The Conrad "State-30" Program: A Temporary Relief to the U.S. Shortage of Physicians or a Contributor to the Brain Drain?

Stephanie Gunselman*

In the United States, physicians are generally concentrated in metropolitan areas and few American-born physicians choose to practice in small, rural areas. Smaller rural hospitals often face a difficult challenge in recruiting new physicians to the area. The population in these underserved areas is left with few doctors and long waiting periods to see a physician. In addition to problems recruiting new physicians to rural areas, the United States is projected to have a physician shortage of 85,000 to 200,000 doctors by the year 2020. To address these shortages, Congress initiated the Conrad

* J.D. Candidate, Suffolk University Law School, 2010; B.S., magna cum laude, College of Charleston, 2006. Ms. Gunselman may be contacted at smgunselman@gmail.com.

1 Mark G. Tozzio, Critical Nature of the J-1 Visa Waiver Program for Foreign Medical Graduates, 49 J. HEALTHCARE MGMT. 61, 61 (2004). The discrepancy can be partially attributed to the fact that many physicians are trained in large metropolitan medical centers or universities which have resources such as high technology, several specialties, generous employment and benefits packages, and sophisticated premises. Id. at 61-62.


3 See Tozzio, supra note 1, at 61. This situation is exacerbated by the aging population and its demanding healthcare needs. See id. See also Nancy Shute, Need a Doctor? Too Bad, U.S. NEWS & WORLD REPORT 73, Apr. 7, 2008 (noting one Massachusetts primary care physician has a fourteen month waiting period).

4 D. Scott Jones, Quantifying Compliance and Quality: Understanding the Economic Impact of Inadequate Care, J. HEALTH CARE COMPLIANCE 41, 44, May-June 2008. This shortage concerns hospital boards about their ability to staff their facilities because staffing has an impact on the quality of care afforded to patients. Id. The physician shortage could also have an impact on the medical
"State 30" Program ("Conrad Program") in 1994 to provide states with visa waivers allowing them to hire up to thirty foreign physicians to practice in medically underserved areas in the United States. Under the Conrad Program, visa recipients are permitted to bypass the normal requirement of returning to their countries of nationality for at least two years before applying for permanent residence or an immigration visa.

While allowing foreign physicians to waive the two year home residence requirement before applying for permanent residence relieves some pressure on rural areas in the United States to provide better health care access, it often leaves the foreign physician’s home country with inadequate care. It is not responsible, nor is it ethical for


the United States to recruit highly specialized physicians from developing countries and from countries lacking adequate healthcare. This process, while providing temporary support to rural areas of the United States, effectively deprives the foreign physicians' home countries of opportunities for better health care. Instead of recruiting foreign physicians to practice in the United States, the United States needs to develop new policies to attract American physicians to practice in rural and underserved areas.

Part I of this note examines the physician shortage in the United States, the efficacy of the Conrad Program in facilitating access to healthcare in rural areas of the United States, and the impact that recruiting foreign doctors has on their countries of origin. Part II of the note discusses the impact of the recent legislation to extend the Conrad Program until September 30, 2009, and possible future legislation in the context of ongoing United States health care reform. Finally, Part III explores other solutions to providing more adequate health care to rural populations. The final section also investigates other ways to address the pending shortage of health care providers in the United States.

Physician Shortage in the United States

The World Health Organization ("WHO") estimates that fifty-seven countries

---

9 See Vikram Patel, Recruiting Doctors from Poor Countries: The Great Brain Robbery?, 327 BRITISH MED. J. 926, 926 (Oct. 18, 2003).
11 See id.
15 See generally Patricia Keenan, The Nursing Workforce Shortage: Causes, Consequences, Proposed Solutions, THE COMMONWEALTH FUND, Apr. 2003 (discussing necessary implementations to avoid continued healthcare practitioner shortages).
are facing a severe health care shortage that would require 4,250,000 healthcare professionals to confront the shortage. In the United States, there are approximately 730,801 physicians serving a population of 302,841,000. In order to meet its own pending shortage, the United States will need a projected additional 85,000 to 200,000 physicians by 2020. One cause of this shortage in the United States is the small number of medical graduates planning to work as primary care physicians or general surgeons, the gatekeepers in handling patient care. Medical graduates tend to choose more lucrative specialties, in part to repay the high cost of attending medical school in the United States.

For nearly twenty years, several advisory groups indicated that there would be a surplus of physicians, which led medical schools to keep enrollment levels stagnant, even while the United States's population grew. However, these advisory groups did not take into account the aging baby boomers, a population that includes nearly 250,000 physicians, many of whom will likely retire by 2020. The baby-boomer sub-set of the American population not only increases the demand for healthcare services and physicians, but also figures prominently as a reason for the physician shortage.

---

16 World Health Organization (WHO), The Global Shortage of Health Workers and Its Impact, (Apr. 2006), http://www.who.int/mediacentre/factsheets/fs302/en. Healthcare professionals include physicians, nurses, pharmacists, laboratory technicians as well as management and support workers. Id.


18 Jones, supra note 4, at 44 (noting physician shortage impacts quality of care delivered).

19 See Shute, supra note 3, at 73. In fact, the number of new physicians “choosing residencies in family practice, internal medicine, and pediatrics fell seven percent from 1995 to 2006.” Id.

20 The median cost of attending a public medical school as a nonresident in 2007-2008 was $41,648 and $22,984 as a resident. American Association of Medical Colleges, Tuition and Student Fees Reports (last visited Mar. 15, 2009), available at http://services.aamc.org/tsreports/report_median.cfm?year_of_study=2008. Many doctors have $150,000 to $250,000 of education debt after graduating from medical school. Davis, supra note 2.

21 Davis, supra note 2. From 1980 to 2005 medical schools maintained enrollment at about 16,000 per year. Id. The advisory groups were all leading groups on issues in medicine including the Institute of Medicine and the Council on Graduate Medical Education. Id. These institutions regularly issue reports on issues relating to medicine and medical education. Id.


This shortage of physicians disproportionately affects patients living in rural areas. For example, in Mississippi there are only one hundred forty one physicians per 100,000 people, with only fifty primary care physicians per 100,000 people. Mississippi falls far below the national ratio of one hundred ninety eight physicians per 100,000 people. Consequently, while twenty percent of the United States population lives in rural areas, only nine percent of physicians practice in rural areas. This leaves a vulnerable population without access to much-needed healthcare.

This vulnerable, underserved population typically demonstrates high incidences of diseases such as obesity, diabetes, and heart disease, which are often preventable or treatable, but nonetheless entail long-term, high-cost care. Perhaps with better access to health care and preventative education, prevalence of these conditions would diminish, however such measures would not remedy the impending physician shortage.

24 See, e.g., American Association of Medical Colleges, Pediatricians Becoming Scarce in Select Areas (Nov. 2004), available at http://www.aamc.org/newsroom/reporter/nov04/pediatricians.htm; See also Davis, supra note 2; Shute, supra note 3, at 73 (noting in twenty-four Texas counties there are no primary care physicians).


26 Id.

27 Roger A. Rosenblatt, et al., Shortages of Medical Personnel at Community Health Centers: Implications for Planned Expansion, 295 J. AM. MED. ASS’N 1042, 1043 (Mar. 1, 2006). There is a growth of community health centers in rural areas to provide healthcare needs to the underserved population. Id.

28 Rosenblatt, supra note 27, at 1042. See Shute, supra note 3, at 72-73. For those patients receiving Medicare, it is even more difficult to find a physician. Id. at 72. For example, not one of the 749 private-practice physicians in Alaska took new Medicare patients in November 2007. Id. at 73.

29 See, e.g., HHS, supra note 25. Mississippi ranked highest in the country for deaths due to heart disease in 1999. See also Shute, supra note 3, at 72 (noting that one patient’s inability to access a primary care physician resulted in a long wait for diagnosis). It took three years of visiting emergency rooms and after-hours acute care centers for one Oklahoma patient to receive a simple diagnosis. Id. AGENCY FOR HEALTHCARE RESEARCH AND QUALITY, HEALTH CARE DISPARITIES IN RURAL AREAS: SELECTED FINDINGS FROM THE 2004 NATIONAL HEALTHCARE DISPARITIES REPORT 1-2, (May 2005) http://www.ahrq.gov/research/ruraldisp/ruraldispar.pdf (noting barriers to care for diabetes and heart disease in rural areas).

30 See Rosenblatt, supra note 27, at 1043 (discussing problems staffing rural community health centers).
Attracting Foreign Physicians to the United States

In addition to demographic issues in rural areas, hospitals and health care providers have a difficult time recruiting and retaining physicians. Physicians in rural and underserved areas are often plagued with hectic call schedules, heavy workloads, and lower salaries. Further, the main insurance providers in rural areas are Medicare and Medicaid, which also detract from the ability to bring physicians into these areas. Medicare and Medicaid are infamous for low reimbursement levels and hassling paperwork and, therefore, discourage physicians from working in areas with large Medicare and Medicaid populations. As part of the solution to the shortage of primary care physicians and general surgeons, the United States developed policies and programs such as the Conrad Program to bring foreign physicians to the United States.

Effect on Foreign Physicians' Home Countries

Some physicians in foreign countries desire to work in rural, underserved areas, but the obstacles that they face cause them to leave rural practice shortly after they arrive. One obstacle confronted by foreign physicians practicing in rural nations,

31 Rosenblatt, supra note 27, at 1043. Rural areas do not offer as great a potential for career advancement, salary raises or technological advancements as urban areas. See id.


33 Tozzio, supra note 1, at 61. Government reimbursement for healthcare is often not as good as private insurers; therefore, physicians prefer not to deal with Medicare and Medicaid populations. See generally Lisa R. Shugarman & Donna O. Farley, Shortcomings in Medicare Bonus Payments for Physicians in Underserved Areas, 22 HEALTH AFFAIRS 173 (July 2003) (noting that physicians are provided incentives to practice in areas with high Medicare populations). In 2005, Medicare rates were about 82.6% of private insurance payment rates. JENNIFER O'SULLIVAN, CONGRESSIONAL RESEARCH SERVICE, MEDICARE: PAYMENTS TO PHYSICIANS 23 (July 2008). But see Saad Shafqat & Anita K.M. Zaidi, Unwanted Foreign Doctors: What is Not Being Said About the Brain Drain, 98 J. ROYAL SOC'Y OF MED. 492, 492 (2006) (describing the visa problems encountered by foreign medical graduates due to the fear of terrorism on United States soil following September 11, 2001).


36 Pooja Kumar, Providing the Providers—Remedying Africa's Shortage of Health Workers, 356 NEW ENG.
particularly many African countries, is the potential of contracting highly contagious and often stigmatized diseases, such as human immunodeficiency virus ("HIV") or acquired immune deficiency syndrome ("AIDS"), because they do not have the resources to adequately protect themselves. Also, family lives and children require these physicians to relocate to more urban areas to educate their children or earn extra income. These challenges and the possibility of higher salaries and continuing education draw physicians to urban practice despite their desire to serve rural populations.

While the United States has underserved populations; Mississippi only has one hundred forty-one physicians per 100,000 people, countries such as Chad have less than one physician per 10,000 people. In Africa, it costs $150,000 to educate a physician. If, after receiving training, that physician leaves Africa to practice in the United Kingdom, Canada, or the United States, Africa has not only lost $150,000, but the continent has also lost a much-needed physician to care for its dramatically underserved population. This pattern in poor countries has been referred to as the 'brain drain': impoverished countries spend significant resources training professionals to serve their populations, but these professionals, including physicians, are subsequently recruited to wealthier nations.

Many developing countries discovered that instead of spending money to train physicians facing diseases such as HIV/AIDS or those treating patients in war-torn areas often need health services themselves, such as counseling and testing, which puts another strain on already resource-poor nations. The family and economic concerns not only affect African or other foreign physicians' decisions to practice in urban areas, but also their American counterparts who either decline or neglect to consider rural practice due to similar constraints. See also Davis, supra note 2; Rural Medicine Programs, supra note 2.

See HHS, supra note 25, at 1.


See Eyal, supra note 10, at 180-82. See also Patel, supra note 9, at 926; see generally WHO, supra note 16; see generally Wilson, supra note 41.
physicians who will be recruited to practice in wealthy, developed nations, training mid-level practitioners to perform many of the same functions is accomplished at a much lower cost. Mid-level practitioners are not physicians, but have sufficient training to treat, diagnose, refer, and transfer patients with health concerns. Mid-level practitioners are more willing to practice in rural areas than physicians. Although these practitioners are necessary to meet the countries’ needs, problems may arise due to lack of licensure regulations and training inadequacies. Therefore, while increasing the number of mid-level practitioners is beneficial, it may not relieve the necessity for more physicians in these areas.

Conrad Program

Many foreign medical students travel to the United States to receive medical training. Foreign medical graduates (“FMGs”) are authorized to train in the United States by the Educational Commission on Foreign Medical Graduates (“ECFMG”). FMGs may obtain a J-1 visa, which is a nonimmigrant, exchange visitor visa. Under

---


47 See Lane, supra note 45, at 775. In Mozambique, eighty percent of mid-level practitioners remained in rural areas while no physicians remained seven years after graduation. Id. at 775-76.

48 Lane, supra note 45, at 769. Patient safety should not be overlooked simply to rectify a discrepancy in the number of physicians and the demand for healthcare. See Lane, supra note 45. The WHO encourages countries to review their medical licensure laws to ensure patient safety. Lane, supra note 45, at 769.

49 Patel, supra note 9, at 927. Encouraging physicians to return to their home country will ultimately benefit global health initiatives. Id. But see generally Lalwani, supra note 8 (noting some foreign physicians may prefer to practice in their native countries).


51 Mahsa Khanbabai, Foreign Medical Graduates – Remedies to Cure the Two-Year Flu, 2 IMMIGR. PRAC. MANUAL 1, ch.27, 3 (2004). FMGs may travel to the United States for his or her residency program. Id. FMGs are attracted to the United States in hopes of receiving better education than in their home country. Id.

52 8 U.S.C. § 1182(e). Under the nonimmigrant visa, applicants are admitted to the United States for a specific purpose and for a specific time period. ESTER, supra note 50, at 1. FMGs are also eligible for the resident H-1B visa, but sponsoring FMGs under the J-1 visa is more attractive to hospitals. Khanbabai, supra note 51, at 2. The J-1 visa is not permanent and there are fewer
the J-1 visa, the physician is required to return to their home country for two years before seeking lawful permanent residence or a temporary work visa for professionals.\textsuperscript{53} While many FMGs have long-term plans to remain in the United States, the two-year home residency rule prevents them from remaining in the United States.\textsuperscript{54} If J-1 visa waivers were not available, FMGs required to return to their home country may find themselves unable to return to the United States due to familial or cultural ties to their home country.\textsuperscript{55} Once a FMG returns to their home country for two years, that FMG may become reacquainted and comfortable with his or her culture and customs thereby making it difficult to move to the United States as a permanent resident where the FMG may feel out of place or have issues identifying with the culture.\textsuperscript{56}

Prior to 1994, only interested federal agencies could sponsor physicians for visa waivers, allowing a FGM to remain in the United States without fulfilling the two-year home residency requirement.\textsuperscript{57} While any federal agency could support a waiver request, the main federal agencies sponsoring waivers included the Appalachian Regional Commission ("ARC"), the United States Department of Veterans Affairs ("VA"), the Delta Regional Authority ("DRA"), and the United States Department of Agriculture ("USDA").\textsuperscript{58} However, after the September 11, 2001, terrorist attacks, the USDA announced it would no longer participate in the J-1 visa waiver program.\textsuperscript{59} This decision qualifications than the H-1 visa. Khanbabai, supra note 51, at 2.

\textsuperscript{53} INA § 212(e). Physicians with a J-1 visa may not change status to some other nonimmigrant visas. Khanbabai, supra note 51, at 3. Physicians with a J-1 visa may receive a waiver of the two-year home residency requirement. Ester, supra note 50, at 2-3. There are five bases to obtain a waiver: (1) a "no objection" statement from the FMG's home country (note this is not available for FMGs who acquired J-1 status on or after Jan. 10, 1977); (2) sponsorship by an interested government agency; (3) fear of persecution; (4) if their departure would cause an exceptional hardship to a U.S. citizen or permanent resident; or (5) the Conrad Program. 8 U.S.C. § 1182(e).

\textsuperscript{54} See Tozzio, supra note 1, at 63.

\textsuperscript{55} See generally Lalwani, supra note 8.

\textsuperscript{56} Lalwani, supra note 8, at ¶ 5.

\textsuperscript{57} Tozzio, supra note 1, at 62. The FMG was required to show that returning to his or her country would be detrimental to an activity of the interested government agency. Ester, supra note 50, at 3. Also the physician's home country would have to provide a "no objection" statement, the physician must have an offer of full-time employment, and agree to work in a medically underserved area for three years. Id. In 1995, federal agencies requested 93.5\% of the waivers compared to 2005 where federal agencies requested 5.5\% of the waivers. U.S. GOVERNMENT ACCOUNTABILITY OFFICE, DATA ON THE USE OF J-1 VISA WAIVERS NEEDED TO BETTER ADDRESS PHYSICIAN SHORTAGE 13 (2006) [hereinafter GAO].

\textsuperscript{58} See Greg Siskind & Bryan Stevenson, Physician J-1 Waivers: A Primer, 17 HEALTH LAWYER 1, 2 (Aug. 2005).

\textsuperscript{59} See Tozzio, supra note 1, at 62. Prior to September 11, 2001, USDA was the largest sponsor of J-1 visa waiver, because of the close connection between the USDA and rural areas and the need
left many rural areas, which had relied on USDA sponsorship of foreign physicians, with vacancies in positions, exacerbating the lack of physicians in their areas. Following the USDA's announcement that it would not sponsor J-1 physician waivers, the Department of Health and Human Services ("HHS") decided it would sponsor J-1 waivers.

In order to promote the utilization of the J-1 visa, Congress initiated the Conrad Program in 1994. The Conrad Program commenced in 1994 and allowed state health departments, in addition to the federal interested government agencies, to sponsor up to twenty doctors for J-1 visa waivers. The Conrad Program allowed the waivers for physicians taking jobs in federally designated medical shortage areas. The initial legislation expired on June 1, 1996, however Congress has subsequently extended the deadline every time it has expired. In 2002, Congress extended the deadline until 2004 and increased the number of waivers from twenty to thirty. In 2004, Congress extended the Conrad Program and made changes. One of these changes included giving states five waivers per year for physicians not serving in federally recognized medical shortage areas. In October 2008, Congress extended the Conrad Program again, until March 6, 2009, and in March 2009, Congress extended the program until September 30, 2009. Under changes made in 2008 states may issue ten waivers per
In order to attract foreign physicians, under the Conrad Program, the United States Department of State offers visa waivers to FMGs who are sponsored by an interested state government agency, and who are willing to practice in health professional shortage areas ("HPSAs") for at least three years. Each state must enact legislation implementing the Conrad Program. The states may have different requirements and procedures for filing Conrad waivers. For example, in Massachusetts, the Massachusetts Department of Public Health ("MDPH") receives waiver requests and decides whether to support the request. If the MDPH decides to

---

71 Tozzio, supra note 1, at 63. An HPSA is "(1) an urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility" with a shortage of health professionals as designated by the Secretary of Health and Human Services. See 42 C.F.R. § 5.2 (1992). In 2008, Congress recommended that the Secretary "consider the needs of vulnerable populations in low-income and impoverished communities, communities with high infant mortality rates, and communities exhibiting other signs of a lack of necessary physician services" when designating areas as HPSAs for the purposes of the Conrad Program. Extension of Waiver Program – Foreign Country Residence Requirement, Pub. L. No. 110-362, 122 Stat. 4013, 4013 -14 (2008). There are several criticisms of the HPSA designations including the fact that the criteria used by HHS needs to be reviewed and renewed to reflect the times. See Keri Tonn, HPSA and the Anti-Kickback Safe Harbor: Are We Sending Doctors to the Right Neighborhoods? 16 ANNALS HEALTH L. 241, 241-42 (2007) (discussing some of the shortcomings of the HPSA designation). On Feb. 29, 2008, HHS published notice of a proposed rule revising the process for designating HPSAs, but due to the number of comments and need to revise the proposed rule, HHS did not promulgate the new rule. See Designation of Medically Underserved Populations and Health Professional Shortage Areas, 73 Fed. Reg. 11232 (proposed Feb. 29, 2008). According to HHS, as of September 30, 2008, there are 6,033 Primary Care HPSAs requiring a total of 16,336 practitioners to provide sufficient primary care needs to the population. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, HEALTH RESOURCES AND SERVICES ADMINISTRATION, http://bhbr.hrsa.gov/shortage/ (last visited March 9, 2009).
73 Siskind, supra note 58, at 8. All states must establish minimum regulations including that the location be in a HPSA or MUA, work contract must be for at least three years, and the physician must work forty hours per week. Siskind, supra note 58, at 8; see also Immigration and Nationality Act of 8 U.S.C. § 1184(a) (2000 & Supp. 2008).
74 Massachusetts Department of Public Health, supra note 72, at 1. Each state may have different requirements or procedures for the program. Siskind, supra note 58, at 8. One aspect in which states differ as to the granting of J-1 visa waivers is the cost of the application. Siskind, supra note
sponsor a physician, it forwards its recommendation for sponsorship to the Bureau of Consular Affairs at the United States Department of State, which will review the request and recommend the waiver to the United States Citizenship and Immigration Services. These waivers allow the FMG to by-pass the normal two-year foreign residency requirement. There are other waiver options available, but it may be more difficult to meet the requirements of these options. Other waiver options for FMGs include sponsorship by an interested government agency, fear of persecution in the FMG's home country, or establishing that the FMG's departure would cause an exceptional hardship to a United States citizen or permanent resident. Many of the FMGs cannot meet any of the other waiver options, making sponsorship through a government agency very attractive to the FMG.

Effect of Extending Conrad Program

By extending the Conrad Program each time it is about to expire, Congress has expressed its belief that keeping J-1 physicians in the United States helps relieve the shortage of physicians meanwhile benefiting rural and underserved communities. Simply extending the Conrad Program's deadline cannot, by itself, solve the physician shortage. The Conrad Program's three-year commitment has the potential to leave a

---

58, at 8. In Massachusetts, the cost of applying in 2008 was $215 while the cost of applying in Oregon was $2,000. See Massachusetts Department of Public Health, supra note 72, at 4; OR. ADMIN. R. 333-005-0020 (2003). Another difference between the states in implementing the Conrad Program is the type of physicians who are granted waivers. Siskind, supra note 58, at 8. For example, in Massachusetts while primary care physicians are preferred, specialists may also apply and can be awarded visa waivers while in California specialists are not encouraged to apply and will not receive waivers unless there are extreme circumstances. See id. (providing state by state Conrad program requirements in table format).

75 Massachusetts Department of Public Health, supra note 72, at 1.

76 The Immigration & Nationality Act of 1952 § 212(e), 8 U.S.C. § 1182(e). There are five bases to obtain a waiver: (1) a "no objection" statement from the FMG's home country; (2) sponsorship by an interested government agency; (3) fear of persecution; (4) if their departure would cause an exceptional hardship to a U.S. citizen or permanent resident; or (5) the Conrad Program. Id.

77 See The Immigration & Nationality Act of 1952 § 212(e), 8 U.S.C. § 1182(e).

78 Id.

79 See Siskind, supra note 58, at 1.


81 See Texas Department of State Health Services, supra note 32, at 21-22 (explaining other ways to increase number of physicians in rural areas). This study also noted that the J-1 visa waiver program was not as successful as loan repayment programs or scholarships in retaining physicians in rural areas. Texas Department of State Health Services, supra note 32, at 20.
void in underserved hospitals and communities. Recruiting physicians to these areas is challenging due to busy call schedules, low salary levels, and heavy workloads. Further it has not been established that physicians participating in the Conrad Program are more likely to remain practicing in underserved areas after they have satisfied their three-year commitment. Every three years, the employer is left to decide how to fill the position left open by a former J-1 visa waiver recipient. Not only must the hospital or employer spend resources and time recruiting, they also have to work on advisory opinions to encourage extension of the Conrad Program in order to ensure coverage to its population.

Making the Conrad Program Permanent

One proposed solution to the shortage of physicians in the United States is making the Conrad Program a permanent government policy. It is clear that Congress believes that the Conrad Program benefits medically underserved areas experiencing physician shortages, as demonstrated by its continuous renewal and expansion of the program. By making the Conrad Program permanent, hospitals and employers would not have to be concerned with an impending termination of the program. Hospitals would rely on the fact that the state in which it operates has thirty waivers each fiscal

---

82 See Texas Department of State Health Services, supra note 32, at 20 (noting physician retention issues in rural areas).
83 See generally Texas Department of State Health Services, supra note 32 (detailing results of study on retaining health care providers in underserved Texas communities).
84 See Hagopian, supra note 8, at 242. States have not kept detailed records on retention information or exit surveys of physicians participating in the Conrad Program. Id. Cf. GAO, supra note 57, at 20 (noting that most states conducted reporting activities).
85 See Hagopian, supra note 8, at 248. Employers have to find replacements when a J-1 physician's commitment is met and timing becomes critical to fill the vacancy. Id.
86 See Hagopian, supra note 8, at 246-48; see also Tonn, supra note 71, at 241 (describing how hospitals have to be careful when offering incentives while recruiting new physicians). A large part of recruiting new physicians to rural and underserved areas includes advocacy work and increasing awareness of the need for more health care professionals. See Kumar, supra note 36, at 2566. This work takes a lot of time and can be made more difficult when physicians are transient and only provide short-term care, as with many J-1 visa practitioners. See Tozzio, supra note 1, at 63 (discussing problems recruiting physicians). However, more data is needed to verify retention statistics. See Hagopian, supra note 8, at 248.
87 See Hagopian, supra note 8, at 248. While the Conrad Program does appear to provide a short-term relief to rural and underserved areas, there is not sufficient data to suggest a long-term benefit. Id. at 248. See also GAO, supra note 57, at 1 (discussing states' reliance on J-1 physicians to fill vacancies in underserved areas).
88 See generally Hagopian, supra note 8 (noting that it is difficult to determine the extent of the effect of the Conrad Program on long-term retention of physicians in underserved areas).
year and can fill physician vacancies using the waivers. Therefore, hospitals and employers in rural and underserved areas would be partially relieved of the strain of retaining the physicians they have acquired because they can always rely on thirty waivers being available.\textsuperscript{89}

However, the Conrad Program does not have federal funding and states are limited in the ability to follow through with the physicians and provide retention incentives after the three-year commitment.\textsuperscript{90} Further, due to the lack of resources, there is not sufficient data showing the effectiveness or exact placement of the waiver recipients during their commitment.\textsuperscript{91} The constraint on state budgets to collect data and encourage retention rates diminishes the goal of the Conrad Program to provide medical services, specifically primary care, to underserved populations.\textsuperscript{92}

It is difficult for states to ensure that reliable, quality care is available to its constituents in underserved areas if the state does not have the ability to track J-1 physicians.\textsuperscript{93} In order to take full advantage of the Conrad Program the federal government could provide federal funding to track the J-1 physicians and invest in retention efforts.\textsuperscript{94} For example, a physician may be employed as a primary care physician in order to obtain a J-1 visa waiver from the state, but then receive a fellowship in a subfield and not practice as a primary care physician.\textsuperscript{95} Without tracking and data collecting ability, the states do not have any way of knowing whether these physicians are providing care to the intended population.\textsuperscript{96}

\textsuperscript{89} See generally Hagopian, supra note 8 (mentioning efficacy of waiver program concerning supply of physicians).

\textsuperscript{90} Hagopian, supra note 8, at 248.

\textsuperscript{91} See Hagopian, supra note 8, at 248.

\textsuperscript{92} See Hagopian, supra note 8, at 248.

\textsuperscript{93} See Hagopian, supra note 8, at 248. Only a quarter of the participating states keep records of J-1 visa waiver physicians following their three-year obligation. \textit{Id.} at 246. Likewise only six states require exit interviews and only eleven states engaged in site visits in the eighteen months prior to the study. \textit{Id.} at 246-47. Due to the lack of federal funding, states are strained to engage in tracking practices. See \textit{id.} at 247.

\textsuperscript{94} See Hagopian, supra note 8, at 248.

\textsuperscript{95} See Hagopian, supra note 8, at 248. In 2000-2001, two-thirds of the physicians receiving waivers were employed as primary care physicians, but there is no data showing that they actually practiced as primary care physicians, providing care to the underserved population. \textit{Id.} In effect this practice adds to the need of primary care physicians and deprives states of the ability of filling these vacancies depending on the number of J-1 visa waivers already issued. \textit{Id.}

\textsuperscript{96} See Hagopian, supra note 8, at 248 (explaining survey respondents were unsure whether J-1 visa waiver program met needs of underserved populations).
Upon the collection of the information such as numbers of J-1 physicians practicing in a given HPSA, patient demographics, length of time the physician remains in the HPSA, and practice specialties, Congress would be better able to determine whether the Conrad Program is effectively meeting the long-term health needs of the population. Under the current situation, Congress is limited in its ability to monitor and assess the success of the program. Federal funding, therefore, would not only benefit employers trying to retain physicians, but it would also benefit the federal government in ensuring the efficiency of designating areas as HPSAs.

Alternatives to the Conrad Program

The Conrad Program is set to expire on September 30, 2009, but a long-term, more comprehensive solution is needed. The Conrad Program only requires physicians to work in underserved communities for three years; therefore, hospitals in rural and underserved areas must continuously work to recruit or retain physicians, and social issues may arise concerning the prevalence of foreign physicians in an area.

---

97 See GAO, supra note 57, at 27. The GAO recommends that HHS carry out the data collection and maintenance. Id. HHS agrees that data on the physicians is useful and may also be helpful in identifying areas where health care is needed. Id. at 28.
98 See Hagopian, supra note 8, at 248. There is no federal funding for the Conrad Program; therefore, Congress is unable to use its resources to oversee the effectiveness. Id.
99 See GAO, supra note 57, at 28.
100 157 CONG. REC. H10267 (daily ed. Sept. 27, 2008) (statement of Rep. Smith) (urging Congress to pass the extension due to its importance in bringing physicians to underserved areas). It is also important to note that President Obama’s health plan includes the federal government spending $10 billion a year over the next five years on health information technology in addition to funding for loan repayment, obtaining adequate reimbursement, and grants for training. See BARACK OBAMA AND JOE BIDEN’S PLAN TO LOWER HEALTH CARE COSTS AND ENSURE AFFORDABLE, ACCESSIBLE HEALTH COVERAGE FOR ALL, http://www.barackobama.com/pdf/issues/HealthCareFullPl.pdf, (last visited Nov. 23, 2008). There is also $1.5 billion in grants for health information technology improvements included in the recent economic recovery package. American Recovery and Reinvestment Act of 2009, H.R. 1, 111th Cong. (2009). President Obama’s immigration policy includes allowing more people into the country to fill vacancies in job positions. See BARACK OBAMA AND JOE BIDEN: FIGHTING FOR COMPREHENSIVE IMMIGRATION REFORM, http://www.barackobama.com/pdf/issues/ImmigrationFactSheet.pdf, (last visited Nov. 23, 2008).
101 See Blakely v. Anesthetix of Iowa, P.C., No. C04-3031-MWB, 2005 WL 1588543, *1 (N.D. Iowa June 23, 2005) (denying U.S. citizen physician claim of discrimination based on national origin). A U.S. citizen anesthesiologist employee claims he was terminated because his employer prefers to hire non-U.S. citizens. Id. The district court granted the employer’s motion for summary judgment because Blakely’s Title VII claim relied on his claim of being discriminated against on the basis of citizenship, not national origin or race. Id. at *9. Citizenship is not a
Social issues facing foreign physicians in rural and underserved areas include discrimination based on race or national origin as well as difficulty identifying with the population and experiencing cultural differences. Several alternatives to the Conrad Program are available that do not require recruiting foreign physicians to rural and medically underserved areas of the United States. This note focuses on three general alternatives: incentives, increasing use of mid-level practitioners and reassigning roles among health care professionals, and educational programs.

a. Incentives

Providing incentives to employers is an effective way of attracting, retaining, motivating, and satisfying physicians and other practitioners to underserved areas. The World Health Organization (WHO) defines incentives as "all the rewards and punishments that providers face as a consequence of the organizations in which they work, the institutions under which they operate and the specific interventions they provide." These incentives can be financial or non-financial and benefit individuals, groups, or organizations. Incentives have a powerful influence on physicians' decisions on where to practice and could be used to attract more physicians to underserved areas.

protected characteristic under Title VII. Id.

* See Blakely, 2005 WL 1588543 at *4-5 (noting complaints were received about physician's hygiene and communication skills). Issues have also arisen concerning exploitation of foreign physicians on J-1 visas. Marshall Allen, Doctor's J-1 Actions Go Under Microscope, LAS VEGAS SUN, Aug. 7, 2008, at 1, available at http://www.lasvegassun.com/news/2008/aug/07/doctors-j-1-actions-go-under-microscope/. A Nevada investigatory committee found that employers were benefiting personally for hiring J-1 visa physicians and placing them in non-HPSA settings to earn more money while paying the physicians less. Id.

GLOBAL HEALTH WORKFORCE ALLIANCE, GUIDELINES: INCENTIVES FOR HEALTH PROFESSIONALS (forthcoming), pre-publication copy available at http://www.who.int/workforcealliance/documents/Incentives_Guidelines%20EN.pdf. The Global Health Workforce Alliance commissioned leaders in health professional associations to develop guidelines for retaining and recruiting health professionals. Id. These are the first-ever guidelines. Id.


GLOBAL HEALTH WORKFORCE ALLIANCE, supra note 103, at 11.

GLOBAL HEALTH WORKFORCE ALLIANCE, supra note 103, at 7. Incentives are also useful in developing nations experiencing the brain drain. Id. For example, physicians in Zambia are offered hardship allowances, education allowances for their children, and funding for continuing education in return for a three-year commitment to a rural area. Kumar, supra note 36, at 2566.
Expanding the Medicare Incentive Payment Program is one alternative to the Conrad Program that may encourage more American-born physicians to practice in HPSAs.107 Physicians are often discouraged from practicing in underserved areas because the population generally relies on Medicare and Medicaid, which are infamous for low reimbursement levels.108 Under the Medicare Incentive Payment Program, physicians practicing in a designated HPSA automatically receive a ten percent bonus payment on a quarterly-basis when the physician provides services in a designated HPSA.109 The ten percent bonus is calculated based on where the service is performed and what Medicare actually paid the physician for the service, not on the approved Medicare payment amount.110 One problem with this program is that the HPSA designation is not permanent.111 If the hospital or employer cannot rely on its designation as a HPSA, it cannot strategically plan to retain or recruit physicians based on the Medicare Incentive Payment Plan.112 Relaxing the requirements to receive bonus payments could make it easier to attract physicians to the area.113

The Medicare Incentive Payment Plan should be extended to include non-physician practitioners, who are not currently eligible to claim a bonus payment.114 Non-physicians, or mid-level practitioners, are cost-effective for employers and their

---

108 See Tozzio, supra note 1, at 61.
109 Medicare Prescription Drug, Improvement, and Modernization Act of 2003 § 413; see also Shugarman, supra note 33, at 173.
110 Medicare Prescription Drug, Improvement, and Modernization Act of 2003 § 413.
111 See Tonn, supra, note 71, at 255-56. The HPSA designation was created in 1978 to identify areas in need. Id. at 250. The method for determining HPSA designations has not been changed since 1993 and HHS has proposed revising the process to make the designations more accurate. Id. at 252. See Notice of Proposed Rulermaking, 73 Fed. Reg. 11232 (Feb. 29, 2008). If a HPSA no longer meets the requirements of an HPSA it may lose its status and therefore, physicians may not qualify for a bonus based on this status. See Tonn, supra, note 71, at 252-53.
112 See Tonn, supra, note 71, at 255-56. Physicians were also entitled to a five percent bonus payment for providing care in physician scarcity areas (PSAs) through Dec. 31, 2007. Medicare Prescription Drug Improvement and Modernization Act of 2003, § 413 (expired Dec. 31, 2007).
113 See generally Tonn, supra note 71. Again this bonus system relies on HPSA designations; therefore, in order to maximize the benefits, review of HHS’s designation policy may be necessary. Id. at 256.
114 See Rosenblatt, supra note 27, at 1044 (noting that in rural community health centers forty-six percent of the care is provided by non-physicians); see also Uta Lehmann, supra note 46. While physicians are provided with up to a ten percent bonus to provide care in rural areas, non-physicians such as nurse practitioners, physician’s assistants, or nurses are not offered a similar incentive. See Shugarman, supra note 33, at 174.
services should also result in eligibility for bonus payments.\textsuperscript{115} In addition, it is questionable whether a ten percent bonus issued quarterly is truly an incentive for the physician.\textsuperscript{116} Increasing the bonus or adjusting it according to current Medicare fee schedules may be more attractive to physicians.\textsuperscript{117} Although current Medicare reimbursement rates serve as a disincentive to physicians, improvements to its bonus program may reconcile its shortcomings and make practicing in rural or underserved areas more appealing to American-born physicians.\textsuperscript{118}

Providing higher education loan forgiveness to physicians working in rural or medically underserved areas is another financial incentive that may encourage physicians to practice in these areas.\textsuperscript{119} Similar to the plan recently enacted for public service employees, Congress could enact legislation to forgive loan balances of physicians who work in a rural or medically underserved area for a certain period of time.\textsuperscript{120} If complete loan forgiveness is not feasible due to the current economic recession, Congress could permit physicians working in underserved areas to forgo the interest payments on their federal loans or provide partial loan forgiveness if they work and live in an underserved area.\textsuperscript{121} This would provide incentive to American physicians to work in rural areas in order to receive assistance paying back the high cost of medical school in return for a commitment to serve the underserved.\textsuperscript{122}

\textsuperscript{115} See Rosenblatt, supra note 27, at 1046 (noting that community health centers may benefit from ability to provide more competitive salaries for nurses as well as physicians); see also Lehmann, supra note 46, at 26 (explaining the financial savings in training mid-level practitioners as compared to training physicians).

\textsuperscript{116} See Shugarman, supra note 33, at 177 (noting physicians were not claiming the bonus available). In order to encourage use of the bonus, it may need to be a more substantial amount. \textit{Id.}

\textsuperscript{117} See Medicare Incentive Payment Program Refinement Act of 2002, S. 2914, 107th Cong. (2002). Senator John Rockefeller (D-WV) introduced a bill in 2002 increasing the bonus amount to twenty percent of the payment amount for the service provided, but action was never taken on the bill. \textit{Id.}

\textsuperscript{118} See Shugarman, supra note 33, at 177-78 (noting that Medicare bonus payments have potential to be effective incentives).

\textsuperscript{119} Texas Department of State Health Services, supra note 32, at 20 (finding that providers with rural backgrounds were more likely to work in rural areas in the future). See \textit{College Cost Reduction and Access Act}, Pub. L. No. 110-84, \S 401, 121 Stat. 784, 800-01 (2007) (providing a loan forgiveness plan for public service employees). The loan forgiveness for public employees allows a borrower to have one tenth of his or her loan balance forgiven for each of the ten years in which the borrower earned $65,000 or less. \textit{Id.} A similar law could be enacted for physicians, with an adjusted income cap and year commitment.

\textsuperscript{120} See \textit{College Cost Reduction and Access Act}, \S 401.

\textsuperscript{121} See \textit{GLOBAL HEALTH WORKFORCE ALLIANCE}, supra note 103, at 16 (noting that an island nation allows students to not pay interest on their loans if they live and work in the country).

\textsuperscript{122} See \textit{GLOBAL HEALTH WORKFORCE ALLIANCE}, supra note 103, at 16.
Finally, the federal government could provide allowances for housing or transportation for physicians and health care providers in underserved areas.\textsuperscript{123} This could be especially attractive to urban, underserved areas where the cost of living may be more than the cost of suburban living.\textsuperscript{124} Providing these types of financial incentives will help reassign the burden of recruiting and retaining physicians from hospitals and other employers in underserved areas to the federal government thereby making it easier for hospitals to bring new physicians to their facilities.\textsuperscript{125}

While financial incentives are beneficial in the process of attracting new physicians to underserved areas, non-financial incentives may also encourage more physicians to practice in rural and underserved areas.\textsuperscript{126} Reducing the workload on physicians may be another way to attract more physicians.\textsuperscript{127} Workload reduction could be accomplished by hiring more supportive staff such as nurses, mid-level practitioners, and secretaries.\textsuperscript{128} Hospitals and employers in rural and underserved areas can also offer more flexible work hours.\textsuperscript{129} Flexible work hours attract physicians who have responsibilities outside of work.\textsuperscript{130} A reduction in the workload and flexible work hours are just two examples of non-financial incentives that could be used to attract more physicians to rural and underserved areas.\textsuperscript{131}

\begin{itemize}
\item \textsuperscript{123} See Global Health Workforce Alliance, supra note 103, at 12 (providing a table of available incentives to physicians).
\item \textsuperscript{124} See Physicians Shortage Disproportionately Affects Rural, Urban, Areas; Restrictions on Foreign Doctors Could Add to Problem, supra note 11, at ¶ 1 (describing physician shortage in urban areas as well as rural areas).
\item \textsuperscript{125} Texas Department of State Health Services, supra note 32, at 20 (discussing difficulty in retaining physicians in rural areas is greater than urban areas); see also Hagopian, supra note 8, at 248 (noting that the Conrad Program does not have federal funding).
\item \textsuperscript{126} See American Association of Medical Colleges, supra note 23, at 3. See also Global Health Workforce Alliance, supra note 103, at 17-23 (describing non-financial incentives to recruit physicians to practice in underserved areas).
\item \textsuperscript{127} See Global Health Workforce Alliance, supra note 103, at 19 (noting that heavy workloads burden health professionals and a reduction may be a useful recruiting tool).
\item \textsuperscript{128} But see Keenan, supra note 15, at 1. Hiring more supportive staff may also be difficult due to the nursing shortage. Id. The use of mid-level practitioners will be discussed in sub-section (2) of this section, infra.
\item \textsuperscript{129} See Global Health Workforce Alliance, supra note 103, at 20.
\item \textsuperscript{130} Global Health Workforce Alliance, supra note 103, at 20.
\item \textsuperscript{131} Global Health Workforce Alliance, supra note 103, at 13-23 (elaborating on financial and non-financial incentives).
\end{itemize}
b. Mid-level Practitioners

In addition to providing incentives, Congress could also work to increase mid-level practitioners, which are often less expensive to train and more willing to work in rural and underserved areas. Studies have shown that mid-level practitioners are more likely to remain in underserved areas than physicians. Congress could extend current education grant programs to more institutions in order to provide advanced education opportunities for nurses, which will help increase the number of advanced education nurses. These grants also motivate people who would not otherwise enter into the health field due to the high cost of education. The increase in advanced education nurses and other mid-level practitioners would reduce the need to hire several physicians practicing in the same field to meet the health needs of the population. Therefore, instead of hiring multiple physicians at high salaries, hospitals and other employers could hire a few physicians and several mid-level practitioners, at lower salaries than the physicians, to meet the population’s needs. By increasing the use of mid-level practitioners, work roles and responsibilities within the health care profession could be reorganized and delegated to reduce the dependency on physicians.

c. Rural Medicine Programs

Another option to attract United States citizen physicians to rural areas is to increase rural medicine programs. Recruiting in rural and underserved areas is most successful when the physicians that are recruited have rural backgrounds themselves. Therefore, creating more programs, such as summer programs for high school students or rural practice setting internships for medical students may encourage these students

---

132 Other nations have received beneficial results in training more mid-level practitioners. See Lane, supra note 45, at 767. For example, in Mozambique, eighty percent of mid-level practitioners remained in rural areas while no physicians remained seven years after graduation. Id. at 775-76.

133 Lehmann, supra note 46, at 27.


135 See generally Lane, supra note 45, at 792-93.

136 See Lane, supra note 45, at 771-72 (noting the lower labor costs of mid-level practitioners).

137 See Global Health Workforce Alliance, supra note 103, at 20; Charles Hongoro & Barbara McPake, How to Bridge the Gap in Human Resources for Health, 364 LANCET 1451, 1454 (2004).

138 Rural Medicine Programs, supra note 2.

139 See Texas Department of State Health Services, supra note 32, at 20.
to practice medicine in rural areas.\textsuperscript{140} Encouraging medical schools to develop rural medicine programs would also encourage more physicians to practice in rural and underserved areas.\textsuperscript{141} Making rural practice more inviting to American students would make it less likely that employers need to recruit foreign physicians to fill vacancies.\textsuperscript{142}

In reality, a combination of incentives, increasing the use of mid-level practitioners, and increasing rural medicine programs is the most effective alternative to the Conrad Program in addressing the health professional shortage in the United States.\textsuperscript{143} These alternatives would allow the United States to reduce its reliance on FMGs and visa waiver programs and use domestic resources to fulfill the United States’ health care needs.\textsuperscript{144}

**Comparing Solutions**

These three basic solutions—extending the Conrad Program’s expiration, making the Conrad Program a permanent policy, or implementing incentive programs to recruit and retain American physicians to underserved areas—each have advantages and disadvantages.\textsuperscript{145} Extending the expiration of the Conrad Program would relieve some of the pressure from states to provide care to underserved areas; however, it would not

\textsuperscript{140} \textit{Rural Medicine Programs}, supra note 2.

\textsuperscript{141} See Rabinowitz, supra note 14, at 242. In one study, only six medical schools had programs with the main goal of increasing the supply of rural physicians, however those six schools greatly increased the supply and retention of physicians in rural areas. Id. at 237, 240. An average of fifty-three percent to sixty-four percent of graduates of these programs practice in rural areas. Id. at 240. The study contemplated that if the class size of U.S. medical schools were expanded by thirty percent and more schools initiated rural medical programs, more than 12,920 rural physicians per decade could be expected. Id. at 239.

\textsuperscript{142} See Rabinowitz, supra note 14, at 235 (noting the difficulty of recruiting physicians to rural areas); see also Texas Department of State Health Services, supra note 32, at 20 (noting physicians with rural backgrounds are more likely to practice in rural areas than are those with urban backgrounds).

\textsuperscript{143} See \textit{GLOBAL HEALTH WORKFORCE ALLIANCE}, supra note 103, at 29. Effective incentive packages include must be designed to accommodate the needs of the specific facility or provider. Id. at 27. The plan should include both financial and non-financial incentives to maximize the effectiveness in recruiting or retaining a physician. Id. at 29.

\textsuperscript{144} See Patel, supra note 9, at 927. Recruiting foreign physicians to the United States has an immediate negative impact on the physicians’ home countries as well as perpetuates universal healthcare inequalities for the future. Id. at 927.

\textsuperscript{145} See Patel, supra note 9, at 927 (discussing some of the disadvantages of recruiting foreign physicians); 157 CONG. REC. H10267 (daily ed. Sept. 27, 2008) (statement of Rep. Lofgren) (expressing importance of extending the expiration of Conrad Program); Shugarman, supra note 33, at 177-78 (discussing Medicare Bonus Payments).
solve the dilemma of retaining physicians. Making the Conrad Program a permanent program allows hospitals in rural and underserved areas to rely on J-1 physicians to fill vacancies, but due to lack of funding to collect data on J-1 physicians it is not known whether they provide a long-term solution to the United States’ health care professional shortage. Whether the Conrad Program is extended indefinitely or for a specific period of time, it would immediately help relieve the states’ burden of providing care their underserved populations. On the other hand, the aforementioned suggested alternatives (incentives, increasing the use of mid-level practitioners and re-assigning health care roles, and increasing rural medicine programs) may not offer immediate relief to the state; however, they have the potential to provide long-term remedies to the health care professional shortage. These alternatives encourage physicians to practice in rural areas and emphasize retention by making the job itself more attractive instead of requiring physicians to commit for a short period of time in order to receive permanent immigration status and then move on to a more urban, profitable practice area.

Remedying the ‘Brain Drain’

Recruiting foreign physicians to work in United States may temporarily relieve the physician shortage in underserved United States regions, but it creates a ‘brain drain’ in the physicians’ home countries. It is not ethical for the United States to remedy its physician shortage by recruiting physicians from other places in the world that suffer from far more significant shortages of health care professionals. The United States’

146 See Eyal, supra note 10, at 183.
147 See Hagopian, supra note 8, at 248.
149 See also GLOBAL HEALTH WORKFORCE ALLIANCE, supra note 103, at 11-12; Lane, supra note 45, at 793-94; Texas Department of State Health Services, supra note 32, at 20; Rural Medicine Programs, supra note 2 (discussing rural medicine programs to promote health care in underserved regions); Rabinowitz, supra note 14, at 235.
150 See Siskind, supra note 58, at 2 (noting that the Conrad Program is not the only way to encourage physicians to practice in rural areas).
151 Patel, supra note 9, at 926.
152 See Patel, supra note 9, at 926; Lane, supra note 45, at 768 (noting countries facing the most devastating shortage of physicians are those with high rates of health care professional emigration); Hagopian, supra note 8, at 248. It is important to note that the U.S. is a member of the World Health Organization (WHO) which states in its preamble that “[t]he enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.” World Health Organization (WHO) Constitution, available at http://www.who.int/governance/eb/who_constitution_en.pdf, (last visited Jan. 12, 2009).
encouragement of health care provider emigration from underserved countries to the United States exacerbates the health care problems affecting those countries. In order to alleviate some of the impact of drawing foreign physicians from these developing nations, the United States could develop partnerships to encourage these physicians to return to their home countries.

The United States and other developing nations could help relieve the effects of the brain drain by establishing more western-style academic medical centers around the world. Providing the type of education desired by many FMGs in their home countries would reduce the number of FMGs seeking to practice in the United States. As more foreign physicians desire to return to their home countries, these medical centers could be run and operated by FMGs who were trained in the United States and other developed nations. The United States could enter into public-private partnerships with the FMG to develop and encourage medical training in their home countries. The United States can provide grant money, possibly funded by any profit earned in the previously described medical centers, to FMGs trained under the J-1 or other nonimmigrant visa to return to work in their home country. The FMGs would then be able to use the skills and training they received in the United States to strongly influence the health policy and leadership in their home countries while benefiting from their time in the United States.

In contrast to developing more western style medical centers around the world, the United States could encourage resource-poor nations to employ locally relevant

---

153 See Lane, supra note 45 at 768. But see Lalwani, supra note 8 (reporting that foreign doctors may not find practice in the U.S. as attractive due to improving economic conditions in their home countries); Shafqat, supra note 33, at 492 (commenting on the ethical and moral issues of “medical migration”).

154 Patel, supra note 9, at 927. Physicians who leave their home countries to train under programs such as the J-1 visa gain expertise and knowledge that should be shared with institutions and professionals in their home country. Id. Countries facing severe shortages of health professionals in rural areas have benefited from programs providing international funding for salaries. For example, Kenya supported 2,500 nurses' salaries through 2007 through international funding programs. Kumar, supra note 36, at 2566.

155 Shafqat, supra note 33, at 493.

156 See Shafqat, supra note 33, at 493 (describing possible result of providing more advanced medical training in physicians' home countries).

157 See Shafqat, supra note 33, at 493.

158 See Shafqat, supra note 33, at 493.

159 See Shafqat, supra note 33, at 493.

160 Cf. Shafqat, supra note 33, at 493.
training. Locally relevant training emphasizes treatment of locally endemic diseases, prescription and use of low-cost medications, and mastery of the physical exam to replace expensive laboratory tests to meet the area’s needs. This type of training would help developing countries retain their medically trained citizens because the skills learned in locally relevant training will not be as marketable to foreign countries or wealthier, more developed nations. Therefore, locally relevant training prevents medical graduates from emigrating to developed nations and the problem of repatriation does not become an issue.

Another remedy to the ‘brain drain’ is requiring applicants for the J-1 visa waiver to engage in telemedicine with their home country as part of the requirement for obtaining a waiver, either as part of the Conrad Program or federal agency waiver. Telemedicine is beneficial in war zones and other areas of the world in dire need of health care. It enables physicians in remote areas to consult with other physicians to provide the best care for the patient. Telemedicine encourages prevention of disease and illness, diagnosis, and management and care of patient health. Consequently, although many FMGs would continue to leave their home countries to train in other areas of the world, they could still provide an essential service to their home countries.

161 Eyal, supra note 10, at 83 (discussing ethical and effective responses to the medical brain drain).
162 Eyal, supra note 10, at 83.
163 Eyal, supra note 10, at 84.
164 Eyal, supra note 10, at 84.
165 Telemedicine is the exchange of medical information via electronic communications. See American Telemedicine Association, http://www.americantelemed.org/i4a/pages/index.cfm?pageid=3333 (last viewed November 23, 2008). In today’s global economy outsourcing is of many services has become routine, the outsourcing of health services is a growing market and can be utilized to address the health care professional shortage throughout the world. See generally Nicolas P. Terry, Under-Regulated Health Care Phenomena in a Flat World: Medical Tourism and Outsourcing, 29 W. New Eng. L. Rev. 421 (2007) (discussing outsourcing of health services and medical tourism).
167 See id. The African Medical & Research Foundation (AMREF) has a telemedicine initiative allowing doctors throughout Africa to consult cases with their headquarters and other doctors. Telemedicine can also empower mid-level practitioners in remote areas by allowing them to consult with physicians to provide better care for their patients. See id.
168 See American Telemedicine Association, supra note 165.
through telemedicine.\textsuperscript{170}

\textbf{Conclusion}

Fifty-seven countries throughout the world are facing a health care professional shortage and WHO projects it will take 4,250,000 healthcare professionals to confront the shortage.\textsuperscript{171} In the United States, the shortage of health professionals is most deeply felt in rural and some urban areas and the United States has partially relied on FMGs receiving J-1 visa waivers through the Conrad “State Thirty” Program to fill vacancies in these HPSAs. By providing a means for non-immigrant FMGs to remain in the United States the Conrad Program indirectly encourages emigration from countries that are in dire need of physicians.

To remedy its own physician shortage, the United States needs to develop a more comprehensive and long-term effective program to benefit the underserved population. The United States should develop policies and programs that utilize a combination of incentives, increased use of mid-level practitioners, and increase in rural medicine programs in order to increase the number of practitioners providing care in rural and underserved areas. Additionally, the United States should compensate countries from which the United States draws a large number of J-1 visa waiver physicians by contributing to the solution of the global health shortage. This solution can be achieved by encouraging repatriation, contribution to J-1 visa waiver recipients’ home countries, or establishing partnerships with world-wide organizations to improve access and quality of care available in these countries.


\textsuperscript{171} World Health Organization, \textit{supra} note 16. Healthcare professionals include physicians, nurses, pharmacists, laboratory technicians as well as management and support workers. \textit{Id}. 