

***Assets and Needs Assessment of Foreign
Trained Medical and Nursing Graduates in
Minnesota and Utilization of Foreign Trained Healthcare
Professional Graduates***

**Prepared by
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Conducted on behalf of African & American Friendship Association for
Cooperation & Development
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Assets and Needs Assessment of Foreign Trained Medical and Nursing Graduates in Minnesota

A Review of literature

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A literature review commissioned by AAFACD, Inc. in collaboration with Center for Urban and Rural Affairs (CURA) University of Minnesota

Executive summary

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Abstract

In as much as the Foreign Trained Health Care Professional Graduates (FTHCPGs) play a critical role in filling the US health care workforce, they endure a complicated set of education and licensing requirements to practice in the US. There are a lot of foreign trained healthcare professionals who have lost touch with the changes in health care industry. They have seen their dreams disappear hence some have given up or decided to retrain themselves for other health care jobs such as nursing assistants, physician assistants, nurses, therapists and research assistants. These jobs, though, require different skills, pay less and may require several additional years of education. In addition, even while doing this, they must take national certification exams in those fields, all on their own time and at their own expense. This has led to many FTHCPGs hop from job to job, state to state, in unpaid volunteer jobs called externships or observorships. This paper examines 1) The existing barriers and opportunities to overcome those barriers so FTHCPGs can continue to work in their specific medical field after immigrating to Minnesota, USA. 2). System adaptations and changes that would be feasible to assist the FTHCPGs to work in their choice of profession. The paper will also compare the model being used in FTHCPGs licensure process in Minnesota to those of California CA, Florida FL and New York NY who have been able to incorporate more foreign trained medical and nursing graduates into their health care delivery than in Minnesota. This paper will not examine the literature based on IMGs that the U.S. Citizenship and Immigration Services (USCIS) regards to be in the US based on H-1B or J- Visas or either seeking this visas.

Abbreviations

ABMS	American Board of Medical Specialties
ACGME	Accreditation Council for Graduate Medical Education
ADTS	Automated Document Tracking Systems
AHEC	Area Health Education Center
AMA	American Medical Association
AOA	American Osteopathic Association
CER	Credentials Evaluation review
CK	Clinical Knowledge
COMLEX	Comprehensive Osteopathic Medical Licensing Examination,
CS	Clinical Skills
CSA	Clinical Skills Assessment
CSAE	Clinical Skills Assessment Examination
ECFMG	Education Commission for Foreign Medical Graduates
FAIMER	Foundation for Advancement of International Medical Education and Research
FLEX	Federation Licensing Examination
FMGEMS	Foreign Medical Graduate Examination in the Medical Sciences
FMGs	Foreign Medical Graduates
FNs	Foreign trained Nurses
FREIDA	Fellowship and Residency Electronic Interactive Database Access System
FRN	Foreign Registered Nurses
FSMB	Federation of State Medical Boards
FTHCPGs	Foreign Trained HealthCare Professional Graduates
GME	Graduate Medical Education
ICN	International Council of Nurses
IMEA	Indirect Medical Education Adjustment
IMG	International Medical Graduate
IIRIRA	Illegal Immigration Reform and Immigrant Responsibility Act
LCME	Liaison Committee for Medical Education
NRMP	National Residency Matching Program,
ROL	Ranking Order List,
SBE	State Board Examination
SBML	State Board of Medical Licensure
SPEX	Special Purpose Examination
USDHHS	US Department of Health and Human Services
US-MD	United States Medical Doctors
US-MG	United States Medical Graduates
USMLE	United States Medical Licensing Examination™
VQE	Visa Qualifying Examination
WHO	World Health Organization

SECTION A

International Medical Graduates (IMGs)

Overview

Medical schools outside the United States and Canada vary in educational standards, curriculum, and evaluation methods. The ECFMG, through its program of certification, assesses whether physicians graduating from these schools are ready to enter programs of graduate medical education in the United States¹. The purpose of ECFMG Certification is to assess the readiness of IMGs to enter U.S. residency and fellowship programs that are accredited by the ACGME.

There are two paths for certifying eligibility for application to a graduate medical education position in the United States- ECFMG and Fifth Pathway. Both of these methods are accessible by the U.S. citizen and legal resident doctors/medical students studying abroad. (It is important to not have completed an internship or social service in your country to be eligible for Fifth Pathway). The main differences between the two processes lie in the time needed to complete certification. The ECFMG certification qualifies a foreign medical graduate to apply for residencies and licensure in all 50 states and in U.S. territories². In 50 states, individuals who hold Fifth Pathway certificates (but not the ECFMG certificate) are eligible for licensure

To be certified by ECFMG, international medical graduates must, among other requirements, pass a medical science examination. Step 1 and Step 2 Clinical Knowledge (Step 2 CK) of the USMLE™ are the exams currently administered that meet the medical science examination requirement for ECFMG Certification. To meet the medical science examination requirement for ECFMG Certification, one must pass both Step 1 and Step 2 CK. ECFMG Certification is required before applying to take Step 3 of the USMLE

The USMLE, ECFMG program of certification) assesses a physician's ability to apply knowledge, concepts and principles that are important in health and disease and that constitute the basis of safe and effective patient care. Each of the three Steps complements the others; no Step can stand alone in the assessment of readiness for medical licensure³.

Definition of IMGs

IMGs are physicians in residency training and in practice in the United States who have graduated from medical schools in countries other than the United States and Puerto Rico. FTHCPGs comprises of IMGs and FNs. Whilst IMGs are defined as physicians in residency training and practicing medicine in the US who graduated from medical schools in countries other than the US and Puerto Rico, they fall in two categories based on nationality. There are US-born IMGs here after referred to as US-MG and foreign born IMGs who will be referred to as FTMG. It's good to note that FTMGs comprises of foreign nationals who are in the US as naturalized citizen, immigrants on green cards or those on temporary visas like H-1B or J-1.

Total IMG Population in U.S. - 23.5% (210,952)
India - 19.5% (41,235)
Philippines - 9.2% (19,449)
Mexico - 5.7% (12,168)
Pakistan - 4.6% (9,755)
Dominican Republic - 3.3% (6,988)

According to the AMA⁴, IMGs in the United States account for approximately 25 percent of physicians in residency and fellowship programs. Ninety percent of all IMGs are foreign born, and 80 percent of current IMG residents and fellows are foreign born. The countries that contribute most heavily to the U.S.'s IMG population include India, Pakistan, the Philippines, China and Iran,

according to the Educational Commission for Foreign Medical Graduates (ECFMG).

Facts about IMGs

FTHCPGs are an important component of the US physician workforce. In 2002, the IMGs constituted 23% of the U.S. physician population and 24% of resident physicians⁵. In the same year, of 874,589 physicians, 198,703 IMGs received medical degrees from 127 different countries, accounting for 22.7% of the total physician count. The heaviest concentrations of FTMGs are in New Jersey (40.3% of the workforce), New York (40.2%), Florida (33.1%) and Illinois (33.7%). Almost half of all FTMGs (48%) train in primary care specialties vs. 33% of U.S. graduates.

In 2002 of the 154,576 total IMG population, 130,741 (85%) are in patient care, 7,635 (5%) are in medical teaching, administration or research, and the remainder are not classified, are inactive, or have an unknown address. In Minnesota, approximately 41 % of the 2002 IMGs completing GME were U.S native born or naturalized U.S citizens or permanent residents, while 55 % held J1 visas. Of all physicians re-licensed through the state in of Minnesota in 2000 only 62.3 percent reported that they actively use their license and are employed in Minnesota⁶. Almost one quarter (23.7 percent) report an active license, but practice in another state. Roughly 6% of these physicians practice in a state bordering Minnesota. Another 10% do not currently hold an active license to practice medicine. Of these inactive license holders 44.5 percent are retired.

2002-2005 U.S. Match Statistics

Some 8,763 FMGs applied to the NRMP in 2002-3⁷. Of these 1,713 were excluded as they had not completed ECFMG certification by match day. Of the 5,029 FMGs who had certification and submitted a rank order list, 2,799 (56%) were successful in matching. US citizens who completed their medical education abroad had a very similar matching result to FMGs. By comparison, 93% of graduates of US medical schools were successfully matched.

US Foreign Graduates	2002	2003	2004
withdrew	856	791	699
no ranking	682	578	463
matched PGY-1	1092	1085	1117
unmatched PGY-1	937	902	898
Non- US foreign graduates			
withdrew	2079	2305	1882

no ranking	1943	1429	1243
matched PGY-1	2335	2799	2970
unmatched PGY-1	2221	2230	2701
5th Pathway			
withdrew	28	41	52
no ranking	21	21	15
matched PGY-1	67	63	62
unmatched PGY-1	47	60	42
Source: Internal Medicine Website			

Some 4768 and 4,698 FMGs applied to the NRMP in 2004-5 respectively. In the same period, 1,781 were US-IMGs in 2005 and 1695 in 2004⁸.

Match Program Applicant Distribution⁹						
	% in each Year					
Category of Applicants	2005	2004	2003	2002	2001	2000
US Seniors	58.10	57.80	59.80	61.10	60.30	57.30
Canadian	0.30	0.30	0.30	0.40	0.30	0.30
US Physicians	5.00	4.80	4.20	4.30	4.10	3.80
D.O	6.00	6.20	5.90	5.60	5.20	4.60
5th Pathway	0.40	0.40	0.50	0.50	0.40	0.20
US-IMG	8.30	8.00	8.30	8.70	8.30	8.70
Non US-IMG	21.90	22.50	21.00	19.40	21.30	25.10
Total Applicants	21,454	21,192	20,908	20,602	20,642	20,598

IMGs by Specialty¹⁰

The specialties who matched the fewest FMGs (i.e. most competitive) were dermatology (0.8% of matched applicants were FMGs), orthopedic surgery (1%), emergency medicine (1.2%), radiation oncology (1.9%), diagnostic radiology (5.1%) and categorical surgery (5.5%). Few FMGs are accepted into transitional and preliminary medicine programs. The residencies matching the most FMGs were categorical internal medicine (25%), rehabilitation medicine (19%), psychiatry (16%), family practice and pathology (both 15%).

Nearly half (47%) of all FMGs matched into categorical internal medicine residencies, Family practice took 15% of the FMG applicants; pediatrics took 9%, psychiatry 5% and preliminary surgery 5%. Of the 22,230 IMGs who are in residency training or are clinical fellows, more than 4,000 are American citizens, 8,200 are immigrants and are permanent residents, and 8,900 are in the U.S. on an exchange visitor visa and plan to return to their country of origin unless the INS grants them a waiver because they are needed to provide care to the American public. Therefore, some 55% of all IMGs in graduate medical education GME programs are U.S. citizens or lawful immigrants

IMGs Overall Licensure Process

a. Steps to Practice Medicine in the U.S

IMGs must have a valid Standard ECFMG Certificate as one of the prerequisites to enter GME¹¹.

Physicians who received their medical degree outside the US or Canada are required to follow the below four steps to begin practicing medicine in the U.S¹²;

1. [ECFMG Certification](#). Through its program of certification, the ECFMG assesses the readiness of international medical graduates to enter US residency or fellowship programs. The process for certification and the required retraining are described at www.ecfm.org
2. [Residency Program Requirements](#) After certification, physicians who wish to practice medicine in the US must complete an accredited residency training program in the US or Canada - this process will take at least three years. The physician will have to complete a residency program regardless of the training they have received overseas. Many medical graduates are placed in residency programs through the National Residency Match Program, www.nrmp.org
3. [State licensure](#) Every medical graduate must apply for a license in the state(s) in which they intend to practice. Generally, one has to complete 1-3 years of residency before applying for a license.
4. [Immigration](#) (for non-US residents). The entry of foreign-born graduates of non-US medical schools to the US is governed by the US Immigration and Naturalization Service (INS).

IMGs may also practice medicine under:

- I. [The Fifth Pathway Program](#) is designed for IMGs who completed undergraduate college (Bachelors degree) in the U.S. and completed all their formal medical school requirements except the internship and/or social service obligation outside the U.S. or Canada. In the past thirty years, only about seven thousand have been awarded Fifth pathway credentials, so approximately 1% of practicing physicians in the U.S. hold the credential¹³.
- II. [Licensure Requirement Exemptions for Eminent Physicians and Medical School Faculty](#)
A very small number of IMGs may be eligible for special consideration if they are either "eminent" physicians or are going to serve on the faculty of a medical school or teaching hospital.

Only 10 State board's license physicians through recognition of eminence in medical education or medical practice¹⁴, they are;

California (MD and DO)
Delaware
Washington, D.C.
Indiana
Louisiana

Maryland
Montana
New Hampshire (*courtesy license for educational purposes is provided to eminent physicians under limited circumstances*)

North Carolina

Pennsylvania

Physicians appointed to a medical school faculty are excused from the graduate medical education (GME) requirement for limited licensure in 15 states listed below:

Arizona

Connecticut

California (MD and DO)

Florida

Georgia (physicians appointed to a medical faculty are excused from the GME requirement for limited licensure for teaching only)

Iowa

Ohio

Vermont

Louisiana

Pennsylvania

West Virginia

Maryland

Rhode Island

North Carolina

Tennessee

Physicians appointed to a medical school faculty are excused from the examination requirement for limited licensure or teaching certification in these 12 states. The faculty appointees would, however, receive a limited license or similar credential.

California MD and DO

Iowa

Rhode Island

Connecticut

Louisiana

Tennessee

Florida

Maryland

Vermont

Georgia

North Carolina

West Virginia

b. State licensure board requirements for IMGs

All international medical graduates (IMGs) must hold a certificate from the Educational Commission for Foreign Medical Graduates (ECFMG) examination before taking Step 3 of the United States Medical Licensing Examination (USMLE).

Thirty-nine states will endorse for licensure the Licentiate of the Medical Council of Canada (LMCC) when held by an IMG¹⁵. Sixteen state boards allow IMGs to take USMLE Step 3 before they have had GME in a U.S. or Canadian hospital. All states, however, require at least 1 year of GME for licensure, and 29 states require 3 years. Candidates are not awarded a license until they undertake the required GME in the United States and meet other board requirements (e.g., an EFMG certificate, personal interview, payment of fees).

c. The Fifth Pathway program

A pathway is an approved avenue to residency training at a U.S. hospital, which completes a medical student's education. Before 1971, there were four pathways¹⁶:

1. Graduation from a U.S. medical school
2. Certification by the Educational Commission for Foreign Medical Graduates (ECFMG)
3. Full and unrestricted licensure by a U.S. licensing jurisdiction
4. Passing the Spanish language licensing examination in Puerto Rico.

But in 1971, the AMA established a special program to assist Americans wishing to return to the U.S. after attending a foreign medical school. This program, called the "Fifth Pathway,"

Fifth Pathway-Is an avenue by which students who have attended four years at a foreign medical school may complete their supervised clinical work at a U.S. medical school, become eligible for entry to U.S. residency training, and ultimately obtain a license to practice in the U.S.

The Fifth Pathway Program was developed by the Council on Medical Education of the American Medical Association (AMA) to expedite the return of citizens who are studying medicine abroad to the United States¹⁷. Under this program, students who have completed the academic curriculum at a foreign medical school may substitute a year of supervised clinical training at a U.S. medical school for the internship or social service obligation required by the foreign medical school¹⁸.

Qualification for a Fifth Pathway

The Fifth Pathway Program provided by a Liaison Committee on Medical Education (LCME)- is available to persons who meet all of the following conditions¹⁹:

1. Completed their premedical work in a U.S.-accredited college of quality acceptable for matriculation in an accredited U.S. medical school;
2. Studied medicine in a foreign medical school located outside the US, including Puerto Rico, and Canada that is listed in the World Health Organization's World Directory of Medical Schools (*International Medical Education Directory*- IMED)and which requires a year or more of internship/social service (beyond the four years of medical school) before receiving a medical degree; IMED is available on the ECFMG Web site at www.ecfm.org and developed and maintained by the Foundation for the Advancement of FAIMER, a nonprofit foundation of the ECFMG.
3. Completed all requirements for admission to practice except internship and/or social service in the foreign country.

If these criteria are met, the IMG may be offered the opportunity to substitute the Fifth Pathway program for internship and/or social service in the foreign country. After being provided with a Fifth Pathway certificate by an accredited U.S. medical school, these candidates are eligible to enter the first year of accredited U.S. graduate training (an academic year of supervised clinical training provided in a medical school accredited by the LCME).

Currently, the only medical school known to provide the Fifth Pathway is New York Medical College in Valhalla, New York²⁰. In 50 states, individuals who hold Fifth Pathway certificates (but not the ECFMG certificate) are eligible for licensure. Fifth Pathway certificate holders must pass Steps 1 and 2 of the USMLE before entering a GME program accredited by the ACGME.

How the Fifth Pathway students different from International Medical Graduates

1. Fifth Pathway students do not graduate from a foreign medical school. They leave early, and complete a final year of medical training in the U.S.

2. Fifth Pathway students receive no medical diploma from the U.S. medical school sponsoring their Fifth Pathway year of clinical education. They receive a 'Certificate of Completion,' which is accepted in lieu of a diploma in virtually all U.S. licensing jurisdictions.
3. The Fifth Pathway certificate is the Fifth Pathway physician's medical credential. Program policy is governed by the AMA, which also serves as the national, primary source credential verification for these physicians.

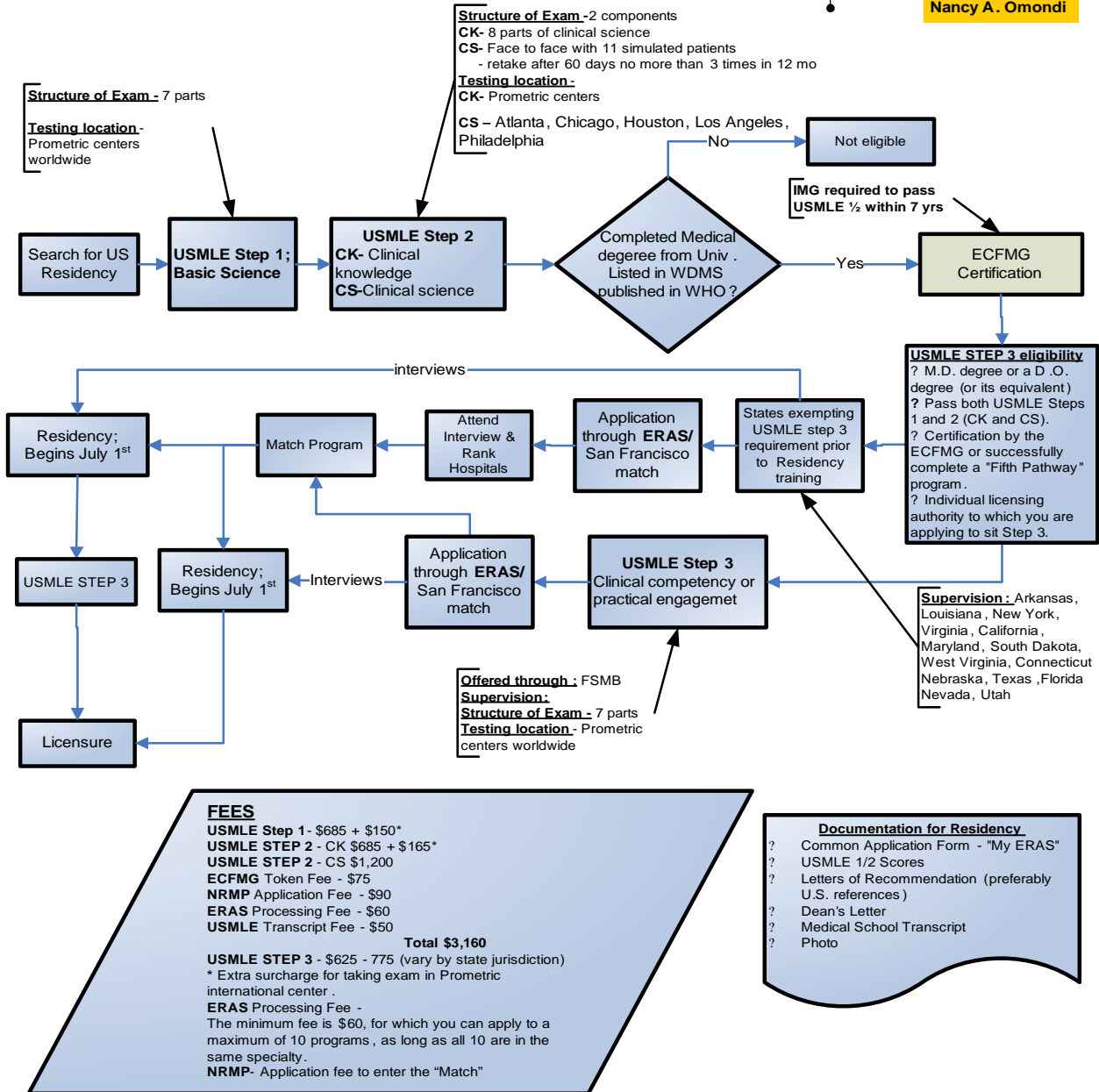
Specific components to obtaining a US medical residency:

For most IMGs, the principal route to obtaining a residency position in US is to apply through the Match program which requires the ECFMG certification. However, there is also another, but less used route- The Fifth Pathway Program.

1. Choose your desired residency.
2. Obtain an ERAS form from the Electronic Residency Application System (www.aamc.org/eras).
3. Send your ERAS application to [ECFMG](http://www.ecfm.org).
4. Research your destination hospitals (see AMA's [FREIDA](http://www.freida.org) online and [Scutwork.com](http://www.scutwork.com) for help)
5. Register with the National Residency Matching Program as an independent application (www.aamc.org/nrmp).
6. Check status of ERAS submission by viewing the Automated Document Tracking Systems (ADTS).
7. Contact hospitals that have received your ERAS application, and inquire about interviews.
8. Attend your interviews and rank your most desired programs.
9. Submit your rank order to the National Residency Matching Program (www.aamc.org/nrmp).
10. Consider obtaining licensing application materials for the states you will likely match with.
11. Obtain your match results
12. Enter the scramble if unmatched- The Scramble, when applicants and programs scramble to find and fill positions Sign your residency contract, and initiate the licensing procedure for the state in which you matched. Not all states require medical licenses for medical residents

IMGs Entry Path into US Graduate Medical Education and Licensure

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FEES

- USMLE Step 1 - \$685 + \$150*
- USMLE STEP 2 - CK \$685 + \$165*
- USMLE STEP 2 - CS \$1,200
- ECFMG Token Fee - \$75
- NRMP Application Fee - \$90
- ERAS Processing Fee - \$60
- USMLE Transcript Fee - \$50

Total \$3,160

USMLE STEP 3 - \$625 - 775 (vary by state jurisdiction)
 * Extra surcharge for taking exam in Prometric international center.

ERAS Processing Fee -
 The minimum fee is \$60, for which you can apply to a maximum of 10 programs, as long as all 10 are in the same specialty.

NRMP- Application fee to enter the "Match"

Documentation for Residency

- ? Common Application Form - "My ERAS"
- ? USMLE 1/2 Scores
- ? Letters of Recommendation (preferably U.S. references)
- ? Dean's Letter
- ? Medical School Transcript
- ? Photo

1. The Exams

The USMLEs are a set of medical exams designed to evaluate your readiness to safely enter the American medical system. The organization that watches over the application of foreign nationals to the American Medical system is the ECFMG and they administer the USMLEs outside of the USA.

2. The ECFMG Certificate

To be certified by ECFMG, IMGs must, among other requirements, pass a medical science examination²¹. Step 1 and Step 2 Clinical Knowledge (Step 2 CK) of the USMLE are the exams currently administered that meet the medical science examination requirement for ECFMG Certification. USMLE Step 2 consists of two separately administered components²².

- The clinical skills examination is referred to as **Step 2 Clinical Skills**, or **Step 2 CS**.
- The computer-based, multiple choice question component is referred to as **Step 2 Clinical Knowledge**, or **Step 2 CK**. Students and graduates of both U.S./Canadian and international medical schools will take Step 2 CS.

All of these components must be valid at the time when you apply for final certification. Step 2 CS replaced the ECFMG CSA for the purpose of ECFMG Certification. Although the ECFMG CSA is no longer administered, passing performance on the CSA will continue to be accepted by ECFMG for ECFMG Certification.

To be eligible to register for USMLE Step 3, IMGs will be required to pass Step 1 and both components of Step 2 (Step 2 CS and Step 2 CK) and be certified by ECFMG. However, international medical graduates who have passed the CSA will not be required to pass Step 2 CS to register for Step 3. ECFMG-certified physicians and physicians who have successfully completed Fifth Pathway programs who have not taken and passed either the CSA or Step 2 CS may register for Step 3 through June 30, 2005. After that point, these physicians will have to have taken and passed either the CSA or Step 2 CS in order to register for Step 3.

Two changes to ECFMG policy concerning revalidation and permanent validation will take effect on June 14, 2004. The two changes are²³:

- IMGs who have passed an English test will not be required to revalidate expired English test dates in order to enter GME; all passing performances on the English test will be valid for the purpose of entry into GME, regardless of the length of time that has passed since the test date.
- IMGs who have passed the ECFMG CSA during the 3-year period before the implementation of USMLE Step 2 Clinical Skills (Step 2 CS) on June 14, 2004 will not be required to revalidate expired CSA dates before entering GME. These individuals may enter GME regardless of the length of time that has passed between their passing performance on the CSA and their program start date.

3. ERAS

The electronic residency application system (ERAS)²⁴ is a method of centralized, computerized application for residency. After paying the required application fee and requested a 'Token' via the On-line Applicant Status and Information System (OASIS), ECFMG will send a unique identification number ('a Token') by e-mail. This Token permits the applicant to access the AAMC's ERAS website to complete his/her ERAS application on-line.

4. Interviews

The most difficult part in the application is securing an interview. Many program directors find it difficult to evaluate foreign graduates, so are reluctant to make the effort to interview them: certainly there is substantial variability in the quality of graduates from disparate medical schools.

5. The Match

The Match is a centralized computer program that matches a physician's highest ranked residency program with a hospital that ranks them highly. The Match process involves;

- a. Applying to the programs in the hospitals of interest
- b. The programs invite selected applicants for an interview
- c. Following the interview, the hospital ranks the applicants
- d. The applicants will then rank the programs they are interested in
- e. All of these preferences are sorted by a computer and the hospitals are matched with the applicants.

There are cases when the hospitals are impressed by a candidate hence they can offer a position directly before the match.

The Match Schedule²⁵ - In mid-January, after completion of the interview process, both applicants and residency programs submit rank order lists (ROLs), which list their respective choices in order of preference, to the NRMP. Applicants may submit a list of up to 15 programs, with the option of adding more for an additional fee. Generally, it is not necessary to rank more than 15 programs unless you are applying to a competitive specialty. Although, the more programs you rank, the better your chances of being matched.

This is the process known as **the Scramble**, when applicants and programs scramble to find and fill positions. If a program you interviewed with has unfilled slots, it is best to contact them first and they may reconsider you. Some programs also advertise unfilled slots in newspapers, particularly if they know prior to Match Day that they will have open slots. Within 48 hours, most slots are filled and it becomes very difficult to find a position.

SECTION C

IMG State's Licensing Model Comparison

The medical license is specific to the state of employing hospital. States differ significantly on their processing times and requirements for licensure. All IMGs must hold a certificate from the ECFMG examination before taking Step 3 of the USMLE²⁶.

Fifteen state boards allow IMGs to take USMLE Step 3 before they have had GME in a US or Canadian hospital. All states, however, require at least 1 year of GME for licensure, and 27 states require 3 years. Candidates are not awarded a license until they undertake the required GME in the United States and meet other board requirements (eg, an ECFMG certificate, personal interview, payment of fees).

	Accepts Physicians Who Complete a Fifth Pathway Program as Candidates for Licensure	Endorses Canadian Certificate (LMCC) Held by an IMG	Amount of Accredited US or Canadian Graduate Medical Education Required	
			...to Take USMLE Step 3	...for Licensure
MN	Yes	Yes	None (must be enrolled in GME)	2 yrs
CA	Yes	Yes/No (case-by-case review)	None (must be enrolled in GME)	3 yrs
FL	Yes	No	None	2 yrs
NY	Yes	Yes (with valid Canadian provincial license and fulfillment of all other licensure requirements)	None	3 yrs

States Licensure Eligibility Requirements ²⁷								
State	Maximum attempt per USMLE test step		Minimum Years of accredited PG training		Time limit to complete USMLE-yrs.		Fee for licensure	Unlicensed Physician permits
	US-MD	IMG	US-MD	IMG	US-MD	IMG		
New York	0	0	1	3	0	0	\$735	Yes*
MN	3	3	1	2	7	7	\$392	Yes**
CA	0	0	1	2	10	10	\$505	Yes*
FL	5	5	1	2	7	7	\$552	Yes*
*limited permit								
** limited permit for postgraduate training								

The California Model

Requirements for IMG Licensure in California- Foreign Nationals or U.S. Citizens²⁸

A. Current ECFMG Certification.-The following examinations and combinations of examinations are currently acceptable for licensing purposes in California:

- USMLE Steps 1, 2 and 3 (Has phased out Flex and NBME Exams)
- NBME Parts I, II and III (National Board Med. Exams)
- NBME Parts I and II and Component 2 of FLEX
- FLEX Components 1 and 2
- State Board Examinations (taken prior to June 1969)
- LMCC (Licentiate of the Med. Council of Canada-now called McCQE or Medical Council of Canada Qualifying Examination)
- Original FLEX (three day FLEX weighted average)
- SPEX (Special Purpose Examination)

B. IMG must have 4 months of approved General Medicine postgraduate training; **OR**, Current certification by a member board of the American Board of Medical Specialties or an ACGME approved specialty board; **OR**, Take and pass the clinical competency exam (SPEX).

C. furnish a current "Evaluation Status Letter" from the Medical Board of California (MBC) when submitting an application for postgraduate training. Fifth Pathway trainees are expected to present a letter from the Medical Board stating that medical school training meets the requirements for licensure in the State of California.

More Notes About California²⁹

1. California allows IMG's to take Step III without any residency training. One can sit for Step III in California as soon as they graduate from medical school
2. In order to start residency in California, a "California Status Letter" (CA Letter) is required on residency start date. Starting residency without the letter constitutes practicing medicine without a license and is a felony.
3. California is one of the states that do not entrust ECFMG's to evaluate foreign medical education. They do their own individual evaluations of IMG's
4. Other Documentation required for licensing of IMGs:
 - a. Pre-professional, post-secondary college transcripts are no longer required.
 - b. Original licenses, official U.S. citizenship documentation, Declarations of Intent, and Petitions for Naturalization are no longer required.
 - c. As an alternative to submitting original diplomas and medical school transcripts, IMGs now have the option of requesting that their medical school send directly to the Medical Board certified copies of these documents.

Pilot Projects in California that support recruitment of IMGs

The *Welcome Back Project*, funded by the California Endowment, offers counseling and educational program opportunities to internationally trained health professionals who wish to work in health care in California. International medical graduates have already been recruited and screened by the *Welcome Back Project*.³⁰ There are more than 3,100 IMGs from more than 100 countries participating in the statewide *Welcome Back Program*, which also has centers in Los Angeles and San Francisco. The Grossmont-based ADN nursing curriculum for IMGs will serve as a demonstration pilot project for the State of California.

So great is the need for nurses, especially bilingual nurses, and given that health care providers spend \$15,000-\$20,000 to recruit registered nurses, institutions such as Sharp Health Care are eager to support the project and to recruit the program's graduates to address the acute nursing shortages in their local communities. Sharp Health Care is sponsoring the 35 international medical graduates in this first "welcome back" accelerated degree program for registered nurses.

Special accelerated Nursing Program³¹-The California Board of Registered Nursing recently announced unanimous approval of a new accelerated curriculum developed by Dr. Hamel that will facilitate the training of 35 international medical graduates (IMGs) as nurses, and will culminate in their eligibility to sit for the Board's licensing exam in just 14 months. While most nursing curricula are based on a two-year format, the new accelerated ADN curriculum gained the Board of Registered Nursing's approval because it builds upon the medical training and experience of these IMGs.

Short-term measures³²-In what looked to be a first in the United States, California is allowed 30 physicians and 30 dentists from Mexico to bypass its medical licensure system and practice in the state. The Mexican doctors were allowed to work under a three-year, nonrenewable license at designated nonprofit clinics beginning July 1 2003, if money can be secured for the program. This project was believed to address the need of the state's 950,000 Mexican agricultural workers, few of whom had access to any physician, let alone those who speaks Spanish. Latinos make up 95% of the 1 million agricultural workers in California.

The program also would create 70 unaccredited one-year residencies for international medical graduates. Residents would need to pass the U.S. Medical Licensing Examination to move into accredited programs and get credit for the year already spent in residency. California has only 3,000 Hispanic practicing physicians. To date, talks are ongoing with California medical and dental schools to determine which ones will oversee the one-year residency program or the physician pilot, including collecting data on the doctors' performances.

The pilot's doctors, who will come from the National Autonomous University of Mexico, will undergo a six-month orientation by the Medical Board of California, and will be allowed to work for their assigned nonprofit clinics only under the supervision of licensed California physicians. They will have to take English as a Second Language courses and 25 hours of continuing medical education a year.

The New York Model

Requirements for IMG Licensure in New York - Foreign Nationals or U.S. Citizens

New York State receives 4500-5000 applications for medical licensure each year, and issues licenses to approximately 3500 physicians. Of these, approximately 1500, or 40%, are IMGs³³. Once primary source verification of an applicant's education is received, it takes about six weeks for review and licensure.

1. Eligibility Requirements

A. USMLE Step 3 applicants must meet the following specific eligibility requirements, as listed in the *2004 Bulletin of Information* ;

- Have an MD (or its equivalent) or the DO degree
- Have passed both Steps 1 and 2
- IMGs obtain ECFMG certification or successfully complete a "Fifth Pathway" program
- Attempt Limits: All New York applicants have an unlimited number of attempts to pass Steps 1, 2 and 3.
- Time Limit: All New York applicants have an unlimited amount of time to complete Steps 1, 2 and 3.
- Licensure Application: All New York applicants must file a completed application for licensure and pay the appropriate fee to the New York State Education Department before September 1, 2004.
- Education Verifications: All New York applicants must have all educational verifications submitted to and approved by the New York State Education Department before September 1, 2004.
- A copy of Fifth Pathway Certificate (if applicable)

New York State licensing regulations require that the applicant's transcript be reviewed to ensure that the course of study was comparable to that offered in US schools. (The Federation performs primary source verification on the above USMLE eligibility requirements.)

All New York applicants who are IMGs and not ECFMG certified are required to submit a notarized photocopy of their Fifth Pathway Certificate and medical school diploma. If a candidate has not graduated from an LCME accredited or New York State registered medical school program, they can apply for New York State licensure and receive confirmation that their educational preparation meets New York State requirements before applying to the Federation of State Medical Boards to take USMLE Step 3

1. Federation Credentials Verification Service (FCVS)³⁴

The FCVS credentialing procedure helps in eliminating all handling of documents by applicants and hence is a preferred method of verifying credentials, because of the greater degree of security and reliability it offers. Currently the Department must scrutinize all materials received in the mail to try to determine with some certainty that they were actually mailed by the school overseas, and not created or tampered with by the applicant.

Six states in the US currently require all applicants for licensure to use the FCVS service. Fees add up to about \$375, but having credentials secured and verified by the FCVS ahead of time may be a good investment because documentation would be immediately available for physicians wishing to pursue opportunities in other states. In the first six months of 2002, the FCVS averaged a 60-day turnaround in verifying the credentials of US medical school graduates and a 70-day turnaround in verifying IMGs' credentials.

Conferral of the "MD" Degree in NY

An IMG from a school granting a degree other than "MD" can apply for the right to use the MD degree the day after becoming licensed. The process takes from six weeks to two months, and involves actual conferral of the degree by the New York State Board of Regents. It is distinct from the licensure process, which recognizes an individual's right to hold him or herself out as a physician who is authorized to practice medicine in the State of New York.

The Minnesota Model

Requirements for IMG Licensure in Minnesota- Foreign Nationals or U.S. Citizens

USMLE Step 3 is administered by either the state medical licensing authority or the Federation of State Medical Boards, depending on the jurisdiction³⁵. The Federation of State Medical Boards registers applicants for Step 3 only on behalf of the following licensing authorities. Minnesota Board of Medical Practice

Eligibility Requirements

All applicants for the USMLE Step 3 must meet the following specific eligibility requirements, as listed in the *2004 Bulletin of Information* on the USMLE website, prior to applying for the USMLE step 3:

- Have an MD (or its equivalent) or the DO degree.
- Have passed both Steps 1 and 2.
- Foreign medical graduates obtain certification by the ECFMG or successfully complete a "Fifth Pathway" program*.

The Federation performs primary source verification on the above USMLE eligibility requirements.

B. All applicants for the State of Minnesota must also meet the following state eligibility requirements:

1. **Certification of Postgraduate Training:** All Minnesota applicants hold current enrolment in, or completed one (1) year of an ACGME, AOA or RCPSC approved postgraduate training program prior to applying. Exception: An applicant issued a permanent immigrant visa as a person of exceptional/extraordinary ability in sciences or as an outstanding professor or researcher is exempt.
2. **Attempt Limits:** All Minnesota applicants are limited to three (3) attempts to pass USMLE Step 1 and three (3) attempts to pass USMLE Step 2. Applicants who fail USMLE Step 1 a third time or Step 2 a third time will NOT be allowed to sit for USMLE Step 3 in the State of Minnesota.
3. **Time Limit:** All Minnesota applicants must complete USMLE Steps 1, 2, and 3, within seven (7) years of passing the first examination. Exception: Candidates from board-approved dual degree program
4. **Copy of Fifth Pathway Certificate** (if applicable). All Minnesota applicants who are graduates of foreign medical schools and not ECFMG certified must submit a notarized photocopy of their Fifth Pathway Certificate and medical school diploma.

Minnesota Licensing for International Graduates Fees³⁶:

- \$392.00 First year and application fee
- \$192.00 Annual fee
- \$60.00 Temporary permit

It takes 6-8 weeks to get a temporary permit and approximately three months to complete the permanent licensing process.

The Florida Model

Requirements for IMG Licensure in Florida- Foreign Nationals or U.S. Citizens³⁷

All applicants for the USMLE Step 3 must meet the following specific eligibility requirements prior to applying for the USMLE STEP 3:

- Have an M.D. (or its equivalent) or the D.O. degree.
- Have passed both Steps 1 and 2.
- Foreign medical graduates obtain certification by the ECFMG or successfully complete a “Fifth Pathway” program*.

The Federation performs primary source verification on the above USMLE eligibility requirements.

- All Florida applicants who are graduates of foreign medical schools and not ECFMG certified must submit a notarized photocopy of their Fifth Pathway Certificate and medical school diploma.

The Florida Board of Medicine’s requirements for initial licensure include a minimum amount of postgraduate training and both attempt and time limits involving the USMLE. Eligibility to sit Step 3 for Florida does not signify eligibility for licensure.

SECTION D

Foreign Nursing Graduates

This process applies to foreign trained health professionals (except physicians) that already have permanent immigrant visa and does not apply to those seeking a change in status to permanent residency based on occupational visa (EB-3).

Overall Licensure Process

CGFNS - Nursing Certification Program is designed specifically for first-level, general nurses educated and licensed outside the United States who wish to assess their chances of passing the U.S. registered nurse licensing exam, the NCLEX-RN examination, and attaining licensure to practice as registered nurses within the United States. The program is comprised of three parts: a **credentials review of the nurse's education, registration and licensure**; the **CGFNS Qualifying Exam** testing nursing knowledge; and an **English language proficiency exam**. Upon successful completion of all three elements of the program, the applicant is awarded a CGFNS Certificate.

Elements of CGFNS Certification Program (CP)-

The CGFNS certifications are comprised of three parts³⁸:

1. Educational/Credentials Evaluation review (CER) of the nurse's education, registration and licensure;
2. CGFNS Qualifying Exam, a one-day qualifying exam testing nursing knowledge (NCLEX-RN exam can be taken instead of the CGFNS exam, but the NCLEX-RN exam will only be offered outside the United States beginning 2004);
3. English language proficiency exam(s).

Upon successful completion of all three elements of the program, the applicant is awarded a CGFNS Certificate³⁹.

There are 6 states that do not require the CGFNS exam (while still requiring credentialing verification and English language exams): California, Florida, New York, Alaska, Hawaii, and Indiana⁴⁰.

Eligibility⁴¹

In order to be eligible for the program, a nurse must be educated and hold both initial and current registration/licensure as a first-level, general nurse as defined historically by the ICN. A first-level nurse is called a registered or professional nurse in most countries. A second-level nurse, often called an enrolled, vocational, practical nurse or nurse assistant, is not eligible to be licensed as a registered nurse in the U.S., and therefore, is not eligible for the Certification Program.

A general nurse must have obtained theoretical instruction and clinical practice in a variety of nursing areas. Applicants must have graduated from a government-approved nursing program of at

least two years in length. A nurse who specialized in one area without being educated and registered/licensed as a general nurse is not eligible for the Certification Program.

CGFNS: Part 1 – Educational /Credentials Review⁴²

CGFNS evaluates an applicant's education and registration credentials to certify that the applicant is a first-level, general nurse and meets all of the registration requirements to be licensed as a professional in that field. The educational review ensures that the applicant's education meets all applicable, statutory and regulatory requirements for the profession the applicant intends to practice, and is comparable to that of a U.S. graduate seeking licensure.

Licensure Review⁴³

The licensure review evaluates initial and all current and past licenses. Applicants must have received theoretical instruction and clinical practice in nursing care of the adult (including medical and surgical nursing), maternal/infant nursing care, nursing care of children and psychiatric/mental health nursing.

Applicants must have a full and unrestricted license/registration to practice as a first-level, general nurse in the country where they completed their general nursing education; and hold a current license/registration as a first-level, general nurse.

CGFNS: Part 2 – Nursing Qualifying Exam

Both the CGFNS Qualifying Exam and the NCLEX-RN® examination are based on the same framework of client needs because it provides a universal structure for defining nursing actions and competencies across all settings for all clients⁴⁴. 95% of nurses, who have passed the CGFNS exam, pass the NCLEX-RN exam as well.

•CGFNS Qualifying Exam Description

- **CGFNS Exam Overseas-** The CGFNS Qualifying exam is conducted in various countries. There are more than 40 test sites worldwide. But in some cases, nurses need to travel to another city or even another country to sit the CGFNS exam, if there are no local exam centers available..
- **CGFNS Examination Schedule** -The CGFNS qualifying exams are offered only a 3-4 times a year, and the deadline to *register* for this exam is three (3) months prior to the exam date.

To date, more than 300,000 exams have been administered to over 175, 000 applicants⁴⁵.

CGFNS: Part 3- English Language Proficiency Assessment⁴⁶

The English language proficiency assessment confirms that the applicant has demonstrated the required competency in oral and written English by submitting passing scores on tests approved by the U.S. Departments of Education and Health and Human Services

Foreign Registered Nurses applying to the Certification Program have the option to take

- The Test of English as a Foreign Language, TOEFL (administered by the Educational Testing Service ETS);
- The Test of English for International Communication, TOEIC (administered by the Chauncey Group); or
- The International English Language Testing System, IELTS, Academic Module (administered by Cambridge ESOL Examinations, the British Council and IDP Education Australia).

Applicants must successfully complete one of the English exams and the Qualifying Exam within a two-year period in order for test scores to be considered valid. The English exam may be taken prior to or following the CGFNS Qualifying Exam. According to the English Language Institute (ELI), the MELAB program has officially requested that the MELAB no longer be recognized for the purpose of certifying healthcare workers, as of November 2002

Facts about Foreign Nursing Graduates

Because passing the NCLEX is usually the final step in the nurse licensure process, the number of people passing the NCLEX (“pass rate”) is a good indicator of how many new nurses are entering the profession in the U.S.⁴⁷.

Previous Statistics: 54% - an average passing rate for foreign nurses taking the NCLEX exam for the first time, based on the state of California over the last 3 years⁴⁸ (Source: California Nursing Board, 2003).

NCLEX® Volume and Pass Rates¹

2005					
Candidates	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Total
RN					
Total	32,244 (71.8%)	41,063 (76.3%)	Available Oct 2005	Available Jan 2006	73,307 (74.3%)
First-Time	24,276 (82.5%)	32,054 (86.0%)			56,330 (84.5%)
Repeat	7,968 (39.2%)	9,009 (41.6%)			16,977 (40.4%)
U.S.-Educated	24,972 (80.0%)	32,468 (85.2%)			57,440 (82.9%)
Internationally Educated	7,272 (43.4%)	8,595 (42.7%)			15,867 (43.0%)
PN					
Total	15,041 (81.7%)	12,221 (75.8%)			27,262 (79.0%)
First-Time	12,500 (89.4%)	9,691 (86.4%)			22,191 (88.1%)
Repeat	2,541 (43.8%)	2,530 (35.1%)			5,071 (39.4%)
U.S.-Educated	14,259 (83.9%)	11,290 (79.2%)			25,549 (81.8%)
Internationally Educated	782 (40.9%)	931 (34.4%)			1,713 (37.4%)

¹Number = the number of candidates taking the examination.

Percentage = percentage of candidates passing the examination (Pass Rate).

Nursing; State Licensing Model Comparison

Chart of nurse licensing requirements⁴⁹

State	By Endorsement	NCLEX license by exam	CGFNS Certificate required?	SS#	Other
California California Board of Registered Nursing 400 R St., Ste. 4030 Sacramento, CA 95814-6239 Web Site: http://www.rn.ca.gov/	Yes Canada only If CNATS written prior to 1980	Yes OR if CNATS written after 1980	No		Compact State Educational documents must be translated and certified by an official translator; education must meet California standards or deficiencies made up; a foreign MD is not adequate. TOEFL is required
Florida Florida Board of Nursing 4080 Woodcock Drive, Suite 202 Jacksonville, FL 32207 Web Site: http://www.doh.state.fl.us/mqa/	Yes With NCLEX results and license verification	Yes* ⁸ Unless licensed in another state and applying by endorsement	Yes	Yes* ⁹	*8 Canadians without NCLEX accepted unless the score is "pass or fail". If not a numeric score on exam, must take the NCLEX or a course by course evaluation by CGFNS *9 Required for NCLEX
Minnesota Minnesota Board of Nursing 2829 University Avenue SE Suite 500 Minneapolis, MN 55414 Web Site: http://www.nursingboard.state.mn.us/	Yes* ²⁹	Yes	Yes* ³⁰		*29 NCLEX passing score; Verification of licensure; and confirmation of nursing employment required *30 Except certain Canadian schools
New York New York State Board of Nursing Education Bldg. 89 Washington Avenue 2nd Floor West Wing Albany, NY 12234 Web Site: http://www.nysed.gov/prof/nurse.htm	Yes, with exam results	Yes	*42 only credentials evaluation		*42 Credentials evaluation; certification required for limited permit only not required from certain Canadians

Additional Information regarding California, CA Model

To practice as an RN in California; you must be licensed by the California State Board of Registered Nursing (BRN). You must meet educational requirements, pass a criminal background check, and pass the national licensing examination.

To qualify for endorsement (reciprocity) into California as a RN, one must hold a current and active license in another state or Canada, have completed an educational program meeting all California requirements, and have passed National Council Licensure Examination (NCLEX-RN) or the State Board Test Pool Examination (SBTPE)⁵⁰. The Canadian Comprehensive Examination is not acceptable. Failure to possess these qualifications renders one ineligible for licensure by endorsement and hence must apply to take the examination instead.

Additional Information regarding MN Model

The board issues licenses by endorsement after the applicant has shown proof of licensing by the nursing board of another state or country. Licensure by endorsement does not require the applicant to take an examination unless the applicant has not passed the same examination⁵¹.

Additional Information regarding New York Model

Fees-

- The licensure fee is \$135
- The limited permit fee is \$35.

The New York State Education Department requires that foreign-educated registered nurses, licensed practical nurses, physical therapist assistants, occupational therapists and occupational therapy assistants obtain independent verification of the authenticity of their credentials from a State Education Department approved credentials verification service. New York State Education Department authorized CGFNS to conduct the verification of educational transcripts and licenses of healthcare professionals who apply for initial licensure or endorsement in New York

NY License Statistics

Licenses Issued, Past 5 Calendar Years

PROFESSION TITLE	2000	2001	2002	2003	2004
Registered Professional Nurse	8,057	8,571	8,598	9,311	10,582
Licensed Practical Nurse	3,009	2,885	3,055	3,657	4,027
Nurse Practitioner	1,042	883	937	784	825

Additional Education Requirements review in NY⁵²

This verification process is **not** the same as CGFNS certification (which is required for Registered Nurse limited permit applicants only). The CGFNS credentials verification process for New York State licensure applicants is a process for verifying the authenticity of education credentials. It is not an evaluation or certification process.

Registered Professional Nursing-RPN

One must hold at least a two-year degree or diploma from a program in general professional nursing that is acceptable to the Department and is:

1. Registered by the New York State Education Department **or**
2. Approved by the licensing authority or appropriate governmental agency in the jurisdiction where the school is located as preparation for practice as a registered professional nurse.

In addition, one must complete the following:

- Every applicant for licensure as a registered professional nurse must complete coursework or training in the identification and reporting of child abuse¹.

- Every registered professional nurse must complete approved coursework or training appropriate to the professional's practice in infection control and barrier precautions²,

New York Licensed Practical Nursing-LPN

One must have completed high school or its equivalent, and be a Graduate from an approved program in general professional nursing.

In addition, every LPN must complete approved coursework or training appropriate to the professional's practice in infection control and barrier precautions³,

- **Examination Requirement**
For those applicants applying for licensure by endorsement, scores from the State Board Test Pool (SBTP) examination and NCLEX may be accepted for licensure..
- **Limited Permits**
The Department may issue limited permits, which authorize the practice of licensed practical nursing or registered professional nursing under the immediate and personal supervision of a licensed, currently registered professional nurse, with the endorsement of the employer.

Currently, New York and New Hampshire do not require social security number or tax ID as requirement for licensure. Nor do they require CGFNS examination as required by majority of the states. Foreign nurses should present their credentials to CGFNS for certification/evaluation and, upon certification, become eligible for NCLEX and licensure⁵³.

SECTION E

Barriers Facing Foreign Trained Health Professionals in US

IMGs face numerous challenges in attempting to enter the supply of practicing physicians in US leading to inability to obtain licenses to practice in US. While some lack the required preparation, knowledge and skill, others have been unable to confirm or demonstrate their skill levels due to tight workforce policies, limited access to assessment and/or training opportunities and lack of support to make them understand the licensure requirements in US. According to the American Medical Association (AMA), some states "place artificial barriers in the way of licensure or make it more difficult for an IMG to obtain a license."

I. Some of the Obstacles Facing IMGs;

1. **CSA Examination**⁵⁴: IMGs have been taking the CSAE as part of ECFMG certification since 1998. Although the AMA Medical Student Section strongly lobbied against USMGs being required to take the CSAE (and AMA policy opposes the CSAE for USMGs), the examination is currently being administered to both USMGs and IMGs as part of USMLE Step 2. The kicker is that the IMGs still have to pay more for this examination than USMGs; the registration fee for an IMG is \$1200 while USMGs pay \$975. This disparity needs to be eliminated.
2. **Preclinical Requirements**: There is often an additional "bench test" that a few states require, which, according to the ADA, "typically applies only to international dentists."
3. **Limited financial aid for foreign students**: In dental schools in the U.S., according to the ADA, "in general, funds are rarely available in the United States for citizens of other countries".
4. **Need for recommendation letter**: preferably from a US MD- this is often quite difficult- One of the obstacles that many FMG face is the lack of clinical experience in the US to be accepted in a residency program. Therefore, they will need to find a mentor or preceptor that will provide them externship and recommendations. Some take the Step 3 (the clinical test which is required to be taken during the residency period to get licensed) ahead of time to increase their matching chances. In most cases, residencies for FMG are 2-3 years longer compared to US meds⁵⁵.
5. **Higher Score requirement**: To be viewed favorably, Some Residency program directors requires IMGs to demonstrate a significantly higher scores in there qualifying exam than there fellow US-MD school graduates⁵⁶.
6. **Fees**

The ERAS application process requires four separate fees⁵⁷:

- a. USMLE Step 1- \$835 (\$685 + \$150)*
- b. USMLE STEP 2 CK- \$845 (\$685 + \$165)*
- c. USMLE STEP 2 CS -The Clinical Skills Assessment fee \$1,200
- d. ECFMG Token Fee \$75(to allow ECFMG to act as Dean's office)

- e. NRMP Application Fee \$90 (excludes registration)
- f. ERAS Processing Fee \$60 (to apply to max 10 programs)
- g. USMLE™ Transcript Fee \$50 (to send transcripts to all chosen programs)
- h. USMLE STEP 3 varies between \$625 - 775

7. *International Test Delivery Surcharge:** These surcharges represent the additional cost of offering Step 1 and Step 2 CK by computer outside the United States and Canada. \$150 for USMLE step 1 and \$165 for USMLE step 2 ck⁵⁸

- **Total standard cost approximately \$4,250** (*This cost excludes the state licensing fees & travel expenses*) * Extra surcharge for taking exam in Prometric international center.

Explanation of ECFMG Token Fee

- ii. ECFMG acts as your designated dean's office. They will scan and transmit your supporting documents and transmit your ECFMG status report.
- iii. ERAS Processing Fee
The minimum fee is \$60, for which you can apply to a maximum of 10 programs, as long as all 10 are in the same specialty.

8. *Travel cost:* to take CS; travel and accommodation arrangements - The USMLE Step 2 CS is administered at the following Assessment Centers;

Atlanta, Chicago, Houston, Los Angeles, Philadelphia

9. *The Fifth Pathway program*⁵⁹.

In some foreign medical schools, e.g. some in Mexico and the Caribbean, obtaining the equivalent of an M.D. can take five or six years. In some cases, this consists of 4 years of instruction followed by a one year internship and/or one year of social service in the country. In 44 states and the District of Columbia, the Fifth Pathway program allows certain IMGs to replace the last year or two years with one year at a special program in the U.S.; after doing this, they are eligible for residency training, without needing to complete the equivalent of the M.D. However, the only longest continuously running Fifth Pathway program in the U.S. is at New York Medical College. If the medical education is already completed and MD degree conferred (or its equivalent) one cannot participate in the Fifth Pathway Program

10. *Limits on number of funding for, residency slots*⁶⁰.

According to the AMA, "the Balanced Budget Act of 1997 capped residency slots as of Dec. 1996 levels and authorized the first of a series of reductions in the IMEA," this affects funding for resident training from the federal government.

11. *Residency training in U.S. required for licensure*⁶¹.

According to the AMA, "all IMGs must undertake residency training in the United States before they can obtain a license to practice medicine in the United States even if they were fully trained, licensed, and practicing in another country. A very small number of IMGs may be eligible for special consideration if they are either 'eminent' physicians or are going to serve on the faculty of a medical school or teaching hospital.

II. Some of the Obstacles facing Foreign Nursing Graduates;

1. *Cost*⁶²

Below is a list of major costs involved in obtaining nursing licensure in the United States.

Exam related fees

- \$295 for CGFNS Qualifying Exam (Excludes English test)
- English Language test
 - \$130 for TOEFL
 - \$125 for TSE
 - TWE costs may vary (generally \$150)
- Training: Preparation for the English language exams
- Travel for the CGFNS exam,
- Travel for the NCLEX-RN exam,
- Transcript and course descriptions translation into English fee (approx. \$65+)

Licensing fees

- Fees to foreign nursing schools and licensing authorities
- Fees for state licensing charged by U.S. nursing boards (**\$200-\$300**)
- Transcript evaluation by a credential evaluation service (CES) A fee (approx. **\$120-\$170**)- General report or detailed report respectively
- Licensure by examination fees are \$105 for RNs and licensed PNs.
- The fee required with each request to retake the examination is **\$60**.
- A permit to practice nursing (for applicants a waiting license processing). The permit fee is **\$60**.
- The fee for licensure by endorsement for registered nurses and licensed practical nurses is **\$105**
- The cost of the NCLEX exam is \$200 and changes are allowed at a \$50 per change⁶³.

2. Exam centers: NCLEX-RN exam is not yet offered abroad. To take the NCLEX-RN exam, one will travel to a designated state within the US.⁶⁴

3. Exam Results Validity: The CGFNS exam is effective for 2 (two) years, as opposed to the NCLEX exam, which is only effective for 365 days. Both the CGFNS and NCLEX-RN® exams and English language exams must be taken within 2 years from one another⁶⁵.

4. License Validity: There are 18 so-called ‘compact states’⁶⁶ (plus a few states pending) that share licensure. Persons seeking Compact licensure need to contact their respective state board of nursing for primary state of residence requirements. U.S. Boards of Nursing by State⁶⁷

5. Re-certification: All Foreign Healthcare Workers Must Re-certify; this is a regulation issued by Department of Homeland Security relating to VisaScreen regulatory amendment for health care workers. The new regulations took effect on September 23, 2003⁶⁸.

SECTION F

Resources available in Minnesota for FTHCPGs

1. *Review classes and materials*

Princeton Review

Locations throughout the U.S.

(800) 273-8439

<http://www.review.com>

Kaplan Test Prep

2610 University Avenue West Suite 1, Saint Paul, MN 55114

(651) 641-1200

Categories: Educational Testing Services, Test Preparation & Tutoring Services, Educational Consultants

2. *Educational Testing Service*

TOEFL/TSE Services- available at University of Minnesota <http://www.toefl.org>

ECFMG/USMLE examinations and test center locations; <http://www.usmle.org>

3. *Health Professional Shortage Areas (HPSA),*

I. **The Minnesota Center for Rural Health (MCRH)**, a nonprofit organization affiliated with the University of **Minnesota-Duluth School of Medicine**⁶⁹. Foreign-trained physicians were placed in underserved areas under the [J-1 Visa Waiver Program](#), a federal initiative that allows foreign-trained physicians to work in this country, provided they work in underserved areas

II. **Bureau of Primary Health Care**

Division of Shortage Designation

4350 East-West Highway

Bethesda, MD 20814

(301) 594-0816

Online Database of HPSAs: <http://www.bphc.hrsa.dhhs.gov>

III. **Appalachian Regional Commission**

1666 Connecticut Avenue, NW

Washington, DC 20235

(202) 884-7700

<http://www.arc.gov/programs/j1visa/visapgrm.htm>

4. *Information on Licensing*

Minnesota Board of Medical Practice

2829 University Avenue South East

Minneapolis, MN 55414-3246
612-617-2130

5. **Resettlement Agencies**-These agencies provide a variety of services including evaluation, training and employment canceling.

I. International Institute of Minnesota <http://www.iimn.org/>-

a. Medical Careers Advancement Program

The program offers a career path for new Americans interested in employment in the medical field. The three step program begins with nursing assistant training then offers academic skills training for entry-level medical professionals and finally provides the assistance of the Medical Career Advancement Coordinator. These specialized training programs and services create an environment in which new American students can achieve success⁷⁰

b. Nursing Assistant Training Project for New Americans –

6, 8 and 11-week training programs are offered to new Americans which certify them as nursing assistants to work in nursing homes and other health care facilities in Minnesota.

c. Academic Skills Training Program

This program offers academic support in three ways to immigrants who are advancing in their careers in the medical field.

- i. **Academic ESL (English Second Language) Classes before medical training** -10 week classes for Students who are refugees, asylees, permanent residents or be naturalized citizens. They must be employed in the medical field and demonstrate motivation to advance in their careers
- ii. **Academic Skills Workshops before college entry**- A series of one to two week-long workshops targeting the skill gaps that are common among immigrant students preparing to begin college. These workshops offer students a "leg up" as they begin advancing in their careers.
- iii. **Tutoring in Math and/or Writing during College** Tutoring is available by appointment only, through the Academic Skills Program at the International Institute. Tutors offer assistance with planning or editing college papers and in basic math.

d. Medical Careers Advancement Program

Services in this program help new Americans move up the medical career ladder from entry-level employment to advanced positions in the health-care industry. Program participants become nurses, medical assistants, surgical technicians and more! Program participants receive:

- Guidance in selection of the appropriate medical career and educational institution.
- Counseling throughout their education.
- Financial assistance which allows them to work part-time, concentrate on their studies and increase their chances of success.
- Strategies for success in school and at work: career analysis, organizational skills, job search skills, and workplace skills.
- Referral to on-site academic support (Academic Skills Training).

II. Others

Minnesota Council of Churches- <http://www.mnchurches.org/>

Lutheran Social services of Minnesota -<http://www.lssmn.org/refugee.html>

Catholic Charities of St. Paul; & Minneapolis-<http://www.ccsmp.org/index.html>

World Relief <http://minnesota.wr.org/>

6. **Minnesota Area Health Education Center-AHEC⁷¹** - is a federal-state matching funds cooperative agreement funded through Title VII of the Public Health Service Act through the Bureau of Health Professions, Health Resources and Services Administration, USDHHS State and local funding to support Minnesota AHEC is made possible through the substantial contributions of its academic and community partners

The AHEC program is a national program, begun in 1970, to improve the accessibility and quality of primary health care. The program was designed to encourage universities and educators to look beyond their institutions to partnerships that meet community health needs, working toward the goal of decentralizing health professions training and linking communities with academic health centers in partnerships that promote cooperative solutions to local health concerns.

AHEC is a partnership between communities and the University to address health professions workforce shortages. The University has a resource in its health professions students in medicine, nursing, pharmacy, dentistry, public health and veterinary medicine. Community resources include not only the professional environment, but also community engagement and quality of life. Through this partnership, the University and communities in greater Minnesota are working to have a positive influence of our future workforce choosing to practice in these areas.

In a typical year, AHECs across the country:

- Train 32,000 health professions students (17,000 medical students and 15,000 other health professions students) in community-based sites
- Work with approximately 600 federally-funded community and migrant health centers, 600 health departments and 200 National Health Service Corps sites
- Provide continuing education to 330,000 local health care providers

Specific Process Guidelines to IMGs

1. *Information on Residency Programs*

The GME Directory, known as the "Green Book," provides information on over 7,800 ACGME accredited residency programs in the U.S. and is available for purchase from the American Medical Association (AMA). More detailed information on residency programs is available in the AMA FREIDA Online. FREIDA is an Internet database with information on all U.S. residency programs. It is available online at <http://www.ama-assn.org/go/freida>. Both the Green Book and FREIDA are good starting points for IMGs beginning the application process to residency programs.

2. *Choosing a Residency Programs*

The following are guidelines from AMA about choosing a residency⁷². There are four different tracks within an internal medicine residency program: transitional, preliminary, categorical and primary care.

- Residents in one-year transitional programs rotate through different hospital departments every couple of months. While a transitional program counts as a year of training, it may not provide enough credits to move into the second year of residency training.
- Preliminary programs are also one-year programs for those wishing to specialize who need a year of internal medicine training.
- Categorical programs are three-year programs that may allow you to train up to board eligibility if your performance is satisfactory. Categorical programs are seen as the more traditional program and are mainly hospital-based.

Primary care programs provide increased emphasis on ambulatory care experience in the community and are becoming more prevalent. Those who are sure that they will be working as a generalist are advised to apply to a primary care program. Those who wish to fully train in internal medicine and then have the opportunity to train in a specialty should apply for a categorical position. While it is preferable to be in a categorical or primary care program, training in a transitional or preliminary program is better than being in no program at all. It is highly advisable to choose the program that best suits your needs and goals

3. *Participating in NRMP (Match) Program*⁷³.

- Even if you do intend to apply for a position outside of the Match, it is desirable to also register with the NRMP as it will only increase your chances of finding a residency position. There are two ways to find programs outside the Match. One, you may ask the programs directly if they offer any positions outside of the Match and if so, how you may apply. The second way is comparing listings in the Green Book and NRMP data. If programs are listed in the Green Book and not in the NRMP program

book, then those program positions are offered outside of the Match. If you feel that your chances of matching are low, it is worthwhile to look at results from past years to see which positions go unfilled and then apply to those programs as they will be more likely to accept IMGs

- When compiling your ROL, make sure that you use current program information, such as codes, and that your list is received by the deadline. You may change your ROL as often as you like after originally submitting it. When doing this, it is imperative to date each list since the ROL with the most recent date will be used in the matching process.
- One should never rank a program that they did not apply to that has not offered them an interview since a program that has not interviewed you will not rank you. It is important to seriously consider the programs you put on your ROL. You will match with the highest spot on your ROL that has accepted you and this is considered a contract.
- Only put program on your ROL that you will attend.
- If you do not match and cannot find a position during the Scramble, you still have a small window of opportunity in obtaining a residency slot. Some slots open up between July 1 and August 1 during the first few weeks of residency programs. Occasionally, residents do not show up for their slots or decide to leave early in the program. Programs that have your information on file will be much more likely to call you to fill a vacated slot. Therefore, it is important that you send a complete application package to a handful of programs by June 1 if you have not been matched

4. Letters of recommendation

While letters from overseas schools are important and may provide more insight into your background, they are not very helpful since international medical school standards vary and often are not comparable to those in the U.S.

Therefore, the best way for IMGs to get letters of recommendation is to get some experience working in a U.S. health care facility before applying for a residency slot. It is particularly important to get experience in a facility with a teaching program. Unfortunately, getting this experience can be a difficult task. Hospitals have no formal programs for IMGs to get experience. Therefore, it is largely up to individual IMGs to go out and find opportunities through their own initiative.

Often it's advisable to contact every hospital in your immediate area and volunteer your services (externship) as a well-trained IMG. Offer to work nights, weekends, or whenever needed in any capacity that is available. Even a short exposure in this atmosphere will be able to get you both a letter of recommendation and some experience working in a U.S. facility. A letter from someone who has seen you perform in a clinical setting will set you apart from other applicants and will often get you an interview. If you are absolutely unable to find a clinical experience in a teaching hospital, try to obtain a research position in a hospital laboratory, where you will have a mentor who will be able to write a letter of

recommendation. Conducting research at a hospital will often give you an entry into the hospital and may allow you to eventually observe clinical activities.

Almost all applicants are asked to provide deans letters, which are basically used to see that there were no major overall problems with their performance in medical school. They really look for letters from professors, residents, etc. who can attest to an applicants abilities and future as a physician in the U.S.

5. Personal Statement

Some programs require a personal statement as part of the application package. Even if a personal statement is not required, it is often a good idea to send one anyway. As long as it is short (not more than two typed pages) and addresses your uniqueness as an applicant, it will not be regarded negatively. A personal statement can often provide a more personal look at an applicant than does the standard application form. Include relevant information about your background, including why you have chosen medicine as a career and why you wish to train in the U.S.

SECTION G

Recommendation for Tackling Minnesota's Lagging FTHCPG Population

U.S has hundreds of physicians who have immigrated to Minnesota with a medical degree from a non-North American school and are unable to practice here. There are also hundreds of FNGs who are pursuing the licensure process. Both groups are needed in Minnesota and have been frustrated by the lack of available assessment opportunities to enable them to qualify to practice here. Experts have suggested several ways to solve the problems of FTHCPGs, though solutions might be costly it requires legislation. The following suggestions incorporate what has been done in other States and also some new ideas;

1. ***Facilitate participation in Externships or Observership:*** IMGs participate in externship rotations in a clinical setting before applying to residency programs. Externship provides IMGs with invaluable knowledge of U.S. medical clinical practice settings and with U.S. physicians who can serve as references⁷⁴. The State needs to play a role in requiring hospitals to facilitate this.
2. ***Need based matching or retraining:*** Set up a foundation or State system to match doctors to specialty areas that need them, i.e. retrain them with scholarships or loans, for other health careers.
3. ***Ease certification requirements for doctors serving ethnic communities:*** In Florida, for example, state laws let Cuban-educated physicians take tests that emphasize clinical diagnosis more than research¹.
4. ***Assessment of qualification:*** Assessment opportunities should be made available for every eligible IMG who lives in Minnesota. This assessment should set a fair and transparent standard using objective methods, and successful candidates should be provided with an assessment/training position in a Minnesota program.

Many IMGs may meet acceptable clinical standards and be willing to upgrade their training, but they are ineligible because others scored higher on the testing and because of the limited number of training positions available. Furthermore, the candidates themselves cannot determine whether they have deficits in their knowledge and, if so, where those deficits may be. The only way is that detailed results should be available to the candidate. There should also be enough training positions to accommodate all successful candidates.

¹ **Critical conditions: Physicians educated abroad work in low-paying jobs as they struggle to get certification** July 24, 2000 http://www.freep.com/news/health/docs24_20000724.htm

Addressing the potential backlog of IMGs who may be capable of providing quality care to Minnesota residents in this fashion would satisfy the frustration experienced by the IMG community related to the uncertainty of the current assessment process.

5. *Expansion of training opportunities:* Expanding training opportunities for FTHCPGs is a key element of the physician and nursing resource solution. While training positions for undergraduate and postgraduate programs have been increased over the past few years, more positions are required. In addition, training opportunities must be provided for IMGs as they move through the assessment and training processes in order to help ensure their success and understanding of Minnesota's health care system.

6. *Facilitate familiarity with Minnesota Health Setting and procedures:* Develop guidelines to encourage IMGs to engage in observation of patient care in a clinical setting with members of the Medical School.

Candidates for registration who are already in the State would be better prepared for assessments if they were able to gain experience by observing the work of Minnesota physicians in a clinical setting. However, many physicians are reluctant to allow IMGs into an observation-like setting because they are concerned that doing so would breach some policy.

The Medical Schools should propose to disseminate guidelines that would make it clear that such arrangements are permissible. The guidelines would include a requirement of patient consent, a confidentiality agreement from the IMGs, and a stipulation that the supervising physician is responsible for the IMG's actions at all times.

7. *Develop e-based legal and ethical training tools for IMGs:* In conjunction with all stakeholders; facilitate the development and implementation of web-based educational and assessment tools to teach legal and ethical issues and language and communications skills to potential Minnesota physicians.

As discussed above, the training and practice experience of IMGs is often very different from the practice of medicine in Minnesota. This extends to the ethical and legal aspects of practice, as well as to clinical performance. To assist IMGs to prepare for assessment in Minnesota, e-based legal and ethical training tools should be developed that IMGs could use on their own time.

8. *Increase postgraduate training positions for IMGs:* On a long-term basis, the postgraduate training capacity be increased to a reasonable factor in relation to the number of U.S. students graduating from Minnesota medical schools.

While the number of post-graduate training positions has recently been increased, there is still a shortage of positions in relation to potential FTHCPGs candidates. For instance, though the Somali immigrants are the highest population in Minnesota, the community just saw the first Somali student graduate with an MD degree at the University of

Minnesota in May 2005. The number of training positions must be increased to accommodate more candidates. This initiative should be considered complementary to, and not a substitute for, the other recommendations in this paper.

9. *Making optimal use of existing resources:* In some cases, improvement may be as simple as changing a regulation. In other instances, enhancements will require a strong concerted effort from all stakeholders. There are cases when FTHCPGs are not even aware of the existing resources.

10. *Facilitate movement between fields of practice:* Introduce more flexibility in the process by which candidates both select and are allowed to switch postgraduate training positions.

11. *Recognition/equivalency of screening examinations:* Develop a process to evaluate screening examinations from a variety of jurisdictions to determine whether they are equivalent to those in other countries. There is a pool of well-trained competent physicians who wish to practice in Minnesota but whose training and education come from institutions whose standards are unknown. Rather than require such individuals to repeat testing and training, a more efficient way of determining whether such physicians meet the standards expected in Minnesota would be to look closely at their education and training and determine whether it is equivalent to programs that the local colleges already recognizes. This should be done in collaboration with other stakeholders.

12. *Re-evaluate Exam attempt limit:* Allow for registration of physicians in practice outside of Minnesota who have met Minnesota's standards in the past. Create an entry pathway for physicians who were eligible for registration in the past, but whose eligibility was lost as a result of changing regulations. There are a number of physicians who are practicing in other State jurisdictions who would have qualified for a Minnesota license had the number of Exam attempt was revised, but they do not qualify under today's regulations. These physicians are welcome in other States and a significant number of exemplary physicians in Minnesota have precisely these credentials.

13. *Form a Foreign Nurses Support Group (FNSG):* This will help to counter the systemic barriers or obstacles while providing outreach, education and support for FNGs throughout the accreditation process. Despite the fact that Nurses experience the hardship of going through the licensure process, they still end up in a daunting work environment. Foreign nurses complain of inherently working odd and extended hours than the domestic US born-nurses. Even though there is a program to help recruit foreign nurses to reduce the nursing shortage, it is precisely this use of foreign workers that is found to be exploitative. MN State needs to form the **Live-in Caregiver Program**, which will help reduce discriminatory and racist activities seen in most nursing homes.

14. *Limited permits:* In January 2003, Mexican doctors were allowed to practice in California without additional US licenses in non-profit clinics to meet the extreme need in health care. They were allowed to practice for a limited time under the supervision of US physicians and 25 hrs of continuing education⁷⁵.

15. *Special Pilot Programs:* There is a **Welcome Back Program** in California created with a purpose of providing counseling and educational program opportunities for IMGs who wish to work in health care in California. The program is supported by The California Endowment and the U.S. health Resources and Services Administration, and currently assists more than 3,100 IMGs from more than 100 countries participating in the statewide Welcome Back program⁷⁶. This program also helps the FTHCPGs with orientation to get credentials⁷⁷.

16. *Outreach Activities:* Conduct outreach to IMGs' professional organizations to reach IMGs who are no longer in their residency period. In addition to being a training opportunity, collaboration with IMGs' professional organizations will strengthen the linkages between the public health system and these organizations

17. *Collaboration with state and local health department programs:* as well as community-based organizations that provide other medical and social services to foreign-born persons. These collaborations should include the development of culturally and linguistically appropriate patient education materials where needed.

18. *Transparency in the Selection Process:* Applicants Should Know What Filters a Residency Program Uses to Screen Candidates. Because of the significant expense attached to submitting applications, hospitals should publicize what their cut-off point has been in recent years, so that candidates do not waste money applying where their applications won't be reviewed. The State should introduce a resolution calling on the AMA to report all filters used for screening candidates for residency training.

19. *Dissemination of Culture:* All teaching hospitals organize a cultural orientation and medical communication day to familiarize. IMGs beginning residency training with norms of communication in US institutions. This is a concept tested very successfully at one hospital in New York, with presentations organized and conducted by IMGs affiliated with the hospital. Understanding of the roles of other health professionals and of inter-professional expectations can help to minimize difficulties for physicians new to graduate medical education in the US.

20. *Imitate California Physician Corps Program:* The corps, approved by the California Legislature, is a state version of the National Health Service Corps and would allow physicians to exchange a three-year commitment to work in underserved areas for an annual salary and forgiveness of \$105,000 in medical school loans. The CMA is also seeking approval from the state for more accredited residencies in California as an alternative to the pilot's one-year, unaccredited positions⁷⁸

21. *Parity for IMGs in Licensure Requirements:* Twenty-seven states require 3 years of GME for IMGs while only one requires 3 years of GME for USMGs. This delays employment and board certification. We have discussed this issue with the FSMB and the AMA Council on Medical Education. A resolution that asks the AMA to work towards parity in licensure, especially for primary care physicians, who complete residency in 3 years, needs to be considered.

Conclusion

The barriers faced by the new foreign-born population arriving in the US in terms of accessing care can best be alleviated by having a critical mass of foreign trained physicians and nurses. The FTHCPs play a crucial role in filling severe shortages within the two largest health care occupations: physicians and nurses. Many health care facilities and states cite examples of FTHCPGs in providing a qualified physician for an underserved area.

Despite the importance of FTHCP workers, the procedures and programs under which the United States permits them to enter the workforce are highly complex, involving constantly evolving laws and multiple federal and state agencies. These procedures and programs are both centrally authorized but locally implemented. Statistics and data on the immigrants involved are hard to come by and in some instances have never been compiled, even by the federal agencies that play key roles in running the programs

Completion of the testing and certification requirements can take an entire year, and therein lays the problem with using this route to satisfy nursing and physician shortages. Hospitals and nursing homes need to fill nursing slots immediately, and a year-long process of hiring is obviously an inefficient and unattractive mechanism for obtaining personnel. Finding the right job is never easy; FTHCPGs face even further challenges in considering their employment opportunities after training. Legal regulations, exploitative employers and bureaucratic delays makes FTHCPs feel like giving up on their American dream. But knowing their rights and getting the right resources on their side can help them avoid common traps and, when pitfalls do occur, how to navigate their way out

Largely as a result of more stringent certification and licensure requirements, the average number of nurses and physician getting certified is dropping. Requiring foreign-trained nurses to prove that they have the requisite skills to perform their job is important. However, the process of fulfilling these requirements under U.S. immigration law is duplicative, slow and expensive. Since foreign nurses must possess either a nursing license in the state of intended employment or have passed a test administered by the CGFNS, the additional certification and evaluation requirements imposed by IIRIRA duplicate requirements already imposed by state licensing authorities. Moreover, the exam of nursing skills (NCLEX) and CS for physicians is available only in the United States and its territories. Thus applicants have to travel to this country or locations like Guam to take the nursing test, an arrangement that constrains participation in the process⁷⁹

Few would disagree with the argument that US immigration system should serve to complement the U.S.- born workforce, and that federal and local policymakers have a duty to facilitate the entry of FTHCP workers into occupations experiencing labor shortages. A couple of ways to address the need for FTHCPs have been recommended in this report.

Endnotes

- ¹ ECFMG Website- <http://www.ecfmg.org/cert/certfact.html>, accessed on June 10, 2005
- ² Fifthpathway website; <http://www.fifthpathway.com/>, accessed on June 28, 2005
- ³ U.S Educational advising in Australia; <http://usembassy-australia.state.gov/education/afc0650.htm>, accessed on June 20, 2005
- ⁴ American Medical Association Website, <http://www.ama-assn.org/ama/pub/category/1550.html>, accessed on June 20, 2005
- ⁵ Essential Medicine webpage, Foreign Medical Graduates in the USA, <http://www.essentialmedicine.net/imgessential/aboutfmginus.php> accessed on July 15, 2005
- ⁶ MDH-Office of Rural health & Primary Care, *Minnesota Physician Workforce Profile, Feb 2002*, <http://www.health.state.mn.us/divs/chs/rhpc/PDFdocs/mdprofile.pdf>, accessed on July 5, 2005
- ⁷ Match program, Advanced Data Tables for 2003 Residency Match - http://www.nrmp.org/res_match/tables/adt2003.pdf, accessed on June 23, 2005
- ⁸ NRMP website, 2005 NRMP Results <http://www.aafp.org/match/table14.htm> , Accessed on 8/07/05
- ⁹ Ibid
- ¹⁰ Essential Medicine Website, IMGs By Specialty, http://www.essentialmedicine.net/imgessential/aboutfmginus_byspecialty.php, Accessed on June 26, 2005
- ¹¹ ECFMG Website - <http://www.ecfmg.org/announce.htm#slb>, Accessed on June 27, 2005
- ¹² AMA Website, Practicing Medicine In the U.S. <http://www.ama-assn.org/ama/pub/category/10141.html> ,
- ¹³ AMA Website, The Fifth Pathway Program - <http://www.ama-assn.org/ama/pub/category/9306.html> ,
- ¹⁴ Ibid
- ¹⁵ AMA Website, State licensure board requirements for IMG, <http://www.ama-assn.org/ama/pub/category/1555.html> , Accessed on June 27, 2005
- ¹⁶ AMA Website, The Fifth Pathway Program, <http://www.ama-assn.org/ama/pub/category/9306.html> , Accessed on June 27, 2005
- ¹⁷ AMA Website, IMGs in medicine and other FAQs, <http://www.ama-assn.org/ama/pub/category/11069.html> , Accessed on June 26, 2005
- ¹⁸ Ibid
- ¹⁹ AMA Website, The Fifth Pathway Program, <http://www.ama-assn.org/ama/pub/category/9306.html> ,Accessed on June 27, 2005

-
- ²⁰ AMA, Licensure information: Guidebook for GME Program Directors, 2003
http://www.ama-assn.org/ama1/pub/upload/mm/410/gmehandbook_app1.pdf , Accessed on June 24, 2005
- ²¹ ECFMG website, <http://www.ecfmg.org/usmle/index.html> ,Accessed on June 20, 2005
- ²² ECFMG website, <http://www.ecfmg.org/usmle/step2cs/transition.html>,Accessed on June 20, 2005
- ²³ ECFMG website, <http://www.ecfmg.org/announce.htm#slb>,Accessed on June 20, 2005
- ²⁴ ECFMG Website - <http://www.ecfmg.org/eras/index.html>,Accessed on June 20, 2005
- ²⁵ NRMP Website http://www.nrmp.org/res_match/yearly.html,Accessed on July 18, 2005
- ²⁶ AMA, Licensure information: Guidebook for GME Program Directors, 2003, http://www.ama-assn.org/ama1/pub/upload/mm/410/gmehandbook_app1.pdf, Accessed on June 24, 2005
- ²⁷ FSMB website, Requirements for Initial Licensure, June 2005
http://www.fsmb.org/2005usmle/html_files/lic_requirements.htm, Accessed on July 30, 2005
- ²⁸ UC Davis, Additional requirements for International Medical Graduates (IMG)
http://www.ucdmc.ucdavis.edu/neurosurg/education/residency_img.html , Accessed on July 26, 2005
- ²⁹ Ibid
- ³⁰ Grossmont college, Grossmont college opens door to IMGs, August 7, 2003
<http://www.grossmont.edu/newsRelease/2003/AcceleratedADNProgram.pdf> , Accessed on Aug 6, 2005
- ³¹ Ibid
- ³² Myrle Croasdale, *AMNews* staff. Jan. 20, 2003. Mexican doctors to staff California clinics
<http://www.fitpsy.org/Medicine/MexDocImports.htm> , Accessed on Aug 2, 2005
- ³³ Medical Society of the State of New York (MSSNY) Website,
<http://www.mssny.org/membership/imgctext.htm>,Accessed on Aug 2, 2005
- ³⁴ Ibid
- ³⁵ Minnesota Board of Medical Practice Website,
http://www.fsmb.org/2004usmle/paper_route/html_files/minnesota_part_4.htm ,
Accessed on Aug 7, 2005
- ³⁶ Allina Hospitals & Clinics Website, Licensing-
<http://www.allina.com/ahs/docopps.nsf/page/licensing>, Accessed on Aug 7, 2005
- ³⁷ FSMB Website, State licensing requirements,
http://www.fsmb.org/2004usmle/paper_route/html_files/florida_part_4.htm Accessed on Aug 5, 2005
- ³⁸ All Nursing Schools Website, <http://www.allnursingschools.com/faqs/foreignnurse.php> ,
Accessed on Aug 5, 2005

-
- ³⁹ Nurses2America Website, <http://www.nurses2america.com/credentialing/credentialing.htm> ,Accessed on Aug 10, 2005
- ⁴⁰ The CGFN Certification Program, <http://cgfns.51test.com/download/Certification%20Program%20Broch.pdf>,Accessed on Aug 10, 2005
- ⁴¹ Immigration Specialties, An Overview of the CGFNS Certification Program, <http://www.immspec.com/RN/CGFNSoverview.htm> Accessed on Aug 12, 2005
- ⁴²Ibid
- ⁴³Immigration Specialties, An Overview of the CGFNS Certification Program, <http://www.immspec.com/RN/CGFNSoverview.htm> ,Accessed on Aug 12, 2005
- ⁴⁴ Website of Nurses2America- <http://www.nurses2america.com/credentialing/credentialing.htm>
- ⁴⁵ <http://www.immspec.com/RN/CGFNSoverview.htm>
- ⁴⁶ Nurses2America Website, <http://www.nurses2america.com/credentialing/credentialing.htm> , Accessed on Aug 10, 2005
- ⁴⁷NCSBN, NCLEX® Statistics, http://www.ncsbn.org/pdfs/NCLEX_fact_sheet.pdf , Accessed on Aug 14, 2005
- ⁴⁸ PulseHR™ Inc, CGFNS Certification: Components, Requirements, and Process, http://www.pulsehr.com/Resources/USA_CGFNS_Certification_Information_for_Foreign_Nurses.htm#Timetable%20and%20Costs, Accessed on Aug 8, 2005
- ⁴⁹Siskind Susser Law firm, Chart of nurse licensing requirements- <http://www.visalaw.com/h02jan/6hjan102.html>, Accessed on Aug 8, 2005
- ⁵⁰California Board of Registered Nursing (BRN) Website, <http://www.rn.ca.gov/lic/lic-end.htm>, Accessed on Aug 11, 2005
- ⁵¹ State of Minnesota Yellow Pages Website, <http://www.yellowpages.state.mn.us/is/yellowpages.nsf/0/2098caa7ad1c622886256b0a005c0ac0?OpenDocument> ,Accessed on Aug 11, 2005
- ⁵²The Office of the Professions: New York State Department of Education, License Requirements: RN & LPN, <http://www.op.nysed.gov/nursing.htm>,Accessed on Aug 11, 2005
- ⁵³ LAW OFFICES OF BRIAN B. JIANG, Foreign Nurses, CGFNS, NCLEX-RN- http://www.immigrationlawyer-usa.com/foreign_nurses.asp?TitleID=15&DetailID=59 Accessed on Aug 12, 2005
- ⁵⁴ AMA Website, <http://www.ama-assn.org/ama1/pub/upload/mm/18/i04rep-a.doc> ,Accessed on Aug 12, 2005
- ⁵⁵MDH, Overview of requirements for foreign trained physicians, nurses and dentists to become eligible for licensure in the United States, <http://www.health.state.mn.us/divs/idepc/refugee/ihtf/foreigndocs.pdf> ,Accessed on Aug 14, 2005

-
- ⁵⁶ Kumar, A.K (October 2003). “Are They Foreign to You?”, *The Journal of the Washington Academy of Family Physician*,30(4),18
- ⁵⁷ ECFMG Website, ERAS, <http://www.ecfm.org/eras/> ,Accessed on Aug 1, 2005
- ⁵⁸ ECFMG Website, 2005 ECFMG Information booklet, <http://www.ecfm.org/2005ib/ibexam.html#locations>,Accessed on July 11, 2005
- ⁵⁹ Eric Freeman, Center for Economic & Policy Research; Barriers to Foreign Professionals Working in the United States, Sept 15, 2003 http://www.cepr.net/publications/professional_supplement.htm , Accessed on July 11, 2005
- ⁶⁰ Ibid
- ⁶¹ Eric Freeman, Center for Economic & Policy Research; Barriers to Foreign Professionals Working in the United States, Sept 15, 2003 Center for Economic & Policy Research- http://www.cepr.net/publications/professional_supplement.htm, Accessed on July 11, 2005
- ⁶² PulseHR™ Inc, CGFNS Certification: Components, Requirements, and Process, http://www.pulsehr.com/Resources/USA_CGFNS_Certification_Information_for_Foreign_Nurses.htm#Timetable%20and%20Costs ,Accessed on Aug 8, 2005
- ⁶³ PulseHR™ Inc, CGFNS Certification: Components, Requirements, and Process, http://www.pulsehr.com/Resources/USA_CGFNS_Certification_Information_for_Foreign_Nurses.htm#Timetable%20and%20Costs,Accessed on Aug 8, 2005
- ⁶⁴ Access Nurses Website, Nurse Licensure. <http://www.accessnurses.com/licensure/>,Accessed on Aug 18, 2005
- ⁶⁵ Ibid
- ⁶⁶ NCSBN Website, Nurse licensure compact http://www.ncsbn.org/nlc/mlpvcompact_mutual_recognition_rules.asp ,Accessed on Aug 8, 2005
- ⁶⁷ PulseHR™ Inc, CGFNS Certification: Components, Requirements, and Process, http://www.pulsehr.com/Resources/USA_CGFNS_Certification_Information_for_Foreign_Nurses.htm#Timetable%20and%20Costs,Accessed on Aug 8, 2005
- ⁶⁸ PulseHR™ Inc, Latest Nursing and Healthcare News on Visa, Immigration and Certification, http://www.pulsehr.com/Resources/US_Nursing_Visa_Immigration_Certification_Latest_News.htm ,Accessed on Aug 8, 2005
- ⁶⁹ <http://www.rwjf.org/portfolios/resources/grantsreport.jsp?filename=030782.htm&iaid=144>
- ⁷⁰ International Institute of Minnesota- http://www.iimn.org/index.asp?Type=B_BASIC&SEC={225F3E84-A39B-44F3-8BD2-3A07717BEEE3} ,Accessed on Aug15, 2005
- ⁷¹ Minnesota Area Health Education Center- <http://www.mnahec.umn.edu/AHEC/faq.html#what> ,Accessed on Aug15, 2005
- ⁷² AMA, Residency program requirements, <http://www.ama-assn.org/ama/pub/category/1554.html> ,Accessed on June 15, 2005

⁷³ Ibid

⁷⁴ AMA, Residency program requirements, <http://www.ama-assn.org/ama/pub/category/1554.html> ,Accessed on June 15, 2005

⁷⁵ MDH, Overview of requirements for foreign trained physicians, nurses and dentists to become eligible for licensure in the United States
<http://www.health.state.mn.us/divs/idepc/refugee/ihtf/foreigndocs.pdf> ,Accessed on June 15, 2005

⁷⁶Grossmont College, Welcome back program
http://www.grossmont.edu/newsRelease/2005/WelcomeBackProgram_March18.pdf ,Accessed on Aug 15, 2005

⁷⁷ Myrle Croasdale, *AMNews* staff. Jan. 20, 2003. Mexican doctors to staff California clinics, <http://www.fitpsy.org/Medicine/MexDocImports.htm> ,Accessed on Aug 20, 2005

⁷⁸ bid

⁷⁹Immigration Policy in Focus, Vol. 3, Issue 1; Feb 2004: Health Worker Shortages & the Potential of Immigration Policy, <http://www.aif.org/ipc/ipf031104.asp> , accessed on Aug 20, 2005

**UTILIZATION OF FOREIGN TRAINED
HEALTHCARE PROFESSIONAL
GRADUATES:**

A Strategy to Reduce Health Disparities in
Minnesota by Diversifying the Health Work Force

A Literature Review

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**A Strategy to Reduce Health Disparities in
Minnesota by Diversifying the Health Work Force**

A literature review commissioned by AAFACD, Inc. in collaboration
with Center for Urban and Rural Affairs (CURA) University of
Minnesota

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Abbreviations

AACN	American Association of Colleges of Nursing
AAP,	American Academy of Pediatrics
ABP,	American Board of Pediatrics
AMA,	American Medical Association
CAH,	Critical Access Hospital
FTE,	Full-Time Equivalent
FTHCPs	Foreign Trained Healthcare Professionals
GME,	Graduate Medical Education
GMENAC,	Graduate Medical Education National Advisory Committee
HPSAs	Health Professional Shortage Areas
HMO,	Health Maintenance Organization
IMG,	International Medical Graduate
IOM	Institute of Medicine
MDEED	Minnesota Department of Employment and Economic Development
ORHPC	Office of Rural Health and Primary Care
REACH	Racial and Ethnic Approaches to Community Health
SIHB	Seattle Indian Health Board
USDHHS	United States Department of Health and Human Services
USMGs	United States Medical Graduates

Executive Summary and Introduction

Foreign-born and foreign-trained professionals play an important role in the delivery of health care in the United States. This paper addresses the issue of Health Disparities in Minnesota and the utilization of FTHCPs as a strategy to reduce health disparities. FTHCPs include Physicians, Nurses, Pharmacists, Dentists and others but for the purposes of this report the term is limited to Foreign Trained Physicians and Nurses. Overall, health disparities is a topic of concern in the United States as a whole and has been addressed by several significant organizations including; The U.S Department of Health and Human Services (DHHS), Institute of Medicine (IOM), Centers for Disease Control (CDC), The Common Wealth Foundation and others. In Minnesota, Health Disparities has also been addressed by organizations such as The Minnesota Department of Health, University of Minnesota (The Academic Health Center) and others.

The need for physicians, particularly in under-represented minorities, continues to grow. There is compelling evidence for the need to increase diversity within the physician workforce to ensure high-quality medical education, access to health care for the underserved, advances in research, and improved business performance¹. To have enough physicians to meet the future needs of the general public, as well as of minority citizens, we must recruit from diverse populations. Addressing shortages requires inventive efforts to counter obstacles created by the anti-affirmative action movement, as well as strategies to encourage institutions to become more engaged in diversity efforts.

The common mission of increasing quality and years of healthy life and eliminating health disparities (goal of Healthy People 2010) depends on the healthcare workforce. FTHCP continue to be important as they continue to fill the gap in HPSAs. Congress has elected to expand the Conrad Program to 30 slots per state, perhaps signaling a continued reliance on IMGs to help solve the U.S. physician mal-distribution problem. The December 2002 decision by Secretary of Health Tommy Thompson to involve DHHS in facilitating placement of IMGs further signals support for a pro-IMG policy.

These new IMG policy changes seem somewhat at odds with recent harsher overall immigration policies, but U.S. policy has historically been friendlier to highly educated immigrants than others. The Conrad "State 20" Program places international medical graduates (IMGs) on J-1 visas in health professional shortage areas (HPSAs). The federal Conrad-20 program was passed as an amendment to immigration legislation sponsored by Senator Kent Conrad (D-ND) in 1997. It allows state health departments to be interested government agencies for the purposes of recommending J-1 visa waivers. Health departments may recommend up to 20 such waivers annually, for any HPSA in its state (rural or urban). Bills before Congress this year⁵ would increase the limit on the number of waivers and extend the sunset provisions of the program.

There has been a longstanding debate between those who advocate and others who oppose a decrease in the proportion of IMGs in the medical workforce (Mullan, 2000). A number of policy-oriented organizations have long advocated for lowering the number of IMGs, while a variety of interest groups have found IMGs to be willing (or able to be induced) to provide care

to underserved poor urban or rural populations. Until recently, the pro-IMG voices have typically prevailed in policy debates. A prominent issue in these debates is whether IMGs are more likely than their U.S. medical graduate counterparts (USMGs) to contribute to the health care safety net, or whether they simply exacerbate a physician surplus (Mick, 1999; Politzer et al., 1998). In the short run, new IMGs can often be induced to serve in underserved communities for at least three years while they participate in various visa-waiver programs.

Evidence shows IMGs are no more likely to practice in urban poor or rural underserved areas than their USMG counterparts. Nonetheless, about one-quarter of community health centers rely on IMGs to fill physician vacancies (Baer et al., 1999). In addition, it has been estimated that if all IMGs currently in primary care practice were removed, “one out of every five ‘adequately served’ non-metropolitan counties would become underserved and the percentage of rural counties with physician shortages would rise to 44.4 percent” (Baer et al., 2001).

Federal programs were launched in the 1990s to make IMGs practice in the U.S. more accessible. It was considered a reasonable strategy to address the physician mal-distribution problem in rural and inner city underserved areas. Two of the most significant interested government agencies for placing foreign-born physicians are;

- The Appalachian Regional Commission (ARC), which places between 50 and 75 physicians a year in portions of 13 states, and
- The U.S. Department of Agriculture (USDA).

Many rural hospitals, clinics, and private physician offices find IMGs to fill their openings, and sponsor them with the USDA or ARC or a state health department to receive a J-1 visa waiver. Exchange visitors with a J-1 visa are defined as persons with a residence in a foreign country who come temporarily to the United States to teach, conduct research or receive training. The presence of J-1 visa holders in the residency programs of many hospitals is due in part to the insufficient number of graduates from American medical schools, which leads residency programs to utilize J-1 temporary immigrants to remain fully staffed.

The USDA recommended over 3,000 IMGs for rural practice between 1994 and 2001. After September 11, 2001, however, the agency became reluctant about its role in allowing foreign nationals to stay in the U.S., and announced it would no longer be an interested government agency for the purpose of recommending J-1 visa waivers to the INS. The USDA has announced it will process all requests that were pending before September 11, and a White House Task Force has been assembled to determine the future of the program.

Understanding Health Disparities

In the United States, health disparities are evident within and among population groups. Disparities in health are defined as unequal burdens in disease morbidity and mortality rates experienced by ethnic/racial groups as compared to the dominant group (USDHHS, 2000). Healthy People 2010 define health disparities as the “Unequal burden in disease morbidity and mortality rates experienced by ethnic/racial groups as compared to the dominant group.”² The IOM 2002 report, “*Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*,” reviewed the evidence of racial and ethnic disparities in health care and provided recommendations towards reducing those disparities. The report suggests that unconscious or conscious discrimination on the part of providers accounts for a portion of the unequal inferior treatment of minorities as opposed to Whites.

Disparities in Access to Healthcare

Access is defined by the IOM³ as “the timely use of personal health services to achieve the best possible health outcomes”. The Journal of Rural Health⁴ identifies integral components of the construct of access as:

- Availability
- Accessibility
- Affordability
- Accommodation (relationship between practitioner and patient)
- Acceptability of care

In the report “Understanding Health Disparities”⁵ Disparities in health care access are most often associated with barriers of entry into the health care delivery system. Factors impeding access to health care include a lack of financial resources, a cultural preference that discourages health-seeking behavior, low health literacy levels, language barriers, lack of diversity in the health care workforce, and a mistrust of the health care system due to a prior negative experience. Additional impediments to access include systemic barriers such as the lack of available and proximate providers, the lack of transportation, the lack of or poor health insurance coverage, the lack of access to a regular source of care, and legal or bureaucratic barriers to receiving public aid.⁶

Recent research suggests that African American and Hispanic physicians see significantly more African American and Hispanic patients than other physicians.⁷ Increasing the numbers of minority physicians from these groups and the diversity of the healthcare work force overall, will help improve access to care, with the longer term benefit of improving minority health status as people with the same backgrounds, cultural norms, experiences, and values are more likely to feel comfortable with each other and to communicate well.⁸ There is some evidence that minorities who can choose their own physicians will choose one who is a member of the same minority group, even after adjusting for geographical proximity.⁹ Good communication leads to good care thus if the medial workforce does not reflect the anticipated demographics, then the delivery of quality care can be compromised leading to broader public health implications.

Disparities in Health Outcomes

The most commonly reported health disparities are seen in cardiovascular disease, cancer, and diabetes. The following findings from the Centers for Disease Control and Prevention highlights disparities for selected health indicators known to affect multiple racial and ethnic minority groups at all life stages:¹⁰

- Cardiovascular Disease: In 1998, rates of death from cardiovascular disease were about 30 percent higher among African-American adults than among white adults.
- Diabetes: The prevalence of diabetes is 70 percent higher among African Americans and nearly 100 percent higher among Hispanics than among whites. The prevalence of diabetes among American Indians and Alaska Natives is more than twice that of the total population.
- HIV/AIDS: Although African Americans and Hispanics represented only 25 percent of the U.S. population in 1999, they accounted for roughly 55 percent of adult AIDS cases and 82 percent of pediatric AIDS cases.
- Immunizations: In 1999, Hispanics and African Americans aged 65 years and older were less likely than whites to report having received influenza and pneumococcal vaccines.
- Infant Mortality: African-American, American Indian, and Puerto Rican infants have higher death rates than white infants. In 1998, the death rate among African-American infants was 2.3 times greater than that among white infants.

Causes of Health Disparities

The US DHHS cites the causes of health disparities to include poor education, health behaviors of the minority group, poverty (inadequate financial resources), and environmental factors. “*Understanding Health Disparities*” report¹¹ identifies a different set of causes namely;

- Lack of Insurance Coverage
- Lack of a Regular Source of Care
- Lack of Financial Resources
- Legal Barriers
- The Health Financing System
- Structural Barriers
- Cultural/ Linguistic Barriers
- Health Literacy
- Lack of Diversity in the Health Care Workforce

Who experiences Health Disparities?

Historically, African Americans have experienced poorer health status and outcomes than the majority population. This situation persists today. For example:

- The rate of prostate cancer among African American men is twice that of White men
- African American women develop breast cancer at a lower rate than do White women, but they are twice as likely to die from the disease
- Obesity, which increases the risk for development of colon, breast, and endometrial cancer, occurs disproportionately among African Americans.

Defining the Health Work Force

The term “Health Workforce” refers to health professionals for example, physicians, nurses, dentists, and pharmacists who work in health service settings. The term may also encompass health professionals who work in other environments, such as educational institutions, research organizations, and government agencies.¹² It may even include others who work in health care settings, such as administrators, public health monitors, medical records personnel, and laboratory assistants.

Composition of the health work force and distribution in Minnesota

The Minnesota Department of Health’s Health Service Personnel Survey of 2000 reveals a number of important factors about the supply of physicians, including the large concentration of physicians in Minnesota’s metro and urban areas and the changing gender composition of the physician workforce. Of all physicians re-licensed through the state of Minnesota in 2000 only 62.3 percent reported that they actively use their license and are employed in Minnesota. Almost one quarter (23.7 percent) report an active license, but practice in another state. Roughly 6% of these physicians practice in a state bordering Minnesota. Another ten percent do not currently hold an active license to practice medicine. Of these inactive license holders 44.5 percent are retired.

Minnesota’s 2002 graduating GME class closely follows this pattern. Roughly a quarter of all responding residents and fellows indicated that they had attended a non-U.S. medical school. Nearly half (41%) of the IMGs completing GME in Minnesota were native born or naturalized U.S. citizens or permanent residents, while 55% held J visas. Respondents from primary care GME programs were much less likely to be here on temporary visas than were respondents from non-primary care programs¹³.

Foreign Born Physician Work Force in the US

Although racial and ethnic minorities make up an increasing percentage of the U.S population, certain minorities are significantly underrepresented in the U.S physician workforce.¹⁴ Latinos, African Americans and Native Americans count for about 25% of the U.S population, yet they represent only about 6% of practicing physicians in the United States; these same three minority groups only make up about 15% of medical school graduates¹⁵

IMG residents: by the numbers

Almost one-fourth (23.3%) of the nation’s 772,000 practicing physicians are graduates of non-U.S. medical schools (IMGs)¹⁶. IMGs represent approximately 25% of the GME population and the physician work force.¹⁷ This figure has remained relatively constant in

recent years. In general, the majority of IMGs are U.S. citizens or permanent residents rather than holders of temporary H or J visas.

The chart below depicts the citizenship/Visa status of all residents and IMGs on duty in ACGME-accredited and in Combined Specialty Programs as of Aug 1, 2003.

Citizenship/Visa status	Resident physicians*			
	Total†		IMGs‡	
	No.	%	No.	%
Native U.S. citizen	64,824	64.8	4,201	15.8
Naturalized U.S. citizen	10,161	10.2	2,650	10.0
Permanent resident	9,457	9.5	6,673	25.1
B-1, B-2 temporary visitor	75	0.1	75	0.3
F-1 student	344	0.3	85	0.3
H-1, H-1B, H-2, H-3 temporary worker	2,399	2.4	2,250	8.5
J-1, J-2 exchange visitor	4,326	4.3	4,192	15.8
Refugee/asylee/displaced person	79	0.1	77	0.3
Other	542	0.5	457	1.7
Unknown	7,757	7.8	5,917	22.3
Total	99,964	100.0	26,577	100.0

* Includes residents on duty as of Aug. 1, 2003, reported through the 2003 National GME Census. A total of 260 programs (3.2 percent) did not provide updated information on residents by March 1, 2004. For these nonresponding programs, residents reported in the last received survey were moved into their next year in the program or graduated, and new residents were added from the 2003 National Resident Matching Program when available.

† Medical school type was not indicated for 18 residents (<0.1 percent)

‡ Does not include graduates of Canadian medical schools

Source: *The Journal of the American Medical Association*, Sept. 1, 2004, volume 292, page 1107. Copyrighted © 2004 American Medical Association. All rights reserved.

The 2000 census counted 1.7 million immigrants in the health care industry, accounting for about 11.7 percent of all workers, including non-medical personnel such as administrators or janitors who work in a health care setting but are not themselves delivering health care directly. Among health care delivery occupations, such as doctors, nurses and physical therapists, some 1.1 million immigrants comprise about 13.0 percent of all workers¹⁸.

Immigrants in the Health Care Workforce: 2000		
	Number of Immigrant Workers	Immigrant Percent of Workforce
All U.S. Workers (Including non-health)	16,073,543	12.4%
Health Care -- All Workers	1,695,372	11.7%
Health Care -- Health Care Providers	1,101,792	13.0%

Within specific health care occupations, the representation of immigrants varies widely. For instance, among optometrists (8.3 percent of whom are foreign born), dental hygienists (4.6 percent) and speech-language pathologists (3 percent), the number of immigrants in the workforce is below the national average of 12.4 percent. However, there are higher than average numbers of immigrants working as physicians (25.2 percent); nursing, psychiatric and home health aides (17 percent); clinical laboratory technicians (15.8 percent); and pharmacists (14.8 percent).

Percentage of Immigrants in Medical Occupations: 2000¹⁹

Dentists	14.4%
Dietitians & Nutritionists	10.7%
Optometrists	8.3%
Pharmacists	14.8%
Physicians	25.2%
Physician Assistants	11.2%
Podiatrists	8.0%
Registered Nurses	11.5%
Occupational Therapists	7.4%
Physical Therapists	7.4%
Respiratory Therapists	9.9%
Speech-Language Pathologists	3.0%
Therapists, all other	8.1%
Health Diagnosing & Treating Practitioners, all others	11.0%
Clinical Laboratory Technologists & Technicians	15.8%
Dental Hygienists	4.6%
Licensed Practical & Vocational Nurses	8.8%
Medical Records & Health Information Technicians	8.7%
Other Health Care Practitioners & Technical Occupations	7.9%
Nursing, Psychiatric, & Home Health Aides	17.0%
Dental Assistants	11.7%
Medical Assistants and other Health Care Support Occupations	9.3%
All Medical Professions	13.0%
All Occupations (not exclusively medical)	12.4%

Note: boldface type denotes categories with higher-than-average numbers of immigrants.

Foreign-born workers have also had a profound impact on the growth of the health care workforce. The American medical industry grew by 1.7 million workers during the 1990s, with nearly 25 percent of this growth attributable to the entry of immigrants into the labor force. While this is relatively low when compared to the more than 72 percent

of net employment growth attributable to immigrants entering the U.S. labor force as a whole during the 1990s, their presence in the medical industry played a critical role in increasing the availability of health care in this country.

Growth of the Health Care Workforce in Selected Health Care Sectors: 1990-2000				
	Industry Employment Growth	Native Born Growth	Foreign Born Growth	Pct. Of Growth Due to Foreign Born
Health Care Industry	25%	21%	62%	25%
Offices of Physicians/ outpatient care centers	80%	91%	14%	14%
Home Health Care Services/ Other Health Care Services	40%	31%	114%	30%
Hospitals	4%	0%	32%	97%
Nursing Care Facilities	8%	3%	72%	70%

Immigrant health workers have been particularly important in home health care, hospitals, and nursing care facilities. In home health care, immigrant workers more than doubled in number during the 1990s, increasing by 114 percent, while the native born workforce grew by only 31 percent. In hospitals, immigrant employment grew by about one third, 32 percent, while native-born employment was essentially flat, growing by less than 1 percent. The number of immigrants working in nursing care facilities jumped by 72 percent, while the number of native-born workers grew by only 3 percent; At the same time, native-born employment in physicians' offices and outpatient care centers nearly doubled, increasing by 91 percent, while immigrant employment grew by only 14 percent²⁰.

U.S Physician Shortage Prediction

Over the next decade, growth in the numbers of practicing general internists and other primary care specialists will decline²¹ while growth in the numbers of sub specialists will increase. This is due in part to medical students' and graduate physicians' perceptions that subspecialty careers offer a better quality of life and higher incomes than primary care. Demand for internal medicine sub specialists and general internists with specialty training (especially geriatricians and hospitalists) will continue to grow. However, job prospects for generalists will still be favorable, particularly in rural and low income areas. Over the next quarter century, predicted (although debatable) physician shortages may increase demand for both sub specialists and generalists.

The Minnesota Health Work Force

Physicians Workforce

Number of licensed Physicians practicing in Minnesota

As of January 2005, there were 12,600 currently licensed physicians with Minnesota addresses. Some of these were retired or not working as doctors. Physicians working at least part time at a Minnesota practice site accounted for 9,428 based on survey responses in 2003. Using data from the American Medical Association, the U.S. Census Bureau reported that Minnesota had 263 licensed physicians per 100,000 population in 2002, compared to a national rate of 256²². The Census Bureau figures include all licensed physicians, whether actively practicing in the state or not.

Using the Health Workforce Database⁴ to document the number of active, licensed allopathic and osteopathic physicians for the 16 identified specialties in 2002, it was found that a total of 4,261 primary care physicians were licensed and practicing in the state. Of those, 1,286 (30%) were practicing in rural Minnesota. Of the state's 2,379 other licensed and practicing specialty care physicians, 498 (21%) were practicing in rural Minnesota. Rural areas had a higher proportion of physicians in primary care (72%), compared with metropolitan Minnesota (61%), and 863 of the 1,286 physicians in rural Minnesota were family practice physicians²³.

In 2001, 285 new primary care licenses were issued. Of those, 207 (73%) were issued to practicing physicians in metropolitan areas and 78 (27%) were issued to rural physicians. Most new licenses issued for both practicing physicians and residents were for family practice (164) and internal medicine (126).

Primary practice settings of Minnesota licensed physicians 2003

Practice Setting	Urban	Rural
Office/Clinic	67.8%	80.7%
Teaching Hospital	20.3%	2.1%
Other Hospitals	4.9%	9%
Laboratory	1%	.6%
Medical school	1.4%	.1%
Emergency room	2.6%	5.5%
Nursing home	.2%	.4%
Hospice	.1%	0%
Treatment facility	.1%	.8%
Other	1.6%	.9%
N	7,521	1,907

Minnesota Physician Demand

For the purposes of this paper, rural Minnesota (Rural MN) includes everything outside of the seven-county metropolitan area and does not include the cities of Duluth or Rochester, Minnesota. Greater Minnesota (Greater MN) includes everything outside of the seven-county metropolitan area. Metropolitan Minnesota (Metro MN) includes the seven-county metropolitan area (Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties.) Urban underserved also includes federally funded community health centers located in the metropolitan area.

Number of Physicians Practicing vs. Number of Vacancies by Region in 2003

Specialty	Number Practicing Greater MN	Number of Vacancies Greater MN	Number Practicing Rural MN	Number of Vacancies Rural MN	Number Practicing Metro* MN	Number of Vacancies Metro* MN
Primary Care	1397.3	102.8	1024.2	78.8	598.1	17.0
Medical Specialties	382.8	23.0	100.8	8.0	138.1	8.0
Surgical Specialties	448.9	42.4	243.2	25.4	165.7	6.5
Other Specialties	985.1	49.5	286.7	13.5	279.8	21.6
Total	3214.1	217.7	1654.9	125.7	1181.7	53.1

* Survey sample included 226 randomly selected clinics and all 23 hospitals, 19 CHC's, and 10 MHC's in the seven-county metropolitan area.

Advanced Practice Nurses and Physician Assistants Practice and Vacancy by Region²⁴

Provider Type	Number Practicing Greater MN	Number Vacancies Greater MN	Number Practicing Rural MN	Number Vacancies Rural MN	Number Practicing Metro* MN	Number Vacancies Metro* MN
Nurse Practitioners	323.0	21.6	153.2	21.6	310.2	2.0
Physician Assistants	240.0	7.1	139.4	5.1	89.0	0.0
Certified Nurse Midwives	13.2	1.0	9.2	1.0	27.1	1.0
Total	576.2	29.7	301.8	27.7	426.3	3.0

* Survey sample included 226 randomly selected clinics and all 24 hospitals in the seven county metropolitan area.

Nurse Practitioners represented the greatest proportion of advanced practice providers practicing in all three regions, however in rural Minnesota the number of Physician Assistants was close to the number of Nurse Practitioners.

Five Health Care Work Groups—Current Employment, Current Vacancies, Currently Being Recruited²⁵

Diversifying the Health Work Force using FTHCPs as Strategy to reduce Health Disparities in Minnesota: A Literature Review

Work Category	# Currently Employed	# Current Vacancies	# Currently Recruiting
Primary care physicians	260	23	15
Specialty physicians	301	55	20
Dentists	67	5	9
RNs (Associates & Bachelors degrees)	1288	111	38
Pharmacists	143	12	10

Statewide Job Outlook for 5 Health Care Work Groups²⁶

Work Group (Location-MN)	1998 Employment	2008 Employment	Percent Change	Numeric Change
Primary Care physicians	12,900	16,350	27%	3450
Specialty care physicians	12,900	16,350	27%	3450
Dentists	3,200	3,500	8%	300
RNs	39,800	46,850	18%	7050

The Nursing Work Force

Shortage among the Nurse work force in MN

The AACN recognizes that the shortage of faculty in schools of nursing with baccalaureate and graduate programs is a continuing and expanding problem. AACN notes that the United States is in the midst of an unprecedented shortage of registered nurses. This shortage is expected to persist because of the increasing demand for health care as baby boomers approach retirement; the aging nursing workforce; and the decline of interest in nursing as a career because of expanding opportunities for women in previously male-dominant professions (Staiger, Auerbach, & Buerhaus, 2000).

According to projections from the Bureau of Labor Statistics (BLS), there will be more than one million vacant positions for registered nurses (RNs) by 2010 due to growth in demand for nursing care and net replacements due to retirement (Hecker, 2001). Data from the 2000 National Sample Survey of Registered Nurses estimated that 39 percent of RNs employed in nursing held baccalaureate or master's degrees in nursing (Spratley, Johnson, Sochalski, et al., 2001). Therefore, one can postulate that at least 390,000 of the vacancies projected by the BLS will be for RNs with baccalaureate or master's nursing degrees, which translates into the need for large numbers of well-prepared faculty to educate these new nurses. In addition, US high schools will graduate the largest class in history in 2007-2008-a projected 3.2 million graduates (Western Interstate Commission for Higher Education, 1998). Even if enrollment demand in nursing increases only modestly, will sufficient numbers of nursing faculty be available to teach these students?

Demand for Nurses in Minnesota:

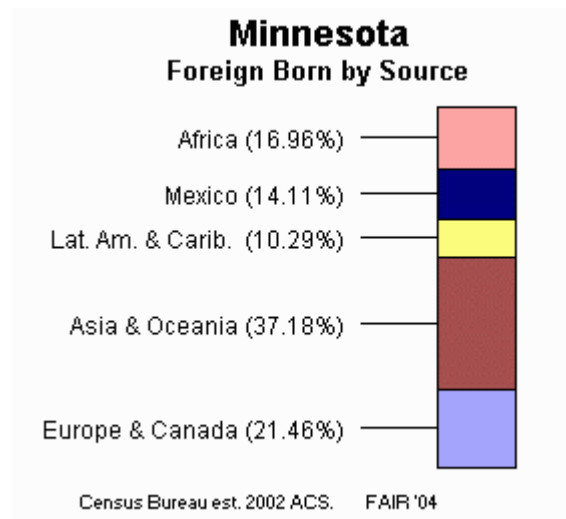
The demand for RNs both nationally and statewide is strong; however, the supply of RNs is not currently meeting the demand. According to the MDEED, in 2004 there are nearly 48,620 RNs employed with approximately 2,000 vacancies throughout Minnesota. A recent study of the Minnesota RN workforce by the ORHPC revealed that an aging workforce, low RN graduation rates, increased wage growth, high staff turnover, and employee demand have all contributed to a shortage of RNs²⁷.

The shortage of nurses is exacerbated in Greater Minnesota where the pool of trained RNs is smaller. In addition, the rural RN workforce is about one-and-a-half years older than their urban counterparts and closer to retirement. In Greater Minnesota the availability of RN programs is scattered. In most cases, students would need to either move away from their home or travel a minimum of two hours one way to attend classes. After a student moves away from home to attend school, the likelihood of returning to practice in rural Minnesota drops significantly. The lure of a metropolitan area is a challenge for rural health care. The opportunity to work in a variety of settings or specialties and earn higher wages can be very appealing.

The shortage of nurses is expected to continue into the future. With more nurses retiring in the next 15 years and fewer students graduating from RN programs, the gap may become even bigger.

Foreign-born population of Minnesota

Despite an economic downturn at the start of this decade, the population of immigrants in Minnesota continues to grow, according to a new report from the Minnesota Demographic Center, Department of Administration. Foreign-born population of Minnesota was about 314,200 persons in 2000. The chart below shows the regions from which those foreign residents came²⁸



Immigrants Living in Minnesota, 2000²⁹

Racial/Ethnic Group:	Population ¹	Number Foreign-born	Percent Foreign-born
African American	167,857	29,457	17.5 %
American Indian	54,568	1,529	2.8 %
Asian	140,969	97,279	69.0 %
Hispanic/Latino	141,786	57,573	40.6 %
White	4,402,124	84,883	1.9 %
Total Population²	4,919,479	260,463	5.3 %

Source: U.S. Bureau of Census, Census 2000

¹ The population base is extrapolated from sample data (Census 2000 SF-3) and therefore differs from the real count.

² The added value of each population group does not add up to "Total Population" because Hispanics, who can be of any race, are not counted in the total and because "Other Race" is excluded from the table.

Estimates of nine immigrant groups are included in the report. The estimates are based on new enrollment data from the Minnesota Department of Education, data from the Minnesota Department of Health's Office of Refugee Health and Vital Statistics, the U.S. Department of Homeland Security's Immigration Statistics and the 2000 Census.

Estimates of nine immigrant groups-2004³⁰

Immigrant Group	State Demographic Center Estimate of Population
Latino	175,000
Hmong	60,000
Somali	25,000
Vietnamese	25,000
Russian	12,500
Laotian	13,000
Cambodian	7,500
Ethiopian	7,500

Minnesota has approximately 25,000 Somalis, 25,000 Vietnamese, 12,500 Russians, 13,000 Laotians, 7,000 Cambodians and 7,600 Ethiopians³¹

Health Disparities in Minnesota

Across a wide variety of measures of health outcomes, racial and ethnic minorities fare worse than their White counterparts in the United States (USDHHS, 1985; IOM, 2002). Even in Minnesota, which is consistently ranked as one of the healthiest states, there are wide gaps between racial and ethnic groups on measures of health status and outcomes. For example, the infant mortality rate for African Americans and American Indians is twice that of White Americans; Asians, American Indians, and African Americans in Minnesota have between 3 to 5 times higher rates of cervical cancer; Hispanic/Latino and African American children are more than three times as likely as white Americans to be uninsured (Minnesota Department of Health 2002). Similar disparities are found over a number of other health measures, such as breast cancer, immunizations, and injury rates.

It is encouraging that the elimination of racial and ethnic disparities in health is one of the two central objectives of Healthy People 2010 (USDHHS 2000) and is also a priority in Minnesota³². In 2001, the Minnesota state legislature passed the Eliminating Health Disparities Initiative, which provided funding to community organizations to target racial and ethnic disparities in health and health care³³. Most would agree that the elimination of racial and ethnic disparities in health outcomes is a worthwhile goal based on the principles of social justice. It must also be recognized that such disparities bring very tangible costs to society. These include a less healthy and productive workforce, with poor health further hindering disadvantaged populations' opportunity to gain economic stability and independence (IOM 2001).

Minnesota has wide gaps in health between whites and populations of color. Minneapolis has 8% of the state's total population, but 38% of state's populations of color, making it a focal point for addressing these gaps³⁴.

- Statewide, Infant Mortality rates among the American Indian and African American communities are two to three times higher than Whites. In Minneapolis, Infant Mortality rates in the African American community are three times higher than Whites; rates among American Indians are almost four times higher than whites.
- Minneapolis is experiencing an increase of tuberculosis (TB) cases in immigrant populations. From 1995-2000, reported cases of TB increased 65%.
- Among the racial/ethnic groups in Minnesota, African American women have a breast cancer mortality rate that is 50 percent higher than that of white or Hispanic/Latina women, despite similar incidence rates. A greater proportion of African American women with breast cancer are diagnosed at a later, less treatable stage³⁵.
- African American, American Indian, and Asian American women have cervical cancer incidence rates that are three to four times higher than the rate for white women. Deaths due to cervical cancer also occur at significantly higher rates among Asian Americans and African Americans compared with whites

The Importance of Eliminating Health Disparities

Views from the U.S. Department Health and Human Services; Healthy People 2010

Life expectancy and overall health have improved in recent years for a large number of Americans, due to an increased focus on preventive medicine and dynamic new advances in medical technology. However, not all Americans are benefiting equally.³⁶ There are continuing disparities relating to the burden of illness and death experienced by African Americans, Hispanic Americans, Asian Americans/Pacific Islanders, and American Indians/Alaska Natives, as compared to the U.S. population as a whole.

Failure to focus on health disparities and the determinants of health places serious limitations on the effectiveness of preventive health care and health promotion programs.³⁷ Inadequate education and income are serious obstacles to learning about healthy lifestyles, accessing health care, and providing for the basic food, clothing, and shelter. The health disparities between those who have versus those who do not have are evidenced in longevity, birth outcomes, and health behaviors (diet, physical activity, etc.). Having two tiers of health outcomes can be prevented by understanding health disparities and addressing health disparities through effective policies and targeted programs. Eliminating health disparities will require both individual and societal efforts.

Views from CDC: Racial and Ethnic Approaches to Community Health (REACH) 2010

CDC is very concerned about the continued existence of health disparities among racial and ethnic groups and is implementing many programs designed to advance the Eliminating Racial and Ethnic Health Disparities initiative. REACH 2010 is CDC's cornerstone initiative aimed at eliminating disparities in health status experienced by racial and ethnic minority populations. It is designed to eliminate disparities in six priority areas:³⁸

- **cardiovascular disease,**
- **immunizations,**
- **breast and cervical cancer screening and management,**
- **diabetes,**
- **HIV infections/AIDS, and**
- **Infant mortality.**

It is an outstanding example of community-based participatory projects that currently support 37 demonstration communities, two of which are funded in partnership with the California Endowment through the CDC Foundation, and four of which are funded through an interagency agreement with the Administration on Aging. About 90 percent of the projects serve African Americans or Hispanics, and the remainder serves Asian Americans, Pacific Islanders and American Indians. The intent of REACH 2010 is to

support community-driven demonstration projects that yield replicable models to eliminate health disparities in all communities of color.

Barriers Faced by Foreign-Born Individuals Entering the U.S

The following are some of the most significant barriers faced by foreign-born new arrivals to the US³⁹ :

1. **Language barriers.** The lack of basic translation services at the hospitals endangers immigrant patients. The use of untrained interpreters who are bilingual, but who may not know much about anatomy, physiology, pharmaceuticals, or medical terminology is generally insufficient. Few hospitals or clinics provide prescription labels in languages other than English, making compliance with medication all but impossible. Some recent immigrant groups, e.g., Somalis and Hmong, have relied for generations on oral traditions of sharing information and have only recently developed written languages, a cultural fact that renders them functionally illiterate in their new home.
2. **Cultural barriers.** Most developing countries do not use an appointment system for delivering health care services. Instead, people who are sick go to the doctor and wait to be seen. Many people have no tradition of going to the doctor when they are well (Physicals) and find it difficult to understand why that is recommended here.
3. **Logistic barriers.** The ability to maneuver through the bureaucratic and administrative maze commonly found in modern hospitals and clinics is essential for accessing clinical resources. Navigating these systems is not easy for many of us who were born here, and for the foreign-born these complex networks can cause feelings of confusion and hopelessness. Unreliable transportation systems, inflexible work hours, and night time or multiple shifts make it difficult for most new arriving foreign-born workers to keep strict Western style medical appointments. This is compounded by the fact that minority patients are more likely than whites to live in communities with fewer physician offices.
4. **Societal barriers.** Many foreign-born refugees feel marginalized in American mainstream society, sensing they are not a part of it and acknowledging that they do not understand it. Physicians and community workers must work actively to develop respect for varying languages, skin color, personal beliefs, and cultural traditions in order to deliver sensitive and effective health care services. The Institute of Medicine report, “Unequal Treatment”⁴⁰, concurs with this line of thinking:

Working Models that Have Used the Diversity in Health Workforce as a Strategy to Reduce Health Disparities

Socio-cultural factors affect health care because they have an impact on health beliefs, behaviors, and treatments. These factors affect⁴¹:

- Variation in symptom presentation.
- Expectations of care.
- Bias, mistrust, prejudice, stereotyping.
- Ability to maneuver within the system.
- Diagnostic and treatment choices.

Lack of diversity in the health care workforce may result in an inability to handle these impacts. It is in the interest of health care systems to increase workforce diversity, as this can increase market share and lower costs. The cost reduction will be achieved by reducing the need for expensive tests when language barriers impede the ability to understand the presentation of symptoms and by decreasing medical errors that are the result of communication gaps and misunderstandings.

Minority leadership in health policy development helps to set guidelines for providers and health care workers that consider minority needs. Leadership can spread lessons learned from the data:

- Providers who speak the same language as their patients receive higher patient satisfaction ratings.
- Black and Hispanic physicians have major roles in providing health care for underserved populations.

In 1997, academic health centers had 79-percent white faculties, and 68 percent of medical school graduates were white. Anti-affirmative action sentiment has decreased the number of racial/ethnic minority students applying to and graduating from medical schools. Policymakers have options to increase diversity at medical schools through both incentives (e.g., awards programs and partnerships) and regulations (through accreditation and funding). Various strategies increase the numbers of racial/ethnic minority medical school students, among them:

- Educational pipelines involving partnerships and collaborations (e.g., the Robert Wood Johnson Foundation and the American Association of Medical Schools have adopted primary and secondary schools through the Health Professions Partnership Initiative).
- Effective recruitment models such as the Faculty Diversity Development Program at Harvard University.

Workforce diversity can also be increased through programs for foreign-born clinicians. The J1 visa program places foreign doctors in underserved communities after completion of a training program.

Keys to effective interventions that policymakers can make to increase the diversity of student bodies in medical schools and in the health care workforce include:

- Incorporating student perspectives (e.g., asking what they see as barriers to attending medical school).
- Providing grassroots and formal support for those making efforts in this area.
- Developing opinion leaders.
- Aiming for institutional change.
- Balancing incentives and regulations.

The American Indian/Alaska Native (AI/AN) Native Family Practice Residency Program Model

The American Indian/Alaska Native (AI/AN) Native Family Practice Residency Program, developed by the SIHB and the Providence Family Practice Residency Program (part of the University of Washington Medical School), is an example of a creative model to increase the numbers of AI/AN doctors.

SIHB's rationale for starting this residency program included:

- Shortage of physicians trained to serve Indian communities.
- Existing community relationships made the project a possibility.
- Indian Health Service (IHS) interest and support.
- Mandate from the Board to increase the number of Indian providers at SIHB.

The goals of the program include:

- Training physicians for careers working with AI/AN populations (if physicians are trained in a special setting, they are more likely to practice successfully in that setting in the long-term).
- Exposing trainees to cultural sensitivity and appropriateness and health issues particular to AI/AN populations.
- Recruiting AI/AN medical students. The highest retention rate for physicians working with minority populations is among those having a personal membership in a minority population.

Operating since 1994, the program is the only AI/AN residency program in the United States. Applicants are required to either be AI/AN or to have extensive experience in AI/AN communities. Six residents participate at SIHB; two each in their first, second, and third years of residency. Residents complete several rotations at SIHB. They spend two half-days onsite during their first year, three half-days during their second year, and four or five half-days during their third year.

Thus far, eight residents have graduated; five are themselves AI/AN. Six work in AI/AN health care facilities. Two work in community health centers with large numbers of AI/AN patients.

Challenges to making this project work include:

- Bridging the requirements/rules of a working clinic and an educational program.
- Funding.
- Recruiting, including the effects of affirmative action on medical school enrollment, lower numbers interested in family medicine, student biases about Seattle's weather, and limited resources for recruitment.

Future concerns include:

- Challenges with money and recruitment.
- Health system change effects on medical education
- Minority recruitment/effects of changes in affirmative action.
- Medicine no longer seen as a desirable profession.

The California Model

- Develop comprehensive surveillance instruments to enhance data collection that will improve measures of education, income, and socioeconomic status to better understand the problem.
- Plan appropriate interventions to address health disparities.
- Initiate research that will help understand the causes of disparities.
- Develop needed policies and funding.
- Mobilize communities (public-private partnerships).
- Unite resources into a common focus.

Academic Health Center (AHC): University of Minnesota Model

Reduce health disparities in Minnesota and address the needs of the state's diverse populations ⁴²

1. Develop and implement recruitment programs
 - Through the Health Careers Center
 - Working with University programs
 - Recruiting a person to lead community development
 - Fostering relationships with minority communities
2. Improve relationships with culturally diverse communities
3. Promote research on the impact of diversity on:
 - Promotion of health
 - Response to treatment interventions
 - Understanding of health and illness
4. Support research on the unique problems of
 - Underserved populations in rural Minnesota
 - Underserved populations in urban Minnesota
5. Promote an understanding of culture and spirituality in health through:
 - Ethnically, culturally, and racially diverse communities
 - Underserved populations in urban and rural Minnesota

The Commonwealth Fund suggestions⁴³,

- Minimum standards for culturally and linguistically competent health services.
- Greater minority representation within the health care workforce.

Commonwealth Themes⁴⁴

- Effective evaluation of programs.
- Emphasize stronger cultural and linguistic competence in all disparities reduction activities.
- Workforce development programs and improvement to the cultural competence of all healthcare professionals.
- Health screening and access to services,
- Focus on creating and/or improving state minority health offices and infrastructure.
- Involve all health system stakeholders.
- Create a national coordinating body to promote continuing state-based activities to eliminate racial and ethnic health disparities.

The Role of FTHCPs as a Strategy to Reduce the Current Health Disparities in Minnesota

In Minnesota, which is consistently ranked as one of the healthiest states, there are wide gaps between racial and ethnic groups on measures of health status and outcomes⁴⁵. Among the racial and ethnic populations included in the study, the groups most likely to be immigrants (Hispanic/Latino, Hmong, and Somali) generally report the greatest number of barriers, followed by African Americans, American Indians, and then European Americans. Among immigrant groups, Hmong respondents are most likely to report experiencing barriers.

The study assessed the influence of access barriers and the following are some major findings from the study (*“Disparities and Barriers to Utilization among Minnesota Health Care Program Enrollees”*) that elicits the need for FTHCPs:

Perceived Discriminatory Attitudes

- About 45% of all adults and 36% of parents think that their ability to pay or being enrolled in MHCP causes their doctor or other health care providers to treat them or their children unfairly. Most Minorities are enrolled in MHCP.
- Among populations of color, approximately 30% of adults and 18% of parents think that their race, ethnicity, or nationality causes their health care providers to treat them unfairly.
- Among people of color, perceptions of discrimination are generally higher among African Americans and Hmong and lowest among Somali.

Language, Religion and Cultural Barriers

Hispanic/Latino, Hmong, and Somali indicate that misunderstanding of their particular language, culture, or religious beliefs causes problems when getting health care services; these barriers are particularly important for Hmong and Somali enrollees. African American adults are also fairly likely to report problems with doctors not understanding their culture or respecting their religious beliefs.

Interpreter Availability and Quality

In the survey, the Hispanic/Latino, Hmong, and Somali rated the availability and quality of interpreter services as follows. Interpreters are least available for Hmong (59% of adults and 75% of parents report problems getting an interpreter when needed) with Somalis falling close behind (about 50% of adults and parents). Of the three groups, interpreters are most available for Hispanic/Latinos; however, as many as 33% report problems with interpreter availability.

When asked how much having an interpreter helps them understand what the doctor is asking, what is being done during the visit, or helps the doctor understand what they are trying to say, Hmong are most likely to provide negative ratings (73% of adults; 53% of parents); Somalis are second (about 50% of adults and 35% of parents), and Hispanic/Latinos are third (30% of adults and parents)

Problems with patient-provider communication

The communication is critical for the delivery of appropriate and effective treatment and care and, regardless of a patient's race; miscommunication can lead to incorrect diagnosis, improper use of medications, and failure to receive follow-up care. Among non-English-speaking populations in the United States, the linguistic barrier is even greater. Less than half of non-English speakers who say they need an interpreter during health care visits report having one. Additional communication problems stem from a lack of cultural understanding on the part of white providers for their minority patients. For example, patient health decisions can be influenced by religious beliefs, mistrust of Western medicine, and familial and hierarchical roles, all of which a white provider may not be familiar with.

Provider discrimination

This is where health care providers either unconsciously or consciously treat certain racial and ethnic patients differently than they treat their white patients. Some research suggests that minorities are less likely than whites to receive a kidney transplant once on dialysis or to receive pain medication for bone fractures. Critics question this research and say further studies are needed to determine how doctors and patients make their treatment decisions. Others argue that certain diseases cluster by ethnicity and that clinical decision making does not always reflect these differences.

Recommendations

Latinos, African Americans, and American Indian/Alaska Natives account for 25 percent of the U.S. population but represent only 6 percent of practicing physicians. Eighty-six percent of registered nurses are white, while whites account for about 69 percent of the U.S. population⁴⁶. Compared with majority colleagues, minority physician residents are twice as likely to practice in federally designated shortage areas, three times more likely to see minority patients, and accept a greater proportion of Medicaid patients⁴⁷. Minority dentists are more likely to practice in minority communities but are a small proportion of the dental workforce⁴⁸. The IOM's Unequal Treatment noted that "racial concordance of patient and provider is associated with greater participation in care processes, higher patient satisfaction, and greater adherence to treatment."⁴⁹ A diversified workforce leads to decreased racial and ethnic differences in health and healthcare outcomes.

1. **Track and disseminate racial composition-** Require residency programs to track and publicly disseminate the racial and ethnic composition of their participants⁵⁰. The data compiled on residency programs should conform to standardized requirements. It is generally acknowledged that residency programs do not have their racial or ethnic composition evaluated or even scrutinized by any organization or administrative body. This lack of accountability is exacerbated by a matching process that, at best, is viewed as being opaque; and, at worst, as being subject to manipulation. Any efforts to diversify residency programs generally are attributable to the commitment of individual program directors rather than to broader institutional commitment. Presently, there has been no public database that shows the exact number of FTHCPs that are either in residency, going through the exams or just waiting for the match. The Minnesota Department of Health indicated that they had started creating a database early this summer (2005)
2. **Strengthen & Increase the educational pipeline programs⁵¹.** Pipeline programs are essential to increasing the talent pool. They address one of the most critical barriers to a more diverse physician workforce. Medical and nursing schools in Minnesota should adopt a strategy to increase the admission of minorities in general.

In May 2005 the University of Minnesota medical school had its first African (Somali) medical graduate. This came even after having endured an equally treacherous beginning. He worked full time as an RN to support his wife and kids while he went to medical school. He was also attracted to the Twin Cities because of the large Somali population..." (MN Daily, June 8 2005).

The institutions that sponsor pipeline programs should enter into genuine partnerships with community and constituency groups such as minority medical student and physician associations, since medical schools and teaching hospitals already rely on these groups for community outreach.

The Health Resources and Services Administration of the U.S. Department of Health and Human Services run programs to increase workforce diversity. State health departments can run similar programs through universities, and medical, nursing, dental, and pharmacy schools. States can fund programs looking to increase the pipeline⁵².

HRSA programs include:

- Health Careers Opportunity Program. This program helps students from disadvantaged backgrounds develop the skills necessary to enter health professions.
- HRSA’s Centers of Excellence. These aid health-professional training programs, to enlarge minority applicant pools⁵³
- Minority Faculty Fellowship Program. This assists health-professional training institutions to increase the number of underrepresented racial and ethnic minorities serving on their faculties⁵⁴

2. *Social and academic Support system-* Require that medical schools have adequate social and academic support and retention systems in place for underrepresented minority students⁵⁵. Minorities may have unique needs related to the residual effects of educational inequality and the social isolation inherent in a non-diverse academic environment. These should be acknowledged and addressed. Minority medical students, faculty and administrators are probably best equipped to guide the development of support and retention programs, and they should be supported in this role.

3. *Initiate and support research programs*⁵⁶;

(1) That expands public understanding of the link between medical workforce diversity and improved access to and quality of health care, and

(2) That explores the impact of a more diverse medical workforce on racial and ethnic disparities in health and health care. Research to date—and previously cited in this paper—has demonstrated the following:

- Minority physicians are more likely to practice in traditionally underserved communities.
- Minority physicians are more likely to specialize in primary care than non-minority physicians.
- Minority physicians are much more likely to serve poor, sick patients and a higher proportion of Medicaid recipients than non-minority physicians.
- Given the choice, many minorities will choose a physician who is a member of the same minority group.

Research is also important because affirmative action in higher education is still under attack. The case must be made now that there are legitimate and compelling reasons for ensuring diversity in medical schools. Courts have found affirmative action programs to meet constitutional muster only where they further legitimate educational interests—not where they are used to remedy past discrimination. It will be much easier for educational

institutions to preserve and strengthen affirmative action programs if they have strong evidence that a diverse student body not only enriches the medical education process but also helps reduce health disparities.

4. ***Develop a communications strategy***⁵⁷. This would require reaching a range of audiences, including the general public, medical education leaders, community and advocacy groups, minority leaders, policymakers, and the media. With regard to physician diversity, the education task would include the following:
 - Synthesizing and communicating the research that ties greater diversity in the medical profession to both improved access to care and improved quality of care.
 - Making the link between medical workforce diversity and reduced disparities in health and health care. The leadership group would oversee development of the message, the educational materials, and the dissemination strategy so that the communication would support the overall effort.
5. ***Increasing Culturally Competent Workforce Capacity***. California law permits Mexican and Caribbean licensed physicians and dentists to practice in community health centers in medically underserved areas. The law creates the Licensed Physicians and Dentists from Mexico Pilot Program and authorizes a three-year nonrenewable license⁵⁸.

The Charles Drew University of Medicine and Science, located within a predominantly African American and Latino area of Los Angeles, recruits and educates health professionals who will serve in underserved communities⁵⁹

6. ***Physician and Surgeon Incentive Pilot Program***. The California Division of Licensing of the Medical Board administers a loan program to help correct the unequal distribution of medical practices, in particular, helping licensed physicians and surgeons to establish practices in areas lacking physician services and primary care specialties. The division awards loans on the basis of local need to applicants it determines will establish medical practices in such areas⁶⁰.
7. ***Increasing Medical School Admissions and Recruitment***. Minnesota approved legislation to increase workforce diversity by proactively recruiting within underserved communities. The University of Minnesota–Duluth School of Medicine uses a federal Area Health Education Center Program grant to plan, develop, and operate area health education center programs. Each program seeks to recruit minorities and increase awareness of health careers among minority and other students in medically underserved areas of the state⁶¹

Conclusion: Specific State Policy Strategies

This paper has attempted to review and summarize the best evidenced based research addressing the problem of healthcare disparity in Minnesota. The focus was on how foreign trained health care professionals can be used as a suitable resource strategy to diversify the Minnesota health workforce in order to reduce the existing health disparities. In doing so, the paper primarily looked at national and international studies to identify current and proposed best practices to address this glaring health manpower dilemma.

The increased demand for primary care services, coupled with a critical shortage of primary care physicians has required health care providers to look for new sources of qualified primary care physicians. One largely untapped source for primary care physicians is the large number of foreign medical school graduates who are participating in residency and fellowship programs in the United States. More often than not, these foreign physicians are well trained and eager to stay in the U.S. Facilitating conduit for absorbing them would help reduce the lack of diversity in health care workforce. The Bridging Distances in Healthcare program is an excellent example of a successful collaboration with a single goal in mind - to increase the RN workforce in rural Minnesota

If a task force is created with a goal of addressing this health diversity issue, it will undoubtedly center on the action steps which might be undertaken in the public policy arena of Minnesota. Examples of pertinent State policy suggestions include⁶²:

1. ***FTHCPs Incentive Program***-State can develop incentive programs to increase the supply of providers working with underserved populations. Many states offer loan repayment opportunities for health professionals. These programs can be tailored to different environments to absorb FTHCPGs.
2. ***FTHCPs Internship & Fellowship Fund***- State can create and fund fellowships and internships for FTHCPs interested in working with underserved populations. Because minority students are more likely to serve in these communities, these initiatives will diversify the health workforce.
3. ***FTHCPs Workforce Data Collection***-State can use data collection systems to monitor workforce diversity and the adequacy of training and recruitment programs. States can tailor interventions to areas that have shortages of minority health professionals. Minnesota does not currently have a tangible database that monitors the population of FTHCPs.
4. ***FTHCPs Residency Funds***-State can use Graduate Medical Education (GME) funds to encourage residency programs and teaching hospitals to increase diversity.
5. ***Sustained funding of the diversity programs***⁶³: Grants for Bridging Distances in Healthcare program are ending in 2005 and new source of funding is not yet known. The goal of the program is to increase nursing capacity in rural Minnesota

- and to build coalitions with healthcare, workforce centers, and education for ongoing system development and sustainability.
6. ***Facilitate Externships***- Create Program that collaborates with hospitals and clinics to offer externships to FTMGs who are just seeking to get the means of fulfilling the application process.

Each of these recommendations is consistent with the literature review and the general consensus findings pointing towards successful physician diversity as a strategy to reduce the health disparities.

Opportunities for Further Research

Any in-depth review raises as many questions as it attempts to answer, and this review of reducing health disparities by diversify health workforce using FTHCPs is no different. The first is related to the work Location in which the FTHCPs have to endure despite having gone through the daunting task of the licensure process. As noted earlier, however, they mostly practice primary care in rural areas more than the US-MG, even though they are similarly qualified. Understanding the factors important to an IMG physician's decision to practice rural primary care is critical if Minnesota and the nation are to increase the overall supply of primary care physicians to urban areas that similarly has underserved population- mostly being of foreign origin.

The second question is related to the lack of supervision to ensure good work environment. The IMGs and FNGs are more likely to be found working long and odd hours than their fellow white counterparts. Common sense suggests that this has as much to do with the discrimination and attitude about FTHCPs as it does with any characteristics of the population and the location itself hence further investigation is necessary.

End Notes

- ¹ Reede, J.Y, “A Recurring Theme: The Need For Minority Physicians” Health Affairs, Vol 22, Issue 4,91-93
- ² U.S Department of Health and Human Services (HHS) , Healthy People 2010: National Health Promotion and Disease Prevention, conference ed. in two vols (Washington D.C, January 2000)
- ³Institute of Medicine (IOM) Appendix D: Ambulatory-care-sensitive conditions and referral-sensitive surgeries. Access to healthcare in America, Washington, DC: National Academic Press, 1993
- ⁴ Comer, J., and Mueller, K. Access to healthcare: Urban-rural comparisons from a Midwestern agricultural state. Journal of Rural Health 11:128;136, 1995
- ⁵ Health Policy Institute of Ohio, Nov 2004. Understanding Health Disparities. <http://www.healthpolicyohio.org/pdf/healthdisparities.pdf> , accessed on June 14,2005
- ⁶ Ibid
- ⁷ Komaromy, M., Grumbach, et.al.(1996). The Role of Black and Hispanic Physicians in Providing Health Care for Underserved Populations. N Engl J Med 334: 1305-1310
- ⁸ Council on Graduate medical Education, 'Minorities in medicine,' Twelfth Report, May 1998
- ⁹ Saha, et al., (2000). “Do patients Choose Physicians of Their Own race?” Health Affairs Vol. 19, No. 4: 76-83.
- ¹⁰ Centers for Disease Control and Prevention, “Fact Sheet: Racial and Ethnic Disparities in Health Status,” <http://www.cdc.gov/od/oc/media/pressrel/fs020514b.htm>>, accessed July 12th2005.
- ¹¹ Health Policy Institute of Ohio, Nov 2004. Understanding Health Disparities <http://www.healthpolicyohio.org/pdf/healthdisparities.pdf> , accessed on June 14,2005
- ¹² Karen Matherlee, April 11, 2003. NHPF. The U.S. Health Workforce: Definitions, Dollars, and Dilemmas. http://www.nhpf.org/pdfs_bp/BP_Workforce_4-03.pdf, accessed on June 15,2005
- ¹³ Minnesota Medical Association. New Findings from the 2002 Minnesota Resident Physician Exit Survey- August 2003/Volume 86 <http://www.mmaonline.net/publications/MNMed2003/August/Rydrych.html>
- ¹⁴ Gonzalez, P& Stoll, B, April 2002. The Color of Medicine: Strategies for Increasing Diversity in the U.S Physician Workforce. http://www.kaisernetwork.org/health_cast/uploaded_files/The_Color_of_Medicine.pdf, accessed on July 2, 2005
- ¹⁵ Ibid.
- ¹⁶ CAH/FLEX National Tracking Project (2003)- <http://www.rupri.org/rhfp-track/results/vol3num1.pdf>, accessed on July 2, 2005
- ¹⁷ The Minnesota Medical Association, New Findings from the 2002 Minnesota Resident Physician Exit Survey, Minnesota Medicine, August 2003/Volume 86

-
- <http://www.mmaonline.net/publications/MNMed2003/August/Rydrych.html>, accessed on July 15, 2005
- ¹⁸ Immigration policy in focus: Health Worker Shortages & the Potential of Immigration Policy *Volume 3, Issue. February 2004*. <http://www.aif.org/ipc/ipf031104.asp>, accessed on July 23, 2005
- ¹⁹ Ibid
- ²⁰ Immigration policy in focus: Health Worker Shortages & the Potential of Immigration Policy *Volume 3, Issue. February 2004*. <http://www.aif.org/ipc/ipf031104.asp>, accessed on July 23, 2005
- ²¹ ACP research (American College of Physicians). Supply and Demand of Internists (Enduring), *December 23, 2004* <http://ea.acponline.org/physicians/SAD.html>, accessed on July 16, 2005
- ²² Website of Minnesota Department of Health, <http://www.health.state.mn.us/divs/chs/physicianswkfc.htm> , accessed on July 29, 2005
- ²³ MMA, Minnesota Medicine; Minnesota Physician Workforce Analysis Rural Supply and Demand, September 2004/Volume 87 <http://www.mmaonline.net/publications/MNMed2004/September/Buck.html>, accessed on Aug 13, 2005
- ²⁴ MDH Office of Rural Health and Primary Care, Minnesota Health Workforce Demand Assessment 2002 http://www.mnahec.umn.edu/img/assets/11440/2002D_Assess_Summary.pdf, accessed on July 30, 2005
- ²⁵ The Northwest Minnesota Health Professions Study, 2003 <http://www.mnahec.umn.edu/img/assets/11440/HPRptAnalFin.pdf> ,accessed on Aug 3, 2005
- ²⁶ Ibid
- ²⁷ Website of Minnesota Department of Health, <http://www.health.state.mn.us/divs/chs/qspring04.htm>, accessed on Aug 3, 2005
- ²⁸ Website of Federation for American Immigration Reform (FAIR) http://www.fairus.org/site/PageServer?pagename=research_researche361#nat, accessed on Aug 15, 2005
- ²⁹ MDH, Eliminating Racial and Ethnic Health Disparities Initiative, January 15 2005, <http://www.health.state.mn.us/ommh/legislativerpt2005.pdf>, accessed on Aug 18, 2005
- ³⁰ Barbara J. Ronningen, Minnesota's immigrant populations continue to increase, June 17, 2004 <http://www.mnplan.state.mn.us/resource.html?Id=7193> ,accessed on Aug 18, 2005
- ³¹ Website of Newsmax, <http://www.newsmax.com/archives/articles/2005/2/7/162734.shtml>, accessed on Aug 18, 2005
- ³² Minnesota Department of Human Services: Disparities and Barriers to Utilization among Minnesota Health Care Program Enrollees, December 2003

http://www.dhs.state.mn.us/main/groups/healthcare/documents/pub/dhs_id_008306.pdf, accessed on Aug 18, 2005

³³ Minnesota Department of Health Website; <http://www.health.state.mn.us/ommh/priority.html>, accessed on Aug 12, 2005

³⁴ Web Site of the City of Minneapolis, Health disparities in Minnesota, <http://www.ci.minneapolis.mn.us/legislativeaffairs/HealthDisparities.asp> , accessed on Aug 12, 2005

³⁵ MDH, eliminate health disparities, <http://www.health.state.mn.us/strategies/disparities.pdf> ,accessed on Aug 12, 2005

³⁶ U.S. Department Health and Human Services (HHS): Eliminating minority health disparities, July 12, 2004. <http://raceandhealth.hhs.gov/> ,accessed on Aug 12, 2005

³⁷ Healthy People 2010; Understanding and Improving Health <http://www.healthypeople.gov/Document/pdf/uih/uih.pdf>, accessed on Aug 05, 2005

³⁸ Website of Department of Health and Humans services, April 12, 2002 <http://www.hhs.gov/asl/testify/t020412.html>, accessed on July 30, 2005

³⁹ Ann O'Fallon, Culture Within a Culture: US Immigrants Confront a Health System that Many Citizens Can't Manage, AMA, <http://www.ama-assn.org/ama/pub/category/15228.html> accessed on Aug 6 2005

⁴⁰Institute of Medicine, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, <http://www.iom.edu/report.asp?id=4475> , accessed on Aug 15, 2005

⁴¹ Joseph R. B. et al, AHRQ, Strategies to Reduce Health Disparities: Access to Providers <http://www.ahrq.gov/news/ulp/dispar/dispar5.htm#providers>, accessed on Aug 17, 2005

⁴² Academic Health Center , University of Minnesota http://www.ahc.umn.edu/img/assets/7617/Strategic_Goal_51.pdf, accessed on July 30, 2005

⁴³ Commonwealth Fund Website, <http://www.cmwf.org/> , accessed on July 12, 2005

⁴⁴ McDonough, J et al. "State Policy Agenda to Eliminate Racial and Ethnic Health Disparities," Commonwealth Fund (June 2004). pp 8-9 http://www.cmwf.org/programs/minority/mcdonough_statepolicyagenda_746.pdf ,accessed on Aug 6, 2005

⁴⁵ MDH, Disparities and Barriers to Utilization among Minnesota Health Care Program Enrollees, December 2003, http://www.dhs.state.mn.us/main/groups/healthcare/documents/pub/dhs_id_008306.pdf , accessed on Aug 18, 2005

⁴⁶ Office of Minority Health (OMH); Closing the Gap, *Jan/February 200*, . Available at <http://www.omhrc.gov/OMH/sidebar/archivedctg.htm> , accessed on Aug 12, 2005

⁴⁷Website of American Medical Student Association (AMSA), <http://www.amsa.org/div/>. accessed on Aug 09, 2005

-
- ⁴⁸ Center for the Health Professions, University of California, UCSF Study Finds Shortage of California Dentists in Rural, Poor, Minority Communities, *September 24, 2001*
http://www.futurehealth.ucsf.edu/press_releases/dentistsshortage.html ,accessed on Aug 10, 2005
- ⁴⁹ Smedley et al. *Op cit.*
- ⁵⁰ Phillip Gonzalez and Betsy Stoll, *The Color of Medicine: Strategies for Increasing Diversity in the U.S. Physician Workforce, April 2002*,
http://www.kaisernetwork.org/health_cast/uploaded_files/The_Color_of_Medicine.pdf
,accessed on Aug 10, 2005
- ⁵¹Ibid
- ⁵² Website of U.S. Department of Health & Human Services,
<http://bhpr.hrsa.gov/diversity/hcop/default.htm> , accessed on Aug 2, 2005
- ⁵³ Website of U.S. Department of Health & Human Services,
<http://bhpr.hrsa.gov/diversity/coe/default.htm> , accessed on Aug 2, 2005
- ⁵⁴ Website of U.S. Department of Health & Human Services,
<http://bhpr.hrsa.gov/diversity/mffp/default.htm> , accessed on Aug 2, 2005
- ⁵⁵ Phillip Gonzalez and Betsy Stoll, *The Color of Medicine: Strategies for Increasing Diversity in the U.S. Physician Workforce, April 2002*,
http://www.kaisernetwork.org/health_cast/uploaded_files/The_Color_of_Medicine.pdf
,accessed on Aug 10, 2005
- ⁵⁶ Ibid
- ⁵⁷ Phillip Gonzalez and Betsy Stoll, *The Color of Medicine: Strategies for Increasing Diversity in the U.S. Physician Workforce, April 2002*,
http://www.kaisernetwork.org/health_cast/uploaded_files/The_Color_of_Medicine.pdf
,accessed on Aug 10, 2005
- ⁵⁸ John E. McDonough, et al: A state policy agenda to eliminate racial and ethnic health disparities, June 2004,
http://www.cmwf.org/programs/minority/mcdonough_statepolicyagenda_746.pdf ,
accessed on July 16, 2005
- ⁵⁹ Janet Coffman, et al ; Holding onto Our Own: Migration Patterns of Underrepresented Minority Californians in Medicine, <http://www.ucop.edu/cprc/medmigration.pdf>. accessed on July 22, 2005
- ⁶⁰ John E. McDonough, et al: A state policy agenda to eliminate racial and ethnic health disparities, June 2004,
http://www.cmwf.org/programs/minority/mcdonough_statepolicyagenda_746.pdf
accessed on July 16, 2005
- ⁶¹ Minn. Stat. § 137.42. Available at <http://www.revisor.leg.state.mn.us/stats/137/42.html>.
accessed on Aug 15, 2005
- ⁶² Ibid

⁶³ Stephanie Kloiber, MDH Office of Rural Health Primary Care, Spring 2004 Vol. 6 Number 2 ,
Bridging Distances in Healthcare; A successful model to address the rural nursing
workforce shortage , available at
<http://www.health.state.mn.us/divs/chs/rhpc/PDFdocs/qspring04.pdf#page=4> ,accessed
on Aug 20, 2005