Working Paper

August 2003 #76

How International Medical Graduates Enter US Graduate Medical Education or Employment

by

Karin E. Johnson, PhD
Emily Kaltenbach, MHA
Kenneth Hoogstra, JD
Matthew J. Thompson, MB, ChB, MPH, DTMH
Amy Hagopian, MHA, PhC
L. Gary Hart, PhD

WWAMI CENTER FOR HEALTH WORKFORCE STUDIES

UW University of Washington

School of Medicine

Department of Family Medicine

About the Workforce Center

The WWAMI Center for Health Workforce Studies at the University of Washington Department of Family Medicine is one of five regional centers funded by the National Center for Health Workforce Analysis (NCHWA) of the federal Bureau of Health Professions (BHPr), Health Resources and Services Administration (**HRSA**). Major goals are to conduct high-quality health workforce research in collaboration with the BHPr and state agencies in Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI); to provide methodological expertise to local, state, regional, and national policy makers; to build an accessible knowledge base on workforce methodology, issues, and findings; and to widely disseminate project results in easily understood and practical form to facilitate appropriate state and federal workforce policies.

The Center brings together researchers from medicine, nursing, dentistry, public health, the allied health professions, pharmacy, and social work to perform applied research on the distribution, supply, and requirements of health care providers, with emphasis on state workforce issues in underserved rural and urban areas of the WWAMI region. Workforce issues related to provider and patient diversity, provider clinical care and competence, and the cost and effectiveness of practice in the rapidly changing managed care environment are emphasized.

The WWAMI Rural Health and Health Workforce Research Center Working Paper Series is a means of distributing prepublication articles and other working papers to colleagues in the field. Your comments on these papers are welcome and should be addressed directly to the authors. Questions about the WWAMI Center for Health Workforce Studies should be addressed to:

L. Gary Hart, PhD, Director and Principal Investigator
Susan Skillman, MS, Deputy Director
Roger Rosenblatt, MD, MPH, Co-Investigator
Laura-Mae Baldwin, MD, MPH, Co-Investigator
Denise Lishner, MSW, Center Research Coordinator
Eric Larson, PhD, Senior Researcher
Heather Deacon, Program Coordinator
University of Washington
Department of Family Medicine
Box 354982
Seattle, WA 98195-4982
Phone: (206) 685-6679
Fax: (206) 616-4768
E-mail: deac@fammed.washington.edu
Web Site: http://www.fammed.washington.edu/CHWS/

The WWAMI Center for Health Workforce Studies is supported by the Bureau of Health Professions' National Center for Health Workforce Analysis. Grant No. 5-U79-HP-00003-05; $250,000; 100%.

About the Author

Karin E. Johnson, PhD, is a Research Associate in the Department of Family Medicine, University of Washington School of Medicine.

Emily Kaltenbach, MHA, was a Research Assistant in the Department of Family Medicine, University of Washington School of Medicine, at the time of this study.

Kenneth Hoogstra, JD, is an immigration lawyer with the firm von Briesen & Roper, S.C., in Milwaukee, Wisconsin.

Matthew J. Thompson, MB, ChB, MPH, DTMH, was an Assistant Professor in the Department of Family Medicine, University of Washington School of Medicine, at the time of this study.

Amy Hagopian, MHA, PhC, is Associate Director of the Program for Healthy Communities and Clinical Instructor in the Department of Health Services, University of Washington School of Public Health.

L. Gary Hart, PhD, is Director of the WWAMI Center for Health Workforce Studies and Professor in the Department of Family Medicine, University of Washington School of Medicine.

How International Medical Graduates Enter US Graduate Medical Education or Employment

Karin E. Johnson, PhD
Emily Kaltenbach, MHA
Kenneth Hoogstra, JD
Matthew J. Thompson, MB, ChB, MPH, DTMH
Amy Hagopian, MHA, PhC
L. Gary Hart, PhD

August 2003

This study was conducted by the WWAMI Center for Health Workforce Studies, funded by the National Center for Health Workforce Analysis of the Bureau of Health Professions, Health Resources and Services Administration.

Abstract

International medical graduates (IMGs)—physicians who completed medical school outside of the United States—constitute almost 25 percent of the US physician workforce. They play an important but disputed role in national health workforce planning. Previous research points alternately to IMGs filling gaps in coverage in underserved areas and to exacerbating a national physician surplus. Understanding the mechanisms by which IMGs are authorized to come to, and stay in, the United States to practice medicine helps elucidate the complex policy issues surrounding IMGs. This primer clarifies the various steps that must occur for an IMG to come to the United States to practice medicine. Before they can practice medicine in the United States, including participating in residency programs or fellowship training, IMGs face a complicated set of education and licensing requirements. In addition, any non-US citizen must obtain a visa appropriate to their circumstances. This document describes how long and by what means IMGs holding temporary visas can remain in the United States. The State 30/Conrad J-1 visa waiver program, a way for foreign national medical residents to remain in the United States pursuant to the completion of their training, receives particular attention.

Overview

In the United States, international medical graduates (IMGs) comprise approximately 25 percent of the nation's physician workforce. IMGs are physicians who have graduated from a medical school outside of the United States and who come to the United States to practice medicine, teach, obtain training or conduct research. If IMGs are pursuing residency, fellowship or clinical practice opportunities, they must apply to be certified by the Educational Commission for Foreign Medical Graduates. Those who wish to provide patient care must also meet the licensing requirements of the state in which they wish to practice. All foreign-national IMGs must obtain an appropriate immigrant or nonimmigrant visa. In this primer, we detail each of these processes. Figure 1 summarizes the licensing and immigration requirements for IMGs. Understanding the mechanisms by which IMGs are authorized to come to, and stay in, the United States to practice medicine helps elucidate the complex policy issues surrounding IMGs (summarized below).

Definition of IMGs

IMGs are individuals who (1) are receiving graduate medical education (GME), such as a residency or fellowship, or are practicing medicine in the United States and (2) have graduated from a medical school that is both located outside the US and listed in the International Medical Education Directory (IMED) (FAIMER 2002). The commonly-used IMG classification is based on medical school country, not on citizenship. A US citizen who completes medical school outside of the United States or, in most cases, Canada is considered an IMG, whereas a citizen of a country other than the United States who completes medical school in the United States is not.[1] This document primarily concerns foreign-born IMGs, who are both nationals of foreign countries and graduates of foreign medical schools, and hence face particular immigration and certification requirements before they can practice medicine in the United States, which includes GME.

[1] US citizens who graduate from Canadian medical schools that are accredited by the Liaison Committee for Medical Education are not considered IMGs; all graduates of other Canadian medical schools are considered IMGs and are subject to all of the requirements outlined in the remainder of this document.

IMG Policy Issues

While small numbers of foreign-trained physicians have long practiced in the United States, their role in the US system that we see now began after World War II. Before that time, the most significant influx of IMGs occurred when several thousand foreign-trained doctors, many of whom were Jewish, fled from Europe in the 1930s (Mick, Lee and Wodchis 2000). The most important policy promoting a sustained flow of IMGs was the passage of the US Information and Educational Exchange Act of 1948 (the Smith-Mundt Act), which created the exchange-visitor ("J" visa) program. This program allowed foreign students to enroll in a US government-approved study program, including residency training.[2]

Over time, the number of IMGs in US graduate medical education programs steadily increased, as did the number who remained in the United States after training. By the 1970s, the tendency for foreign-trained medical personnel, including physicians, to stay in the United States in large numbers led the Department of State to place restrictions on the J-1 visa program. These restrictions included limiting the eligible fields of study and implementing a requirement that J visa recipients return to their home country for two years following completion of training.

In the mid-1970s, health planners became concerned that a surplus of physicians loomed. A series of policy initiatives to reduce new IMG residency training slots followed (Mick and Pfahler 1995). The role of IMGs in the US medical system remains contentious today, but policy tends to favor their continued recruitment because they can be induced to practice in underserved areas under certain circumstances (detailed below).

Following the terrorist attacks on September 11, 2001, however, immigration policy in general has become more restrictive—especially for people from some countries in South Asia and the Middle East. Nonetheless, in October of 2002, Congress expanded the Conrad/State 30 program, which allows state health departments to sponsor IMGs for service in shortage areas. Furthermore, at the end of 2002, the Administration designated the Department of Health and Human Services (DHHS) as an interested government agency for purposes of sponsoring J-1 visa waiver physicians. The US Department of Agriculture had

[2] Participants of such programs receive J-1 visas, while their dependents receive J-2 visas.

previously served in this role, but had quit processing applications after September 11, 2001. The new DHHS role signifies continued federal commitment to encouraging IMGs to practice in underserved areas. Additionally, the Delta Regional Authority announced in February 2003 that it also intended to sponsor J-1 visa waivers for primary care physicians in the eight-state Mississippi Delta Region (Siskind 2003).

Experience since the 1970s shows that IMGs play an important, but dynamic role in US health care policy. Policies are likely to continue to change in response to immigration politics and changes in US physician supply and demand. Regardless of specific policies designed to increase or decrease the number of IMGs practicing in the United States, all IMGs must meet a variety of requirements to work or train in the United States. In the following sections, we discuss each of these requirements (ECFMG certification, GME, licensing and immigration) in turn.

ECFMG Certification

In order to enter into the United States to pursue GME, the IMG must have a medical degree and become certified by the Educational Commission for Foreign Medical Graduates (ECFMG).[3] To become certified, the applicant must meet the following four requirements:

First, the IMG must present evidence of a final medical diploma granted by a medical school listed in the International Medical Education Directory of the Foundation for Advancement of International Medical Education and Research (FAIMER 2002). In the course of obtaining the diploma, the applicant must have completed at least four academic years and document each year's accomplishments to the ECFMG. Second, the applicant must pass the United States Medical Licensing Examination (USMLE) Step 1 (basic science) and Step 2 (clinical science).[4] These exams are offered at ECFMG examination

[3] The examination is waived for IMGs who will be engaged in teaching or research that does not involve patient care, who are of national or international renown in their field of medicine, or who were licensed and practicing medicine in the United States before January 9, 1978.

[4] The National Board of Medical Examiners (NBME) examination, the former Visa Qualifying Exam (VQE), the former Federation Licensing Examination (FLEX) and the Foreign Medical Examination in the Medical Sciences (FMGEMS) count as equivalents for the purposes of

centers throughout the world. Third, the IMG must obtain a satisfactory score on the ECFMG English test. Finally, the applicant must pass the ECFMG Clinical Skills Assessment (CSA).[5]

GME for IMGs

Once the IMG has passed all of steps listed above, he or she is granted a Standard ECFMG Certificate and may apply to any residency program accredited by the Accreditation Council for Graduate Medical Education (ACGME). Other than the ECFMG certification requirement, the residency program application process differs little for IMGs and graduates of US medical schools (USMGs). However, this process is worth explicating in order to fully describe the steps by which IMGs enter the US workforce.

Residency applicants must apply directly to each program in which they are interested and typically register with the National Resident Matching Program (NRMP), known as "the Match." Applicants to residency programs using the Match submit a rank list of their preferred programs. Residency programs submit to the system a ranked list of their preferred applicants (USMGs and IMGs). In March of each year, the NRMP releases the results of that year's Match, allowing residents to determine where they will go for residency training and residency program directors to determine how many of their program's positions were filled. In certain specialties, particularly several of the primary care residency programs, a significant number of residency positions do not get filled in the Match process in March. Therefore, unmatched USMG and IMG applicants can then determine which programs have vacant positions and apply to fill them in the post-Match "scramble day." Since approximately 33,000 applicants apply for about 23,000 available residency slots each year, all applicants do not end up in residency programs of their first choice, and positions are not guaranteed.

Unlike their USMG counterparts, IMG candidates may also apply for residency programs outside of the Match process. For example, certain primary care and medical specialty associations offer residency positions directly to IMGs

---

ECFMG certification. Medical students may sit for Step 1 after two years of medical school and take Step 2 if they are within 12 months of completion of the full didactic curriculum.

[5] This requirement was instituted July 1, 1998. Passing grades on the USMLE Step 1 and the English Language Proficiency Test are prerequisites for taking the CSA.

in order to guarantee that they will fill their residency positions in less popular specialties.

Timing is very important for IMGs during the GME application process. Candidates must pass the USMLE Steps 1 and 2 and fulfill the ECFMG certification by the September prior to the year when they wish to start a program. This ensures that certification will be complete as required prior to the submission of rank order lists the following February. All program applications and Match registration steps must be completed by the last business day of October in the year prior to when applicants wish to start GME.

Concurrent to the residency application, the IMG needs to apply for and obtain provisional state licensure. Upon entering an accredited US graduate medical education program, IMGs become eligible for permanent validation of the ECFMG Certification.

IMG Licensing

The USMLE Step 3, which ascertains whether a physician is suitably qualified to practice medicine unsupervised, is a prerequisite for full licensing. The examination is administered by each state through its state licensing authority. Examination requirements vary by state; some permit IMGs to take the exam before any graduate training in a US or Canadian hospital, while others require up to three years of training. However, all states require at least one year of US or Canadian training for licensure. In order to sit for the USMLE Step 3, IMGs must have an MD, DO or equivalent degree, hold ECFMG certification,[6] have passed Steps 1 and 2 of the USMLE or equivalent examinations and meet any other state medical licensing requirements.

[6] In 44 states, US citizens or permanent residents who have successfully completed the Fifth Pathway program do not need ECFMG certification. The Fifth Pathway program is available to US citizens or permanent residents who complete their premedical work in a US-accredited college, study medicine in a foreign medical school listed in the IMED, complete all requirements for admission to practice medicine except internship and/or social service and then wish to return to the United States for GME. Thirty-four states will endorse the Canadian certificate when held by an IMG.

US Immigration Requirements for IMGs

To complete a residency and/or provide patient care, foreign-national IMGs must hold a visa suitable to their circumstances. Under the Immigration and Naturalization Act, most foreign nationals must obtain either a non-immigrant (temporary) or immigrant (permanent) visa to live and, in certain circumstances, work in the United States. Nonimmigrant visas are designated by letters of the alphabet ranging from "A" to "V." Only those visa types of relevance to foreign-born IMGs are described below. Physicians may require one type of visa for purposes of interviews and taking the CSA exam, if applicable, and then another for purposes of employment or training. The description of each visa type focuses on what is most relevant to IMGs. Readers interested in more detailed requirements and restrictions should see the State Department Web site (US Department of State 2003). Figure 2 summarizes the different visa types used for IMGs.

Nonimmigrant Visas (Temporary)

Approximately 45 percent of IMGs are not US citizens or permanent residents and consequently enter under temporary or nonimmigrant visas. Most of them enter on a J-1 Exchange Visitor visa or an H-1B Temporary Professional Worker visa. These and other, less common, visas are detailed below.

J-1 (Exchange Visitor): The most common visa for IMGs in residency programs is the J-1, which is administered by the ECFMG. To obtain a J-1 visa, the applicant must have proof of acceptance into an accredited graduate medical education or training program. Additionally, the IMG must have already passed all of the ECFMG certification steps described above. He or she must also provide a statement from the ministry of health of the country of nationality or last legal permanent residence indicating there is a need for specialists in the area in which the IMG will receive training.

The J-1 visa is valid while the IMG is undertaking medical education or training. Thereafter, the IMG must return to his or her country of nationality or last residence to apply the newly acquired skills. This requirement holds *even if* he or she otherwise meets eligibility criteria for an immigrant visa (e.g., by marrying a US citizen) unless the IMG receives a waiver (discussed below). After two years abroad, the IMG may apply for immigrant status or another nonimmigrant visa category.

H-1B (Temporary Professional Worker): This visa category requires prearranged employment. IMGs may apply for H-1B visa status after their potential employer has filed a petition on their behalf (a GME program is considered an employer). While the number of H-1B visas issued annually is limited, IMGs employed in a research or GME capacity are waived from this limit. H-1B rules grant entry for an initial three years with a possible three-year extension (maximum six years).

IMGs who intend to practice medicine under H-1B status must hold a license in the state in which they intend to work (the license would most likely have been obtained under a J-1 visa). IMGs who are not fully licensed to practice medicine enter under "researcher/teacher" classification, which requires the employer to certify that any patient care will be incidental. If the IMG becomes licensed to practice medicine in the United States, the classification is changed to "medical resident."

O-1 (Extraordinary Ability Temporary Worker): To qualify for O-1 status, an IMG must demonstrate sustained national or international acclaim and recognition for achievements in the field of expertise, for example through receipt of highly recognized prizes or awards, employment in an essential capacity in a distinguished organization or significant publications. The O-1 visa is the only practical way that a J-1 visa holder can stay in the United States and practice medicine without a waiver of the two-year home residence requirement. O-1 status is granted for an initial two-year period subject thereafter to one-year annual extensions.

IMGs are eligible for a few additional types of visas in rare circumstances. These are detailed below.

B-1 (Visitor-Business): B-1 visas are for temporary visitors for business and are only valid for one year or less. IMGs or international medical students are eligible to enter the United States under this type of visa to take an elective course that is part of their formal education, to observe or consult about medical practices and/or to interview for GME positions. Neither employment (compensated by a US entity) nor patient care is permitted under the B-1 visa.

F-1 (Academic Studies): The F-1 visa allows foreign nationals to enter the United States to pursue a full course of study (post-graduate training). However, this visa is rarely used for physicians. Patient care is prohibited unless incidental to training.

TN (Professionals under the North American Free Trade Agreement): TN status is restricted to Canadian and Mexican nationals, per North American Free Trade Agreement (NAFTA) ruling. The intent of this status is for teaching and research. Any clinical care performed must be incidental. This status is issued to Canadian citizens at a port of entry upon presentation of the application and proof of US employment. Mexican citizens must have their employer file a petition for them and apply for the nonimmigrant visa at a US Embassy or Consulate in Mexico. TN status is renewable indefinitely.

L (Intracompany Transferees): The L visa is available to qualified foreign nationals who are being transferred to the United States from a foreign affiliate, parent, or subsidiary. IMGs with L visa status may engage in patient care activities.

J-1 Visa Waivers and Other Status Changes

J-1 visa holders may seek a waiver of the requirement that they return to their home country for two years after completing training. This requirement can be waived if the J-1 will face persecution upon returning to his or her home country, will unduly burden a spouse or children who are US citizens or permanent residents, or pursuant to a recommendation by an interested governmental agency (IGA) or state department of health. If a J-1 visa waiver is granted, the IMG usually switches to H-1B visa status.

Waivers based on persecution or hardship are rare. The persecution option, in particular, is seldom used because, if this situation exists, the person is more likely to apply for permanent residency through asylum. Consequently, waivers are primarily granted through IGAs or state departments of health. The main IGAs are the Appalachian Regional Commission, the Department of Health and Human Services and the Department of Veterans Affairs. The Delta Regional Commission will soon sponsor J-1 waivers as well. In the past, the Department of Agriculture and the Department of Housing and Urban Development were also significant IGAs. In addition, each state may recommend up to 30 waivers per year through the "State 30 program," previously known as the Conrad program.

A J-1 visa waiver based on the recommendation of an IGA or State 30 program requires the IMG to work in a federally designated health professional shortage area, medically underserved area or, if the physician is a psychiatrist,

in a designated mental health professional shortage area. For waivers through an IGA, physicians must practice in a primary care specialty, including general or family practice, general internal medicine, pediatrics, psychiatry or obstetrics and gynecology. Each State 30 program sets its own requirements regarding eligible specialties.

The O-1 visa serves as an additional pathway by which a J-1 visa recipient can remain in the United States following the completion of training. Transition to H-1B or permanent resident status is not allowed without the return home or a J-1 waiver. J-1 holders may also transfer to student (F-1) or tourist (B-2) visas before completing the two-year home requirement.

Changing from H-1B to another visa status is allowed. If IMGs were not initially in J-1 status, or were granted a J-1 waiver because of hardship or persecution, they may apply for permanent residency at any time, if otherwise eligible. IMGs who were originally J-1 visa holders and received waivers through an IGA or state health department may not apply for permanent residency until they have had H-1B status for three years. In most cases, if the IMG has been in H status for 6 years, he or she cannot further extend H-1B status. At that point, the IMG must either change to another nonimmigrant status, have an application pending to adjust status to permanent residency, or leave the United States (in which case the IMG is required to live abroad for one year).

Immigrant Visas (Permanent Resident or Green Card)

An immigrant visa entitles a foreign citizen to live and work permanently in the United States. After three to five years, a permanent immigrant may become a naturalized US citizen. The options for an IMG to obtain an immigrant visa are outlined below.

Relative of Citizen or Permanent Resident: An IMG may obtain permanent residence status if an immediate relative is a US citizen or a permanent resident. Preference is accorded to unmarried sons and daughters (over 21 years of age) of US citizens; spouses and minor children of legal permanent residents or unmarried adult sons and daughters of permanent residents; married sons; and daughters of US citizens and brothers and sisters of US citizens, in that order.

Diversity Immigrant: Diversity visas are chosen by a random computer-generated lottery. They are distributed among six world geographic

regions. More visas go to regions with lower rates of immigration. No visas go to citizens of countries that have sent more than 50,000 immigrants to the US in the past five years (currently Mexico, Canada, India, China [Mainland], Philippines, Taiwan, South Korea, Vietnam, Great Britain, Jamaica, Dominican Republic, and El Salvador). No one country may receive more than 7 percent of the diversity visas available to a given region in any one year (US Department of State, 2003).

Employment-Based Visas: Each year, the Immigration and Nationality Act authorizes 140,000 or more employment-based visas, divided into five preference categories. Employment First Preference (EB-1) or "Priority" Workers are divided into three categories: persons with extraordinary ability, outstanding professors and researchers and certain executives and managers. Persons of extraordinary ability (holding documentation of sustained national and international acclaim) do not need a specific job offer for immigration as long as they are entering the United States to continue work in their field of ability.[7] Consequently, they can file a petition with the INS themselves, rather than having an employer sponsor them. For all other employment-based visas, including other EB-1 subcategories, the prospective employer must provide a job offer and file a petition with the INS.

Professionals with advanced degrees, or persons of "exceptional ability" are classified as Employment Second Preference (EB-2). In addition to holding a job offer, these professionals must have labor certification approved by the Department of Labor (DOL). Labor certification is a process that demonstrates there are no US workers willing or qualified to take the work and that the proposed employment will not adversely affect prevailing wages or working conditions for similarly-employed US workers. This process can take one to two years.

Three more employment-based visa preference categories exist; however they do not generally apply to IMGs.

National Interest Waiver Classification: A national interest waiver exempts IMGs from the labor certification requirement. A National Interest Waiver is issued to professionals whose continued residence and employment in the United States would benefit the national interest. In the case of IMGs, this pertains to those that provide at least five years of full-time clinical medical

---

[7] EB-1 permanent immigrants of extraordinary ability are not the same as O-1 (persons with extraordinary ability) *nonimmigrant* visa holders.

service in a primary care medical specialty that has been designated in short supply in a given geographical area.

Summary

IMGs have long been an important part of US health care. This primer clarifies each of the requirements that an IMG must meet in order to work or train in the United States, including certification by the ECFMG, GME, state medical licensing and immigration. We hope that the primer helps researchers, policy makers and employers better understand the complex mechanisms by which nearly one-fourth of US physicians enter GME and employment.

Glossary of IMG-Related Terms

ACGME	Accreditation Council for Graduate Medical Education
CSA	Clinical Skills Assessment of the ECFMG certification process
DHHS	US Department of Health and Human Services
DOL	Department of Labor
ECFMG	Educational Commission for Foreign Medical Graduates
Foreign-born/ foreign-national IMG	An IMG (see below) who is a citizen of a country other than the United States
GME	Graduate Medical Education: residency or fellowship training
H-1B visa	Temporary Worker visa
IGA	Interested Government Agency: a government agency who may recommend IMGs for waivers of the two-year J-1 visa home return requirement
IMG	International Medical Graduate: a physician that has graduated from a medical school outside of the United States and works in the United States practicing medicine, teaching, obtaining training or conducting research
INS	Immigration and Naturalization Service
J-1 visa	Exchange Visitor visa
J-1 visa waiver	Exemption from the 2 year return home otherwise required of J-1 visa holders
Labor certification	A process required for most employment-based visas that demonstrates that the foreign employee is not displacing a US worker or negatively affecting the US labor market

NRMP	National Resident Matching Program: a computerized system which determines the best match between residency applicants' choice of programs and residency directors' choice of candidates
O-1 visa	Alien with Extraordinary Ability visa
State 30 program	A program through which each state department of health may sponsor up to 30 IMGs a year for J-1 visa waivers; formerly called the Conrad program
TN visa	Professionals Under the North American Free Trade Agreement visa
USMG	United States Medical Graduate: a physician who has graduated from a US or, in most cases, Canadian medical school
USMLE	United States Medical Licensing Examination: a three step examination required for licensing in all US states

Sources

_____. Immigration Information for IMGs. http://www.ama-assn.org/ama/pub/category/1553.html. Accessed 11/8/2002.

_____. State Licensure Board Requirements for IMG. http://www.ama-assn.org/ama/pub/printcat/1555.html. Accessed 11/8/2002.

Allen C. Ladd Immigration Law Office, P.C. US Immigration Law: Foreign Physicians, American Sponsors. http:www.medzilla.com/allenladd-1.html. Accessed 11/8/2002.

American College of Physicians-American Society of Internal Medicine Online. International Medical Graduates-Immigration Law & International Medical Graduates. http://www.acponline.org/img/jafri.htm. Accessed 11/8/2002.

American Medical Association. ECFMG Certification Information. http://www.ama-assn.org/ama/pub/printcat/1552.html. Accessed 11/8/2002.

Diffenbaugh & Associates, Inc. Options for Foreign National Physicians. http:www.diffenbaughassociates.com/pages/immigration.html#H-!B_Visa. Accessed 11/8/2002.

Educational Commission for Foreign Medical Graduates. http://www.ecfmg.org/index.html. Accessed 11/8/2002.

FAIMER. International Medical Education Directory. Available from http://imed.ecfmg.org/. Accessed 8/12/2003.

Immigration & Naturalization Service. Immigration Under the National Interest Waiver for Physicians in Underserved Areas. http:www.ins.usdoj.gov/graphics/services/residency/PhysWaiver.htm. Accessed 11/8/2002.

Ingber & Aronson, Immigration & Nationality Lawyers. "The American Immigration System: An overview of requirements and general information." http://www.ingber-aronson.com/publications/overview.html. Accessed 11/8/2002.

Mick SS, Lee SD and Wodchis WP. Variations in Geographical Distribution of Foreign and Domestically Trained Physicians in the United States: 'Safety Nets' or 'Surplus Exacerbation'? SSM. 2000;50:185-202.

Siskind G. "The Delta Regional Authority Physician J-1 Waiver Program." Immigration Daily. February 28, 2003. From http://www.ilw.com. Accessed 6/12/03.

United States Department of State. Bureau of Consular Affairs. http://travel.state.gov. Accessed 7/2/2003.

Whelan GP, Gary E, Kostis J, Boulet JR and Hallock JA. The Changing Pool of International Medical Graduates Seeking Certification Training in US Graduate Medical Education Programs. JAMA. 2002;288:1079-1084.

Figure 1: Foreign-born IMG Licensing and Immigration Process

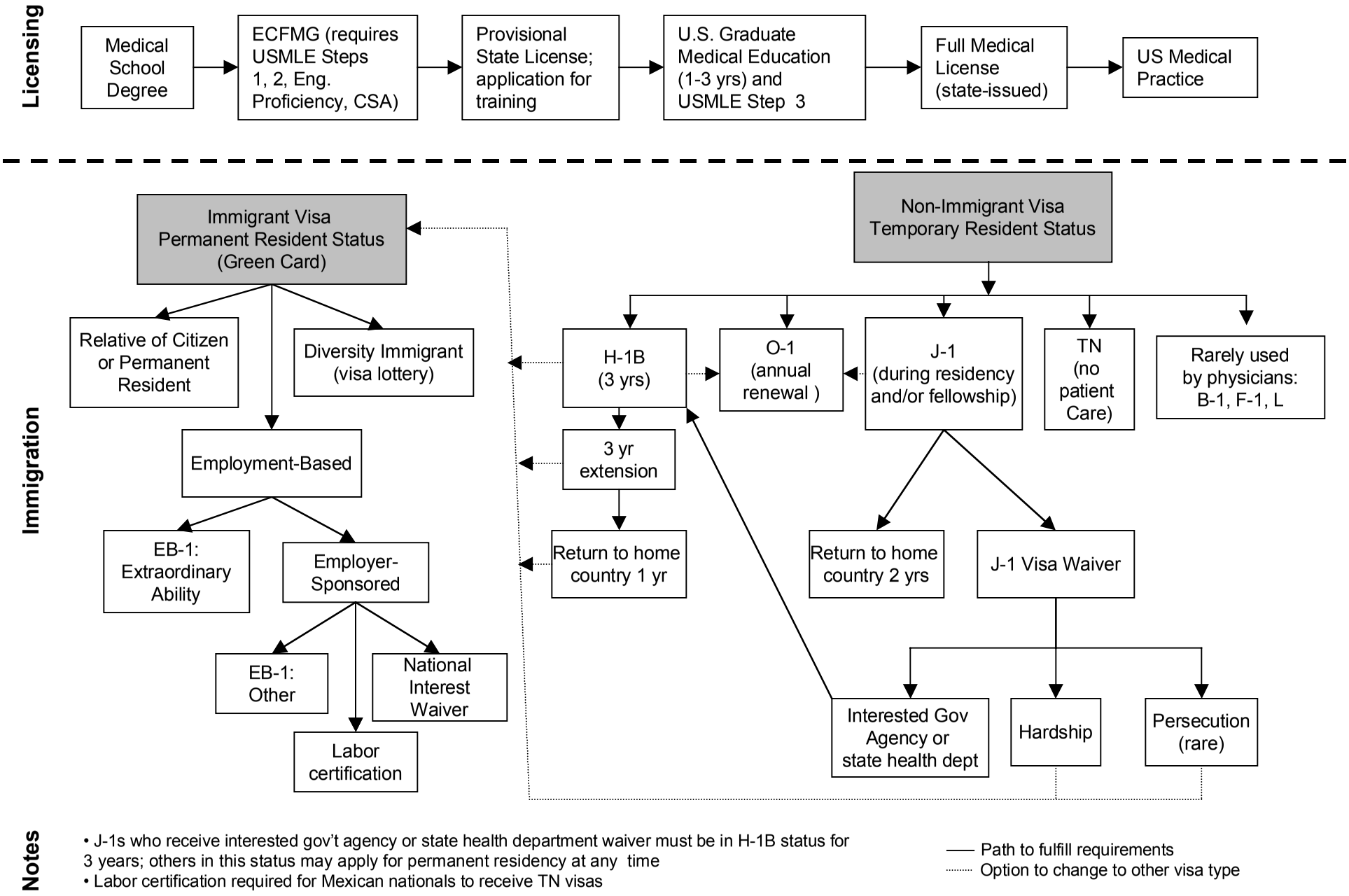

Figure 2: Summary of Temporary Visas Appropriate to IMGs Working in the United States

Type	Length	Patient care allowed?	Special requirements to transfer to different visa type
J-1 (Exchange Visitor)	Length of training	Yes	2-year return home or waiver
H-1B (Temporary Worker)	3 years, with 3-year extension possible	Yes, if appropriately certified	With J-1 Visa Waiver from Interested Government Agency or state health department, must wait three years
O-1 (Alien with Extraordinary Ability)	2 years, with annual renewal thereafter; no statutory limit	Yes	None (unless previously subject to 2-year residency requirement)
TN (Professionals under the North American Free Trade Agreement)	Indefinite	Only if incidental to teaching or conducting research	None
Available, but rarely used:			
B-1 (Visitor for Business)	Up to 1 year	No	None
F-1 (Academic studies)	Course of training	No	None
L (Intracompany transferees)	Initially 3 years; up to 5 years for specialized-knowledge employees and up to 7 years for managers and executives	Yes	None

Previous WWAMI Center for Health Workforce Studies and Rural Health Research Center Working Papers

The WWAMI Rural Health Research Center was established in 1988. The WWAMI Center for Health Workforce Studies was established in 1998.

1. Hart, L. Gary; Rosenblatt, Roger A.; and Amundson, Bruce A. Is There a Role for the Small Rural Hospital? January 1989.
2. Hart, L. Gary; Rosenblatt, Roger A.; and Amundson, Bruce A. Rural Hospital Utilization: Who Stays and Who Goes? March 1989.
3. Amundson, Bruce A. and Hughes, Robert D. Are Dollars Really the Issue for the Survival of Rural Health Services? June 1989.
4. Nesbitt, Thomas S.; Rosenblatt, Roger A.; Connell, Frederick A.; and Hart, L. Gary. Access to Obstetrical Care in Rural Areas: Effect on Birth Outcomes. July 1989.
5. Schleuning, Dianne; Rice, George; and Rosenblatt, Roger A. Addressing Barriers to Rural Perinatal Care: A Case Study of the Access to Maternity Care Committee in Washington State. October 1989.
6. Rosenblatt, Roger A.; Whelan, Amanda; and Hart, L. Gary. Rural Obstetrical Access in Washington State: Have We Attained Equilibrium? January 1990.
7. Rosenblatt, Roger A; Weitkamp, Gretchen; Lloyd, Michael; Schafer, Bruce; Winterscheid, Loren C.; Vaughn, J. Daniel; and Hart, L. Gary. Are Rural Family Physicians Less Likely to Stop Practicing Obstetrics Than Their Urban Counterparts: The Impact of Malpractice Claims. April 1990.
8. Rosenblatt, Roger A.; Whelan, Amanda; Hart, L. Gary, Long, Constance; Baldwin, Laura-Mae; and Bovbjerg, Randall R. Tort Reform and the Obstetric Access Crisis: The Case of the WAMI States. June 1990.
9. Hart, L. Gary; Pirani, Michael; and Rosenblatt, Roger A. Causes and Consequences of Rural Small Hospital Closures from the Perspectives of Mayors. September 1990.
10. Welch, H. Gilbert; Larson, Eric H.; Hart, L. Gary; and Rosenblatt, Roger A. Readmission Following Surgery in Washington State Rural Hospitals. January 1991.
11. Amundson, Bruce A.; Hagopian, Amy; and Robertson, Deborah G. Implementing a Community-Based Approach to Strengthening Rural Health Services: The Community Health Services Development Model. February 1991.
12. Hoare, Geoffrey; Katz, Aaron; Porter, Alice; Dannenbaum, Alex; and Baldwin, Harry. Rural Health Care Linkages in the Northwest. April 1991.
13. Whitcomb, Michael E.; Cullen, Thomas J.; Hart, L. Gary; Lishner, Denise M.; and Rosenblatt, Roger A. Impact of Federal Funding for Primary Care Medical Education on Medical Student Specialty Choices and Practice Locations (1976-1985). April 1991.
14. Larson, Eric H.; Hart, L. Gary; and Rosenblatt, Roger A. Is Rural Residence Associated with Poor Birth Outcome? June 1991.
15. Williamson, Harold A.; Rosenblatt, Roger A.; Hart, L. Gary. Physician Staffing of Small Rural Hospital Emergency Departments: Rapid Change and Escalating Cost. September 1991.
16. Hart, L. Gary; Pirani, Michael J.; Rosenblatt, Roger A. Rural Hospital Closure and Local Physician Supply: A National Study. December 1991.
17. Larson, Eric H.; Hart, L. Gary; Hummel, Jeffrey. Rural Physician Assistants: Results from a Survey of Graduates of MEDEX Northwest. May 1992.
18. Hart, L. Gary; Robertson, Deborah G.; Lishner, Denise M; Rosenblatt, Roger A. Part 1: CEO Turnover in Rural WAMI Hospitals. Part 2: Rural Versus Urban CEOs: A Brief Report on Education and Career Location Patterns. August 1992.
19. Williamson, Harold; Hart, L. Gary; Pirani, Michael J.; Rosenblatt, Roger A. Rural Hospital Surgical Volume: Cutting Edge Service or Operating on the Margin? January 1993.
20. Rosenblatt, Roger A.; Saunders, Greg; Tressler, Carolyn; Larson, Eric H.; Nesbitt, Thomas S.; Hart, L. Gary. Do Rural Hospitals Have Less Obstetric Technology than their Urban Counterparts? A Statewide Study. March 1993.
21. Williamson, Harold A.; Hart, L. Gary; Pirani, Michael J.; Rosenblatt, Roger A. Market Shares for Rural Inpatient Surgical Services: Where Does the Buck Stop? April 1993.
22. Geyman, John P.; Hart, L. Gary. Primary Care at a Crossroads: Progress, Problems and Policy Options. May 1993.

23. Nesbitt, Thomas S.; Larson, Eric H.; Rosenblatt, Roger A.; Hart, L. Gary. Local Access to Obstetric Care in Rural Areas: Effect on Prenatal Care, Birth Outcomes, and Costs. August 1993.
24. Grossman, David; Hart, L. Gary; Rivara, Frederick P.; Rosenblatt, Roger A.; Maier, Ronald V. From Roadside to Bedside: The Regionalization of Motor Vehicle Trauma Care in a Remote Rural County. October 1993.
25. Baldwin, Laura-Mae; Hart, L. Gary; West, Peter A.; Norris, Tom E.; Gore, Edmond. Two Decades of Experience in the University of Washington Family Medicine Residency Network: Practice Differences Between Graduates in Rural and Urban Locations. November 1993.
26. Statewide Office of Rural Health and Washington Rural Health Association. Implementing Health Care Reform: Setting a Course for Rural Washington. Summary of a Workshop, November 9-10, 1993, Seattle, Washington. January 1994.
27. Williamson, Harold A.; West, Peter A.; Hagopian, Amy. Scope of Rural Medical Services: A Workbook for Hospital Trustees. March 1994.
28. Cullen, Thomas J.; Hart, L. Gary; Whitcomb, Michael E.; Lishner, Denise M.; Rosenblatt, Roger A. The National Health Service Corps: Rural Physician Service and Retention. September 1994.
29. Neighbor, William E.; Baldwin, Laura-Mae; West, Peter A.; Bezy, Judith M.; Hart, L. Gary. Experience of Rural Hospitals with the National Practitioner Data Bank. October 1994.
30. Rosenblatt, Roger A.; Mattis, Rick; Hart, L. Gary. Access to Legal Abortions in Rural America: A Study of Rural Physicians in Idaho. November 1994.
31. West, Peter A.; Norris, Thomas E.; Gore, Edmond J.; Baldwin, Laura-Mae; Hart, L. Gary. The Geographic and Temporal Patterns of Residency-Trained Family Physicians: University of Washington Family Practice Residency Network. February 1995.
32. Hart, L. Gary; Dobie, Sharon A.; Baldwin, Laura-Mae; Pirani, Michael J.; Fordyce, Meredith; Rosenblatt, Roger A. Rural and Urban Differences in Physician Resource Use for Low-Risk Obstetrics. March 1995.
33. Rosenblatt, Roger A.; Saunders, Greg; Shreffler, Jean; Pirani, Michael J.; Larson, Eric H.; Hart, L. Gary. Beyond Retention: National Health Service Corps Participation and Subsequent Practice Locations of a Cohort of Rural Family Physicians. April 1995.
34. Dobie, Sharon; Hart, L. Gary; Fordyce, Meredith; Andrilla, Holly; Rosenblatt, Roger A. Content of Obstetric Care for Rural, Medicaid, and Minority Women. June 1995.
35. Melzer, Sanford M.; Grossman, David C.; Hart, L. Gary; Rosenblatt, Roger A. Hospital Services for Rural Children in Washington State: Where Do They Go for Care and Who Takes Care of Them? October 1995.
36. Larson, Eric H.; Hart, L. Gary; Rosenblatt, Roger A. Is Rural Residence a Risk Factor for Poor Birth Outcome? A National Study. December 1995.
37. Norris, Thomas E.; Reese, Jennifer W.; Rosenblatt, Roger A. Are Rural Family Physicians Comfortable Performing Cesarean Sections? March 1996.
38. Lishner, Denise M.; Richardson, Mary; Levine, Phyllis, Patrick Donald. Access to Primary Health Care Among Persons with Disabilities in Rural Areas: A Summary of the Literature. April 1996.
39. Dunbar, Peter J.; Mayer, Jonathan D.; Fordyce, Meredith A.; Lishner, Denise M.; Hagopian, Amy; Spanton, Ken; Hart, L. Gary. A Profile of Anesthesia Provision in Rural Washington and Montana. May 1996.
40. Perrin, Edward B.; Hart, L. Gary;, Goldberg, Bruce; Grossman, David; Skillman, Susan M.; Paul, Britt. Patient Outcomes and Medical Effectiveness Research in Rural Areas for Racial/Ethnic Populations: Issues and Recommendations. July 1996.
41. Perrin, Edward B.; Hart, L. Gary; Skillman, Susan M.; Paul, Britt; Hanken, Mary Alice; Hummel, Jeffrey. Health Information Systems and Their Role in Rural Health Services: Issues and Policy Recommendations. August 1996.
42. Saver, Barry; Casey, Susan; House, Peter; Lishner, Denise; Hart, Gary. Antitrust and Action Immunity in Rural Washington State. Part I: User's Guide to Antitrust and Rural Health Care Environments. Part II: Antitrust Issues in Rural Washington State. January 1997.
43. Dyck, Sarah; Hagopian, Amy; House, Peter J.; Hart, L. Gary. Northwest Rural Hospital Governing Boards. November 1997.
44. Doescher, Mark P.; Ellsbury, Kathleen E.; Hart, L. Gary. The Distribution of Rural Female Generalist Physicians in the United States. February 1998.
45. Wright, George E.; Andrilla, C. Holly A. How Many Physicians Can a Rural Community Support? A Practice Income Potential Model for Washington State. April 2001.

46. Saver, Barry G.; Bowman, Robert; Crittenden, Robert A.; Maudlin, Robert K.; Hart, L. Gary. Barriers to Residency Training of Physicians in Rural Areas. April 1998.

47. Larson, Eric H.; Hart, L. Gary; Goodwin, Mary-Katherine; Geller, Jack; Andrilla, Catherine. Dimensions of Retention: A National Study of the Locational Histories of Physician Assistants. April 1998.

48. Baldwin, Laura-Mae; Rosenblatt, Roger A.; Schneeweiss, Ronald; Lishner, Denise M.; Hart, L. Gary. Rural and Urban Physicians: Does the Content of their Practices Differ? May 1998.

49. Geyman, John P.; Hart, L. Gary; Norris, Thomas E.; Coombs, John B.; Lishner, Denise M. Physician Education and Rural Location: A Critical Review. February 1999.

50. Hart, L. Gary; Morrill, Richard; Cromartie, John. A Guide to the Use of Rural and Urban Commuting Areas (RUCAs) in Health Care Analyses. (forthcoming)

51. Hart, L. Gary; Rosenblatt, Roger A.; Lishner, Denise M.; Friedman, Harvey; Baldwin, Laura-Mae. Where Do Elderly Rural Residents Obtain their Physician Care? A Study of Medicare Patients in Washington State. (forthcoming)

52. Ellsbury, Kathleen E.; Doescher, Mark P.; Hart, L. Gary. The Production of Rural Female Generalists by U.S. Medical Schools. January 1999.

53. Lishner, Denise M.; Rosenblatt, Roger A.; Baldwin, Laura-Mae; Hart, L. Gary. Emergency Department Use by the Rural Elderly. November 1998.

54. Baldwin, Laura-Mae; Grossman, David C.; Casey, Susan; Hollow, Walter; Sugarman, Jonathan R.; Freeman, William L.; Hart, L. Gary. Perinatal and Infant Health Among Rural and Urban American Indians/Alaska Natives. June 1999.

55. Larson, Eric H.; Hart, L. Gary; Muus, Kyle; Geller, Jack. Content of Physician Assistant Practice: Results from a National Survey. May 1999.

56. Richardson, Mary; Casey, Susan; Rosenblatt, Roger A. Local Health Districts and the Public Health Workforce: A Case Study of Wyoming and Idaho. November 1999.

57. Larson, Eric H.; Hart, L. Gary; Ballweg, Ruth. National Estimates of Physician Assistant Productivity. January 2000.

58. Hart, L. Gary; Norris, Thomas E.; Lishner, Denise M. Attitudes of Family Physicians in Washington State Toward Physician-Assisted Suicide. February 2002.

59. Rosenblatt, Roger A.; Baldwin, Laura-Mae; Chan, Leighton; Fordyce, Meredith A.; Hirsch, Irl B.; Palmer, Jerry P.; Wright, George E.; Hart, L. Gary. The Quality of Care Received by Diabetic Patients in Washington State: A Rural-Urban Comparison. March 2000.

60. Wright, George E.; Paschane, David M.; Baldwin, Laura-Mae; Domoto, Peter; Cantrell, Diana; Hart, L. Gary. Distribution of the Dental Workforce in Washington State: Patterns and Consequences. March 2001.

61. Rosenblatt, Roger A.; Casey, Susan; Richardson, Mary. Rural-Urban Differences in the Public Health Workforce: Findings from Local Health Departments in Three Rural Western States. January 2001.

62. Ellsbury, Kathleen E.; Baldwin, Laura-Mae; Johnson, Karin; Runyan, Sue; Hart, L. Gary. Gender-Related Factors in the Recruitment of Generalist Physicians to the Rural Northwest. February 2001.

63. Norris, Thomas E.; Hart, L. Gary; Larson, Eric H.; Tarczy-Hornoch, Peter; Masuda, David; Fuller, Sherrilynne; House, Peter J.; Dyck, Sarah M. Low-Bandwidth, Low-Cost Telemedicine Consultations Between Rural Family Physicians and Academic Medical Center Specialists: A Multifaceted Satisfaction Study. February 2001.

64. Larson, Eric H.; Palazzo, Lorella; Berkowitz, Bobbie; Pirani, Michael J.; Hart, L. Gary. The Contribution of Nurse Practitioners and Physician Assistants to Generalist Care in Underserved Areas of Washington State. June 2001.

65. Rosenblatt, Roger A.; Rosenblatt, Fernne Schnitzer. The Role and Function of Small Isolated Public Health Departments: A Case Study in Three Western States. June 2001.

66. Thompson, Matthew J.; Skillman, Susan M.; Johnson, Karin; Schneeweiss, Ronald; Ellsbury, Kathleen; Hart, L. Gary. Assessing Physicians' Continuing Medical Education Needs in the U.S.-Associated Pacific Jurisdictions. September 2001.

67. Hart, L. Gary. The Evaluation Questionnaires of Office for the Advancement of Telehealth Grantees. September 2001.

68. Skillman, Susan M.; Hutson, Troy; Andrilla, C. Holly A.; Berkowitz, Bobbie; Hart, L. Gary. How Are Washington State Hospitals Affected by the Nursing Shortage? Results of a 2001 Survey. May 2002.

69. Rosenblatt, Roger A.; Schneeweiss, Ronald; Hart, L. Gary; Casey, Susan; Andrilla, C. Holly A.; Chen, Frederick M. Family Medicine Residency Training in Rural Areas: How Much Is Taking Place, and Is It Enough to Prepare a Future Generation of Rural Family Physicians? March 2002.

70. Palazzo, Lorella; Hart, L. Gary; Skillman, Susan M. The Impact of the Changing Scope of Practice of Physician Assistants, Nurse Practitioners, and Certified Nurse-Midwives on the Supply of Practitioners and Access to Care: Oregon Case Study. March 2002.

71. House, Peter J. The Direct-Care Paraprofessional Workforce Providing Long-Term Care Services in the United States: Wyoming Case Study. March 2002.

72. Baldwin, Laura-Mae; Beaver, Shelli K.; Hart, L. Gary; MacLehose, Richard F; Every, Nathan; Chan, Leighton. Quality of Care for Acute Myocardial Infarction in Rural and Urban U.S. Hospitals. June 2002.

73. Patterson, Davis G.; Skillman, Susan M. Health Professions Education in Washington State: 1996-2000 Program Completion Statistics. October 2002.

74. Chan, Leighton; Hart, Gary; Ricketts, Thomas C., III; Beaver, Shelli K. An Analysis of Medicare's Incentive Payment Program for Physicians in Health Professional Shortage Areas. August 2003.

75. Women's Reproductive Health Care in Rural Washington: Who Provides Care and What Is their Scope of Practice? October 2001.