional requirement for ECFMG certification, and the timing of its implementation, is intended to stimulate the development of a meaningful, universally accepted system of accreditation for undergraduate medical education outside the United States and Canada.

ECFMG's decision to require medical school accreditation as a requirement for IMGs seeking ECFMG certification is a significant step in the organization's continuing efforts to enhance protection of the public. More information on this new requirement can be found on the ECFMG website: <http://www.ecfmg.org/accreditation/index.html>

In light of all of these challenges associated with physician migration to the United States, various for-profit companies exist to assist IMGs in navigating the process. While many of these agencies use the word "recruitment" in their name and description of their services, these businesses are not entities providing, or brokering, employment positions. The services offered

by these firms are aimed at enhancing the ability of an IMG to secure a GME position. For a fee, an IMG can receive individualized assistance from the agency, such as in improving his or her resume, advice on which training programs may be more likely to hire IMGs, and coaching in interviewing skills. Therefore these types of physician “recruitment” activities can be more accurately described as providing support to IMGs already in the process of trying to secure a GME position in the United States, rather than agencies that actively seek out IMGs in their home countries and bring them here for employment.

Physician Data (ECFMG Certified Physicians)

ECFMG maintains comprehensive demographic and exam performance records for all applicants to the certification process. As is noted previously, ECFMG certification is required for all IMGs who seek to enter an accredited graduate medical education program in the United States, and participation in GME is required of all IMGs prior to licensure and unrestricted practice.

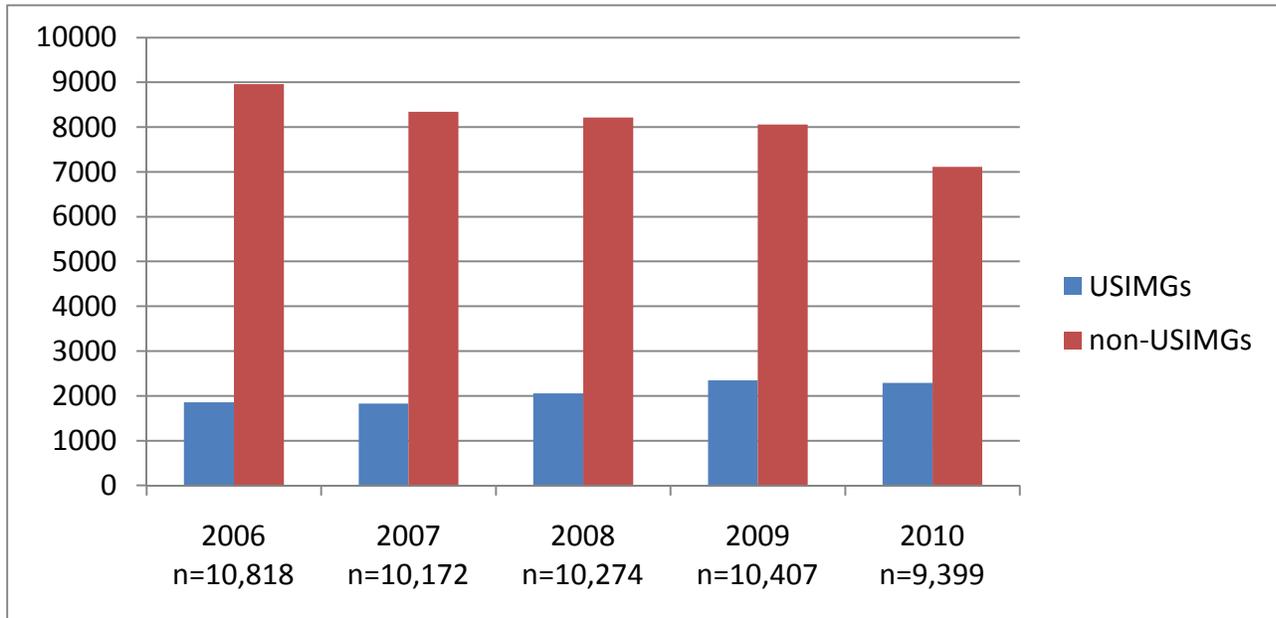
The numbers of IMGs certified by ECFMG for the years 2006 – 2010 are presented in Figure 1.

This data represents the numbers of IMGs who were successful in the entire certification process, including diploma verification, passing all exams, etc., and were granted an ECFMG certificate.

Within the total number of IMGs certified by year, the data is stratified by the number of IMGs that are U.S. citizens (USIMGs) versus all other IMGs (non-USIMGs). The proportion of total IMGs that are USIMGs has increased every year for the past five years; 2006: 17.2%, 2007: 18.0%, 2008: 20.0%, 2009: 22.6%, and 2010: 24.3%. Currently, USIMGs represented almost one quarter of all IMGs certified by ECFMG.

Figure 1

Numbers of IMGs certified by ECFMG for the years 2006 – 2010, stratified by USIMGs versus non-USIMGs



Graduates of international medical schools who are U.S. citizens (USIMGs)

Graduates of international medical schools who are not U.S. citizens (non-USIMGs)

Physician Data (Practicing Physicians)

We used data from the 2010 version of the American Medical Association (AMA) Physician Masterfile (American Medical Association, 2010) to describe the IMG contribution to the U.S. physician workforce. The AMA Masterfile is a database comprising current and historical data for more than one million physicians and residents in the United States. Physician records are updated continuously through extensive data collection activities, including the National

Graduate Medical Education Census, the Department of Practice and Communications Data Surveys, the Annual Census of Physicians, and the Group Practice Database.

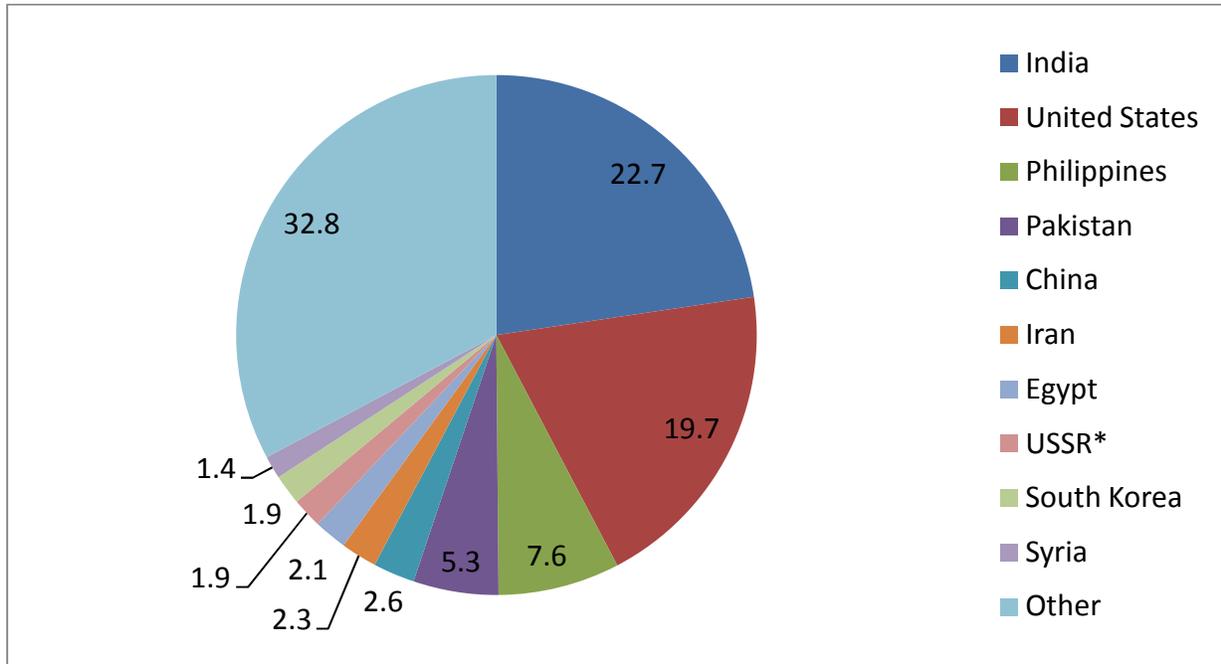
We analyzed the numbers of IMGs who are currently practicing medicine and are in direct patient care. This designation indicates physicians who are either full time hospital staff or in office based practice. While residents also provide patient care, many IMGs return to their home countries or emigrate elsewhere following GME. Therefore residents were excluded from this analysis.

In 2010 there were 692,171 physicians in direct patient care in the United States. Of these, 162,997 (23.5%) are IMGs. Of the IMGs, 19.1% are USIMGs, 78.1% are non-USIMGs, and 2.7% are IMGs that could not be classified.

Figure 2 displays the citizenship of IMGs currently in direct patient care. Approximately 50% of IMGs are citizens of India, the United States, or the Philippines.

Figure 2

Citizenship percentages of IMGs in direct patient care in 2010



*Includes Russia and all other former Soviet Republics

Nurses

Over the past 20 – 30 years, the United States has experienced a nursing shortage, especially in hospital settings. Some causes for the nursing shortage include growing demand without appropriate supply strategies, limited capacity in nursing schools, and shortages of nursing faculty (Schumacher, 2011). In response to the shortages, internationally educated nurses (IENs) have become an important part of the nursing workforce in the United States.

There are several requirements that must be fulfilled by IENs in order to practice as a Registered Nurse (RN) in the United States. The Commission on Graduates of Foreign Nursing Schools (CGFNS) Certification Program is the primary tool for determining if internationally-educated, first-level, general nurses qualify for licensure in the United States (<http://www.cgfns.org/>). The Certification Program consists of a credentials evaluation, the CGFNS Qualifying Exam and an English language proficiency test. This certification is a prerequisite for licensure by most U.S. state boards of nursing and it also satisfies one of the requirements the Department of Homeland Security has established for immigration.

To ensure public protection, in addition to CGFNS certification, National Council of State Medical Board (NCSBN) jurisdictions require candidates for RN licensure to pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The NCLEX-RN examination measures the competencies needed to perform safely and effectively as a newly licensed, entry-level nurse, and is a requirement for both domestically and internationally educated nurses.

In contrast to the situation with physicians, and the limited opportunities for a business model for actually recruiting IMGs, it appears that the situation is significantly different for nurses. A 2010 study of U.S.-based recruitment of IENs revealed that there are numerous companies in this field, with varying levels of integrity (Pittman et al., 2010). The study's authors identified more than 200 companies that were actively recruiting IENs. Most agencies target the Philippines and India, although there were also about 20 companies recruiting in Africa. There is growing use of the staffing agency model in this industry, which usually requires IENs to sign an 18 – 36 month employment contract. Nurses who breach their contracts are subject to high fees. The authors

also conducted focus groups with both industry executives and IENs, and conclude that both parties express concern regarding some recruitment practices.

Nurse Data (CGFNS Certified Nurses)

Examining the numbers of IENs entering the process for eligibility to practice in the United States provides some evidence of trends in emigration. In 2008–2009, a total of 5,270 applicants took the CGFNS exam and 3,300 certificates were issued. These numbers are lower than in previous years because the current three-year retrogression delay in visa issuance may have discouraged some foreign-educated nurses from applying. The U.S. nursing shortage is expected to continue into the future, and it is currently unknown how these policy issues will affect the supply of IENs in this country.

Nurse Data (Practicing Nurses)

According to the National Sample Survey of Registered Nurses (NSSRN), a survey conducted approximately every four years by the Health Resources and Services Administration, IENs accounted for 3.7% of the RN workforce in the United States in 2000, 2.9% in 2004, and 3.5% in 2007. These numbers are believed to be a gross underestimate of the actual numbers of IENs practicing in the United States, although the reasons for this under-reporting remain speculative. In 2004 the mean age of IENs was 46.1, and 92.2% were female. The four top countries of origin for IENs were the Philippines (46.6%), Canada (23.9%) and the United Kingdom (8.0%), and Nigeria (2.7%) (Xu et al., 2010; Schumacher, 2011).

Pharmacists

Graduates of international pharmacy schools are required to achieve Foreign Pharmacy Graduate Examination Committee (FPGEC) Certification before applying for a license from a state board of pharmacy. Certification ensures that an internationally-educated pharmacist's education meets acceptable requirements as compared to the education that U.S. educated pharmacists are expected to have before they practice as licensed pharmacists. As part of the certification, the pharmacist must pass the Foreign Pharmacy Graduate Equivalency Examination (FPGEE) and the Test of English as a Foreign Language (TOEFL). In order to be licensed, international pharmacists who have FPGEC approval must also pass the North American Pharmacists Licensure Examination (NAPLEX) and the Multistate Pharmacy Jurisprudence Examination (MPJE), and complete approximately 1,500 hours of training. Further licensure requirements vary by individual state.

Pharmacists Data

In 2008, 3,045 applicants from 90 countries took the FPGEE. India, Philippines, Korea, Egypt and Nigeria accounted for 60% of the applicants (Alkhateeb et al., 2010). No publically available data on the numbers of internationally-educated pharmacists currently practicing in the United States was found.

Ethical Integration of Internationally Educated Health Professionals in the United States

Internationally-educated health professionals practicing in the United States have been educated in countries all over the world, and have diverse cultural backgrounds. The health care systems and typical health provider - patient interactions may be very different from what internationally educated professionals are accustomed in their home countries (Whelan, 2006). For example, in some societies depression is seen as a normal part of life and not a condition that requires medical attention. In some cultures a physician is perceived as having the ultimate authority and not to be questioned, which contrasts with the typical American concepts of shared decision making and patient-centered care. The role of a patient's family also varies significantly. In addition, the professional relationship between physicians, residents, nurses, and other members of the health care team can be quite different. Therefore, to safely and effectively facilitate newly arriving internationally educated health professionals into the U.S. health care system, it is crucial that successful orientation and acculturation activities are provided for those in need.

In addition to ECFMG's certification program and other activities related to international medical education, ECFMG also plays an important role in the ethical integration of IMGs in the United States. Throughout ECFMG's history, developing and funding resources to meet IMGs' acculturation needs has been part of its mission. In 2006, ECFMG launched an Acculturation Program to assist IMGs with the transition to working and living in the United States. As part of this program, ECFMG has developed a spectrum of resources designed to help IMGs as they learn about the U.S. medical system where they will be training, and about living in the United States.

The resources developed as part of ECFMG's Acculturation Program can be used by IMGs at any stage of their journey into U.S. GME programs. Although the ECFMG acculturation resources on the ECFMG website are publically available, these services are targeted at IMGs who are already certified and have obtained GME positions. They can also be used by staff of GME training programs, hospitals, and other health care institutions who are responsible for orienting new IMG residents and introducing them to U.S. medical culture. The Acculturation Program also serves as a clearinghouse for a range of materials, programs, or resources developed by other organizations that may be useful to IMGs and those with whom they work and interact. All materials offered by the ECFMG Acculturation Program are available free of charge.

Currently, resources available in the ECFMG Acculturation Program include the IMG Advisors Network, a free service that allows qualifying IMGs who plan to enter U.S. GME to connect with advisors who can answer questions about participating in U.S. GME and about practical issues, such as finding lodging, opening a bank account, and getting a driver's license. In addition, there are various interactive modules on the website that use videos, analysis, and discussion questions to introduce IMGs to such topics as the doctor-patient relationship, the role of the patient's family, U.S. GME system, and professionalism. The educational database, Interdisciplinary Health Care Team (IHCT), is designed to introduce IMGs to the concept of teamwork in the U.S. medical system. The resources also include a glossary and an annotated list of websites that define medical abbreviations, and *IMG Survival Guide Template*, a resource to help graduate medical education programs develop local "Survival Guides" for new IMG residents/fellows.

While ECFMG and other organizations offer these orientation services to assist internationally educated health professionals in integrating into the U.S. workforce, there is limited data describing the success of these initiatives. An 8-week orientation session for surgical IMGs in one residency program noted a positive outcome in providing participants with enough experience to successfully integrate into the U.S. health care system (Horvath et al., 2004). In a study of IMG psychiatry residents, the authors found that participation in acculturation activities and social support were related to improved mental health (Atri et al., 2011). In a focus group study of internationally educated nurses, some participants reported that they had been appropriately oriented prior to working with patients, while others reported that they were offered no integration instruction, or only limited and ineffective sessions conducted by their employers (Pittman et al., 2010). Further research is needed to justify the costs and resources associated with these orientation programs, and to determine the most effective methods for acculturation.

Discussion / Conclusions

For the foreseeable future, it is likely that the United States will continue to rely on internationally educated health care professionals to fill gaps in the patient care network. The purpose of this report was to describe the pathways for entry, to provide summary data on numbers of physicians, nurses and pharmacists entering and practicing, and to outline some initiatives related to the ethical integration of health care professionals in this country.

For the physician profession, IMGs currently constitute almost one quarter of all physicians in direct patient care in this country. Approximately half of all IMGs are citizens of India, the

United States, or the Philippines. Countries frequently viewed as the least able to afford losing doctors (i.e., many African nations), are not significant suppliers to the United States in terms of overall proportion of cohorts currently in practice. Nevertheless, in some countries that produce relatively few doctors (i.e., Ghana), the emigration of a small number of graduates does have a significant impact on the country's domestic supply.

Several important trends can be observed in the data describing the numbers and citizenship data of entering physicians. The absolute number of IMGs certified by ECFMG has remained relatively steady over the past five years, with a slight decrease in 2010. At the same time, the proportion of IMGs who are U.S. citizens has been increasing. In addition, there is evidence that a significant portion of ECFMG applicants may have migrated to the United States prior to seeking entry into the profession. Based on an analysis of ECFMG application records, approximately three-quarters of IMGs use a U.S. based mailing address as their primary point of contact. While it is unknown how many IMGs seeking ECFMG certification already reside in the United States, versus those that are outside of the country but use a U.S. contact's address for convenience, many IMGs may have already left their home countries prior to seeking U.S. professional qualification. This data on the increasing proportion of USIMGs and potential pre-migration of IMGs demonstrates the decreasing role of the traditional non-domestic citizen IMG educated in his or her home country who, immediately following graduation, attempts to migrate to the United States for GME and potential practice. Trends pointing to a greater portion of IMGs being U.S. citizens, citizens of a country that typically produces doctors for export (i.e., India), and/ or international citizens who already reside in the United States, can help mitigate issues surrounding imbalances in global migration of health care workers.

Programs focused on improving the quality of health care workers in countries that traditionally supply large numbers of internationally educated health care workers to the United States are also important aspects of this country's efforts to enhance the ethical global movement of individuals. For example, the FAIMER Institute is a fully or partially funded two-year fellowship program for international health professions educators who play a key role in improving health professions education at their institution and in their country. The program is designed to teach education methods, management, and leadership skills, as well as to develop strong professional bonds with other health professions educators around the world. Regional FAIMER Institutes are present in areas that typically supply large numbers of IMGs to the United States, including India, Southern Africa and Brazil. More information on the FAIMER education initiatives can be found at www.faimer.org.

For nurses and pharmacists, there continues to be opportunities for internationally educated professionals to enter and become qualified to practice. Further research is needed to better quantify the actual numbers of internationally educated individuals practicing in these professions, and to better track trends in the population over time. Studies are warranted to determine effective policies, best practices, and successful programs aimed at balancing workforce needs of the donor countries and the rights of health care professionals. In addition, initiatives are needed to ensure fair treatment of professionals that choose to immigrate, and integration of these individuals into the U.S. health care setting.

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